









County Government Center
Campus Development
Project

Final EIR

San Mateo County Government Center Campus Development Project Final Environmental Impact Report

May 2018



San Mateo County Manager's Office Project Development Unit

Table of Contents Page i

SAN MATEO COUNTY GOVERNMENT CENTER CAMPUS DEVELOPMENT PROJECT FINAL ENVIRONMENTAL IMPACT REPORT

TABLE OF CONTENTS

Chapter 1	Introduction	1- 1
1.1	Environmental Review Process	1-1
1.1.1	Public Scoping of Draft EIR	1-1
1.1.2	Public Review of Draft EIR	1-1
1.1.3	Agency Review of Response to Comment	1-2
1.2	Changes to the Draft EIR	1-2
1.3	Final EIR Organization	1-2
Chapter 2	Additional Information	
2.1	County Government Center Parking Study	2-1
2.2	Revised Traffic Study	2-1
2.3	Construction Parking Plan	2-1
2.4	Shading Study	2-2
2.5	COB3 Design	2-2
Chapter 3	Public Comment on Draft EIR	3-1
Chapter 4	Responses to Comments on Draft EIR	4- 1
4.1	Response to Comments from Caltrans	4-1
4.2	Response to Comments from Judicial Council of California	4-3
4.3	Response to Comments from City of Redwood City	4-6
4.4	Response to Comments from 4Cs	4-16
4.5	Response to Comments from Ken Rolandelli	4-16
4.6	Response to Comments from Martin T. Fox	4-17
4.7	Response to Comments from Richard Keyes	4-17
Chapter 5	Errata and Revisions	5- 1
Chapter 6	Mitigation Monitoring and Reporting Program	6- 1
	APPENDICES	
Appendix B		
Appendix F.		
Appendix G	. Draft EIR Notice of Availability and Distribution List	
Appendix H	. County Government Center Campus Parking Study	
Appendix I.	Lathrop House Relocation Plan	
Appendix J.	Shading Study	
Appendix K	. COB3 Design Concept	

Table of Contents Page ii This page deliberately left blank.

Introduction Page 1-1

Chapter 1 INTRODUCTION

This document is the Final Environmental Impact Report (EIR) for the San Mateo County Government Center Campus Development Project. The EIR is prepared as an informational document for action by the County of San Mateo on the development of County government campus in downtown Redwood City, CA.

Per the California Environmental Quality Act (CEQA) Guidelines Section 15132, the Final EIR shall consist of:

- The Draft EIR or a revision of the draft.
- Comments and recommendations received on the Draft EIR either verbatim or in summary.
- A list of persons, organizations, and public agencies commenting on the Draft EIR.
- The responses of the Lead Agency to significant environmental points raised in the review and consultation process.
- Any other information added by the Lead Agency.

In accordance with CEQA Guidelines Section §15132, this document together with the January 2018 Draft EIR constitutes the Final EIR for the County Government Center Campus Development Project.

1.1 Environmental Review Process

1.1.1 Public Scoping of Draft EIR

The County of San Mateo determined that the implementation of the proposed County Government Center Campus Development Project would have the potential to have a significant impact on the environment and that an EIR would be prepared pursuant to CEQA. Accordingly, the County issued a Notice of Preparation (NOP) of an EIR for the proposed project on September 14, 2017. The County distributed the NOP to state agencies via the State Clearinghouse and directly mailed the NOP to state and local agencies and other potentially interested organizations and individuals, including property owners within 300 feet radius of the project site. The County also posted the NOP for review at the San Mateo County Clerk's Office. The County provided a 30-day public review period for the NOP from September 15 to October 15, 2017. The County received six comment letters in response to the NOP. These comments were summarized in Section 1.3.1 of the Draft EIR and presented in full in Appendix A of the Draft EIR. Additionally, the County held a public scoping meeting on November 6, 2017 for the purpose of inviting public comments on the project. Public notice of the scoping meeting was distributed to adjacent property residents, homeowner and neighborhood associations, local community agencies, and interest groups. Notice was also published in a newspaper of local circulation. Three written comment cards were received at the public scoping meeting as summarized in Section 1.3.2 of the Draft EIR.

1.1.2 Public Review of Draft EIR

On January 18, 2018, a Notice of Completion of the Draft EIR was sent to the California Governor's Office of Planning and Research, State Clearinghouse, and a Notice of Availability (NOA) for the Draft EIR was posted at the County Clerk's office for San Mateo County. The County directly mailed the NOA to Caltrans, State Office of Historic Preservation, City of

Introduction Page 1-2

Redwood City, and other potentially interested agencies, organizations, and individuals including property owners within 300 feet of the project site (see Appendix G attached to this Final EIR). Notices were also published in the local daily newspaper: The Examiner circulated in Redwood City. The Draft EIR was circulated for a 45-day commenting period between January 18 and March 5, 2018. Hard copies were made available for review at the San Mateo County Manager's Office, Project Development Unit (Redwood City). In addition, the Draft EIR was made available online at the County Manager's Office PDU website (https://cmo.smcgov.org/public-notifications).

The San Mateo County Board of Supervisors held a public hearing to receive comment on the Draft EIR at the Hall of Justice, 400 County Center in Redwood City on February 27, 2018.

1.1.3 Agency Review of Response to Comment

Upon completion of the 45-day public review period, written responses to all significant comments raised with respect to the environment were prepared and incorporated into the Final EIR. Written responses to comments received from public agencies have been made available to those agencies at least 10 days before the County of San Mateo considers certification of the Final EIR. The comments and their responses will be considered by the County when deciding whether to certify the Final EIR and approve the County Government Center Campus Development Project.

1.2 CHANGES TO THE DRAFT EIR

CEQA anticipates that the public review process will elicit information that can result in modification of the project design and refined impact analysis to reduce potential environmental effects of the project. As provided in CEQA Guidelines Section 15088.5, when significant new information is added to the EIR after public noticing of the Draft EIR, the EIR must be recirculated to give the public a meaningful opportunity for review. Significant new information is defined as 1) a new significant environmental impact, 2) a substantial increase in the severity of an environmental impact requiring new mitigation, or 3) a feasible project alternative or mitigation measure considerably different from those previously analyzed that would clearly reduce environmental impacts. Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR.

This Final EIR includes the following modifications to the Draft EIR:

- Additional information that provides more background setting, project description details, and new analysis.
- Text changes to provide clarity to the analysis, make minor text corrections, or fix grammatical or typographic errors.

These revisions do not constitute considerably different changes in the project description, environmental setting, conclusions of the environmental analysis, or in the mitigation requirements incorporated into the project or otherwise provide significant new information that would require recirculation of the Draft EIR pursuant to CEQA Guidelines Section 15088.5.

1.3 Final EIR Organization

The Final EIR for the County Government Center Campus Development Project is as organized as follows:

Introduction Page 1-3

Chapter 1 Introduction. This chapter explains the contents of a Final EIR and the environmental review process for the County Government Center Campus Development Project.

- Chapter 2 Additional Information. This chapter describes and summarizes additional information related to the environmental analysis of the County Government Center Campus Development Project and the effect this information has on the discussions contained in the Draft EIR.
- Chapter 3 Public Comment on Draft EIR. This chapter contains copies of the comment letters received on the Draft EIR during the public review period. The comment letters have been individually numbered. A list of those who commented is provided at the front of the chapter.
- **Chapter 4 Responses to Draft EIR Comment.** This chapter provides the written comments received on the Draft EIR and provides a written response to each comment raising a significant environmental issue submitted on the Draft EIR.
- Chapter 5 Errata and Revisions. This chapter includes the changes to the Draft EIR needed to respond to comments and clarify or amplify the information provided in the Draft EIR. The changes correct inaccuracies and clarify the analysis in the EIR.
- Chapter 6 Mitigation Monitoring and Reporting Program. This chapter contains the County's program for monitoring and reporting on the implementation of mitigation measures incorporated into the County Government Center Campus Development Project EIR.
- **Appendix B** Revised Air Quality/GHG Calculations. This appendix contains revised calculations for air quality and greenhouse gas emissions to reflect the increase in COB3 design size.
- **Appendix F** Revised Traffic Impact Assessment. This appendix contains the project traffic study revised to address the cumulative traffic impacts from additional projects.
- **Appendix G Draft EIR Notice of Availability and Distribution List.** This appendix provides a list of agencies, organizations, and members of the public that were sent the Notice of Availability for the Draft EIR and/or the Draft EIR.
- Appendix H County Government Center Campus Parking Study. This appendix contains the parking demand analysis for employee parking at the County Government Center campus.
- **Appendix I** Lathrop House Relocation Plan. This appendix contains a concept design relocation plan for the Lathrop House and material submitted to the Office of Historic Preservation as referenced in the Draft EIR.
- **Appendix J** Shading Study. This appendix contains schematics illustrating the shadow pattern created by the project buildings.
- **Appendix K** COB Design Concept. This appendix contains building concept drawings presented to the Board of Supervisors on April 24, 2018.

Introduction Page 1-4 This page deliberately left blank.

Additional Information Page 2-1

Chapter 2 ADDITIONAL INFORMATION

2.1 COUNTY GOVERNMENT CENTER PARKING STUDY

A parking study was prepared by Hexagon Transportation Consultants (May 2018) to evaluate the adequacy of the existing and proposed County parking structures to meet the future parking demand for the County Government Center. The report is attached in Appendix H of this Final EIR document.

The parking counts conducted in November 2017 and March 2018 show that the existing parking at the County Government Center is occupied at or near its capacity during peak periods. It is estimated that the existing Government Center uses result in an unmet parking demand of 282 spaces. The proposed project would result in an increased parking demand of 332 spaces associated with the new COB3 building and 505 displaced parking spaces. In addition, the County has committed to provide 150 additional public parking spaces. In order to meet the estimated future parking demand, the County would need to construct 1,100 spaces in the proposed new parking structure and implement new TDM measures that would reduce County employee parking demand by at least 12 percent. Alternatively, the County could construct 1,200 spaces in the proposed new parking structure and implement new TDM measures that would reduce County employee parking demand by at least five percent.

2.2 REVISED TRAFFIC STUDY

The Traffic Impact Assessment (TIA) prepared by Hexagon Transportation Consultants for the Draft EIR has been revised to include refined parking information based on a new stand-alone parking analysis, a new analysis of an alternative project access scenario, and revisions requested by the City of Redwood City. The TIA is based on the increase in number of employees at the Government Center Campus. The increase in the size of COB3 as discussed in Section 2.5 below from 156,000 square feet (s.f.) to 186,000 s.f. would not generate an increase in the number of vehicle trips and therefore does not change the project's traffic impacts. The revised TIA is presented in Appendix F of this Final EIR document.

Per Redwood City's comments on the Draft EIR, the intersection level of service analysis was revised to ensure consistency with recent TIA's prepared for other nearby developments and the freeway ramp analysis was revised to correct the ramp capacity. The background and cumulative traffic volume forecasts also were revised to include additional developments listed by the City. The revised TIA also recommends improvements intended to facilitate pedestrian and bicycle travel in the vicinity of the County Government Center as suggested by the City and identifies a possible improvement at the Veterans/Middlefield intersection to address an existing queue storage deficiency. The modification would improve traffic flow out of the County Government Center but is not required to mitigate a significant impact on intersection levels of service. Lastly, the revised TIA incorporates minor text changes such as the addition of text describing I-280 as a regional roadway in the vicinity of the proposed project.

2.3 CONSTRUCTION PARKING PLAN

During project construction, County employee, judicial, and construction worker parking on the County Government Center campus will be allocated space in designated locations.

Additional Information Page 2-2

County Employees. Approximately 300 employee parking spaces will be relocated from the existing parking structure. The County will employ a shuttle service that will transport employees to and from the Government Center from designated off-site parking locations. The County is currently negotiating with several landowners near the project site. It is anticipated that the shuttle service will loop to and from the drop off and pick up sites every 15 minutes, continuously throughout the day, Monday through Friday.

Judicial Officers and Jurors. The existing parking structure will be rezoned for juror parking and provide 212 full-size parking spaces reserved for jurors. Ten full-sized premium reserved spaces for judicial officers will be relocated to the Law Library parking lot, directly across from the Hall of Justice. An additional 15 "Courts Judicial" parking spaces will remain in the basement under COB2.

Public. No changes will be made to the public parking spaces on the ground floor of the parking garage.

Construction Workers. A designated area for the construction workers parking is tentatively planned to be located on the Government Center site and/or the Bradford lot, a portion of which is rented by the County.

2.4 SHADING STUDY

The County and its architectural design contractor have assessed the potential for the Parking Structure and COB3 to have shadow impacts. Illustrations of the shading impacts are presented in Appendix J of this Final EIR document.

Based on the sun's amplitude and trajectory and the site's latitude, sun exposure is mostly from the south causing building shadows to extend mostly toward the northwest during the morning and northeast during the afternoon. Based on building heights and seasonal amplitude of the sun, shadows can be expected to range from 50 feet in the summer to 300 feet in the winter. Of the sensitive receptors listed in Table 4-2 Marin Day School would not be affected by shadows from the Parking Structure. The outdoor play yard is located outside of the Parking Structure shadow zone. The Indigo Apartments are located southeast of the Parking Structure and would not be affected by shadows. The two residences at 605 and 611 Middlefield Road are located immediately east side of the COB3 project site; the front portion of the parcels would be affected during the times of year as identified in the Shading Study. The shadowing impact is consistent with the impacts to be expected from the urban density and building heights specified for the downtown Redwood City core. Locale Apartments and single-family homes on Brewster Avenue are located at least 240 feet west of the project buildings, which is outside the shadow length and direction of the project buildings

2.5 COB3 DESIGN

The County is investigating a design concept for COB3 that extends over the full County block. The proposed building would be six stories tall and consist of four levels of building mass elevated 32 feet over a ground floor. Below the elevated portion of the building will be two levels which provide open air terraces and County functions with public interface and would be closely connected to the ground-level Public Plaza. The building would be designed to project a sense of transparency, public access, and open space through its understory plaza, interior courtyard design, and glass elements.

Additional Information Page 2-3

This design concept requires demolition of the traffic court building, and therefore is dependent upon agreement by the Judicial Council to vacate the building and relocate the court function. The building concept was presented before the Board of Supervisors on April 24, 2018. A narrative of the design concept along with illustrations are presented in Appendix K.

Based on this concept, the COB3 building space would be increased to 186,000 s.f.. This is an increase of up to 30,000 sf over the maximum building space assessed in the Draft EIR (156,000 s.f.). The increase is proposed for conferencing space, employee amenities in accordance with the County Wellness Policy (gym, cafeteria, locker room, lactation, wellness room), and daily operation facilities and daily operations (mail room, storage, mechanical equipment supporting Zero Net Energy). A portion of the area devoted to building services will support the Zero Net Energy goal. The increase in building space would serve the same number of employees described in the Draft EIR; there is no change in the proposed number of occupants at COB3 and the number of employees relocated to COB3 from off-campus.

The increase in building size would not introduce new significant environmental impacts or increase the severity of environmental impacts as assessed in the Draft EIR. The increase in size would not change the types of impacts related to the number of employees such as traffic trips or public services. The types of uses proposed for the increased building space is consistent with the County administrative function. The increased footprint of the building remains within the county block disturbance zone that was analyzed in the Draft EIR. The new building size would cast an afternoon shadow on adjacent residences as discussed in the Shadow Study (Section 2.3 above). The updated COB3 design would result in aesthetic impacts substantially the same as those identified in the Draft EIR.

The increase in building size does not change the impacts to natural or cultural resources discussed in the Draft EIR. The construction period for COB3 may be increased from 24 to 27 months; this increase would not substantially change the project's noise and air quality impacts from those previously described in the Draft EIR. The mitigation identified in the Draft EIR would remain sufficient to reduce the impacts to a less-than-significant level. The increase in building size and to a lesser degree the longer construction period would result in increased energy consumption and GHG emissions. GHG emissions for this larger COB3 design concept were recalculated and the percentage of energy offsets required in project mitigation has been adjusted accordingly through text amendments in Chapter 5, Errata and Revisions.

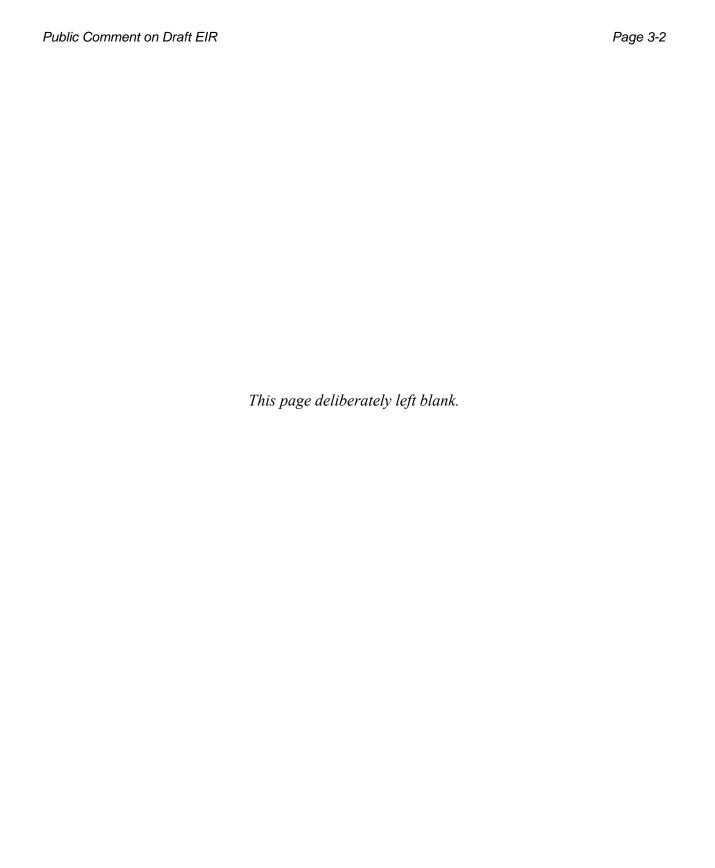
Additional Information Page 2-4 This page deliberately left blank. Final EIR

Chapter 3 PUBLIC COMMENT ON DRAFT EIR

This chapter contains written comments received on or related to the Draft EIR during the 45-day public review period from January 18 through March 5, 2018, as well as a summary of the oral comments made during the public hearing held by the County Board of Supervisors on February 27, 2018.

The County received eight comment letters during the Draft EIR review period pertaining to the contents of the Draft EIR, including two letters from state agencies (Caltrans and the Judicial Council) and one letter from a local agency (City of Redwood City), one letter from an organization (4Cs), and two letters from interested individuals. Additionally, one oral comment was received during a public meeting on the project held by the San Mateo County Board of Supervisors during the review period. Each commenter was assigned a letter (i.e., "A", "B", etc.) and each specific comment was assigned an alphanumeric identification number as summarized in Table 2.

Table 2. Summary of Public Comments on the Draft EIR		
ID	Commenter	Comments
Comment Letters		
A	California Department of Transportation	A1 – A5
В	Judicial Council of California	B1 - B7
С	City of Redwood City	C1 - C32
D	4Cs	D1 – D3
Е	Ken Rolandelli	E1 - E3
F	Martin Fox	F1
Oral Comments Received (Board of Supervisors Meeting, February 27, 2018)		
G	Richard Keyes	G1



DEPARTMENT OF TRANSPORTATION

DISTRICT 4
OFFICE OF TRANSIT AND COMMUNITY PLANNING
P.O. BOX 23660, MS-10D
OAKLAND, CA 94623-0660
PHONE (510) 286-5528
FAX (510) 286-5559
TTY 711
www.dot.ca.gov

Comment Letter A



March 5, 2018

SCH # 2017092039 GTS # 04-SM-2017-00153 GTS ID:7897 PM:SM – 82 – 4.073

Mr. Sam Lin San Mateo County Manager's Office Project Development Unit 1402 Maple Street Redwood City, CA 94063

San Mateo County Government Center Development Project - Draft Environmental Impact Report (DEIR)

Dear Mr. Sam Lin:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the San Mateo County Government Center Development Project. In tandem with the Metropolitan Transportation Commission's (MTC) Sustainable Communities Strategy (SCS), Caltrans' mission signals a modernization of our approach to evaluate and mitigate impacts to the State Transportation Network (STN). Caltrans' *Strategic Management Plan 2015-2020* aims to reduce Vehicle Miles Traveled (VMT) by tripling bicycle and doubling both pedestrian and transit travel by 2020. Our comments are based on the January 18, 2018 DEIR.

Project Understanding

This project is the development of a new County office building (five to seven levels; 121,000 to 156,000 square-feet) and a parking structure (850 to 1,200 stalls) on the eight-block County Government Center Campus in downtown Redwood City. The purpose of this project is to consolidate dispersed, related County functions into a single location to improve operational efficiency and service delivery, and provide financial benefits. This project involves relocation of the historic Lathrop House 200 feet south on Hamilton Street, demolition of two vacant buildings (First American Title Company and Lebsack) and demolition of the existing traffic court building and relocation of that function to the existing Hall of Justice located at the government center site. The project also includes a pedestrian promenade and plaza linking the buildings of the site.

This project is within two miles of US Route (US) 101 (Bayshore Freeway), State Route (SR) 82

Mr. Sam Lin, San Mateo County Manager's Office March 5, 2018 Page 2

(El Camino Real), and SR 84 (Woodside Road). Access from US 101 is achieved either from the interchange at Whipple Avenue, or the interchange at SR 84 (Woodside Road). The nearest access from SR 82 (El Camino Real) is via Jefferson Avenue. It is also located within 0.25 miles of the Redwood City Caltrain Station.

Multimodal Planning

The proposed project is in a planned Priority Development Area identified by the Association of Bay Area Governments (ABAG) as the Downtown Redwood City PDA. This project should include design features to encourage walking and multimodal access to be consistent with the area's PDA designation. The project's location in Downtown Redwood City represents an opportunity to develop a public space for all users. The lack of street-level uses and excess of blank street-walls could discourage people from walking to and through the site. Conditioning the site to accommodate food trucks and/or pop-up retail/activities will improve the walkability of the government center and Downtown Redwood City. The Lead Agency should identify design elements that promote active public spaces and incorporate them into the project, including the proposed plaza and pedestrian promenade.

Caltrans applauds the inclusion of bicycle parking on the site, as well as other Transportation Demand Management (TDM) strategies. The Lead Agency should identify project-generated travel demand and estimate the costs of transit and active transportation improvements necessitated by the proposed project; viable funding sources such as development and/or transportation impact fees should also be identified. We encourage a sufficient allocation of fair share contributions toward multimodal and regional transit improvements to fully mitigate cumulative impacts to regional transportation. Caltrans also notes the addition of the signalization of the intersection at SR 84 (Woodside Road) and Main Street to the Traffic Impact Fee (TIF) project list and looks forward to working with the Lead Agency regarding this project.

The project's primary and secondary effects on pedestrians, bicyclists, disabled travelers and transit users should be evaluated, including countermeasures and trade-offs resulting from mitigating VMT increases. Access for pedestrians and bicyclists to transit facilities must be maintained. These smart growth approaches are consistent with MTC's Regional Transportation Plan/Sustainable Community Strategies and would help meet Caltrans Strategic Management targets.

Parking

The DEIR has identified a parking shortage in Downtown Redwood City as an area of concern, and had indicated that the parking structure capacity will still need to be determined. Caltrans is concerned that providing an excess of parking on-site would discourage employees and visitors from accessing the project via transit or active means. Please provide the parking study, which the DEIR notes should be completed by February 2018, to Caltrans for analysis.

Vehicle Trip Reduction

From Caltrans' Smart Mobility 2010: A Call to Action for the New Decade, the project site is identified as **Place Type 2a: Close-in Compact Communities** where location efficiency factors,

A1

A2

A3

Mr. Sam Lin, San Mateo County Manager's Office March 5, 2018 Page 3

such as community design, are moderate and regional accessibility is strong. Given the place type and size of the project, it should include a robust TDM Program to reduce VMT and greenhouse gas emissions. Such measures are critical to facilitating efficient site access. Caltrans recognizes the TDM Measures identified for this project and encourages the Lead Agency to continuously update and improve its TDM strategies to maximize VMT reduction. The measures listed below will promote smart mobility and reduce regional VMT.

- Project design to encourage walking, bicycling and transit access;
- Transit and trip planning resources such as a commute information kiosk;
- Real-time transit information system;
- Transit subsidies on an ongoing basis;
- Ten percent vehicle parking reductions;
- Charging stations and designated parking spaces for electric vehicles;
- Carpool and clean-fuel parking spaces;
- Designated parking spaces for a car share program;
- Unbundled parking;
- Showers, changing rooms and clothing lockers for employees that commute via active transportation;
- Emergency Ride Home program;
- Employee transportation coordinator;
- Secured bicycle storage facilities;
- Fix-it bicycle repair station(s);
- Bicycle route mapping resources;
- Participation/Formation in/of a Transportation Management Association (TMA) in partnership with other developments in the area; and
- Aggressive trip reduction targets with Lead Agency monitoring and enforcement.

Transportation Demand Management programs should be documented with annual monitoring reports by an onsite TDM coordinator to demonstrate effectiveness. If the project does not achieve the VMT reduction goals, the reports should also include next steps to take in order to achieve those targets. Also, reducing parking supply can encourage active forms of transportation, reduce regional VMT, and lessen future transportation impacts on State facilities. These smart growth approaches are consistent with the MTC's Regional Transportation Plan/SCS goals and would meet Caltrans Strategic Management Plan sustainability goals.

For additional TDM options, please refer to the Federal Highway Administration's *Integrating Demand Management into the Transportation Planning Process: A Desk Reference* (Chapter 8). The reference is available online at:

http://www.ops.fhwa.dot.gov/publications/fhwahop12035/fhwahop12035.pdf.

Lead Agency

As the Lead Agency, the County of San Mateo is responsible for all project mitigation, including any needed improvements to the STN. The project's fair share contribution, financing,

A4 (cont'd Mr. Sam Lin, San Mateo County Manager's Office March 5, 2018 Page 4

scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

A5 (cont'd)

Encroachment Permit

Please be advised that any work or traffic control that encroaches onto the state ROW requires an encroachment permit that is issued by the Department. To apply, a completed encroachment permit application, environmental documentation, and five (5) sets of plans clearly indicating state ROW must be submitted to: Office of Permits, California DOT, District 4, P.O. Box 23660, Oakland, CA 94623-0660. Traffic-related mitigation measures should be incorporated into the construction plans during the encroachment permit process. See the website link below for more information: http://www.dot.ca.gov/hq/traffops/developserv/permits/.

A6

Thank you again for including Caltrans in the environmental review process. Should you have any questions regarding this letter, please contact Jake Freedman at 510-286-5518 or jake.freedman@dot.ca.gov.

Sincerely,

PATRICIA MAURICE

District Branch Chief

Local Development - Intergovernmental Review

c: State Clearinghouse



JUDICIAL COUNCIL OF CALIFORNIA

455 Golden Gate Avenue • San Francisco, California 94102-3688 Telephone 415-865-4200 • Fax 415-865-4205 • TDD 415-865-4272

Comment Letter B

TANI G. CANTIL-SAKAUYE Chief Justice of California Chair of the Judicial Council

MARTIN HOSHINO
Administrative Director

JOHN WORDLAW Chief Administrative Officer

MIKE COURTNEY
Director, Facilities Services

March 5, 2018

Sent via Electronic Mail to:

krodgers@smcgov.org

Deborah Bazan, Director County of San Mateo Project Development Unit 1402 Maple Street Redwood City, CAS 94063

RE: Draft Environmental Impact Report, for the County of San Mateo Government Center Development Project, State Clearinghouse No. 2017092039

Dear Ms. Bazan:

The Judicial Council of California appreciates the opportunity to submit comments to the Draft Environmental Impact Report, January 2018 ("DEIR") and express concerns as to the potential disruption and effect of the County's Government Center Development Project to the ongoing operations of the Superior Court of California, County of San Mateo ("Court") throughout the construction process.

Parking:

<u>Jury Parking</u> - pursuant to the Transfer Agreement Between the Judicial Council of California, Administrative Office of the Courts, and the County of San Mateo for the Transfer of Responsibility for Court Facility entered into between the parties in December 2008 ("Transfer Agreement"), the County of San Mateo has a continuing contractual obligation to provide

R1

Ms. Deborah Bazan Re: County Government Center Campus Development Project - DEIR March 5, 2018 Page 2

specific numbers of parking spaces for use by the judicial officers and staff of the Superior Court of California, County of San Mateo, in addition to providing 212 full-size parking spaces, including six ADA accessible parking spaces for jurors, on two surface-level parking lots located at Brewster Avenue and Veterans Boulevard (as depicted on Exhibit G to the Transfer Agreement). DEIR Table 2-3 lists 151 jury parking stalls that will be displaced by the Project during construction of the multi-story parking structure, however Judicial Council is concerned that the number of juror parking spaces that would be displaced during construction activity should be listed as 212. As shown on figure 3 there are two rows of juror parking stalls immediately adjacent to the planned multi-story parking structure site. Judicial Council is concerned that juror's vehicles could be at risk of damage during construction of the parking structure. The DEIR does not include a description of planned protective measures in order to ensure juror vehicles on the site do not sustain any damage.

B1 (Cont'd)

Table 2.1 provides that the existing surface parking lot(s) used by jurors located at Middlefield Road is 71,000 square feet in size. The temporary replacement juror parking to be constructed at the sites of Lathrop house (627 Hamilton; 14,200 square feet), and the adjacent vacant lot (617 Hamilton; 4,900 square feet) are a combined 19,100 square feet, only 26%+/- of the size of the existing surface parking lot(s). Clarification is requested as to the anticipated number and type of temporary replacement full-size juror parking stalls that will be provided on the Lathrop house and adjacent lot site.

B2

DEIR Section 2.6.3 states that "...the County may also rezone employee parking in existing parking structure to provide additional juror parking spaces. This would be implemented along with establishing off-site employee parking stalls and dedicated shuttle service for employees displaced from the parking garage by juror parking." Pursuant to the Transfer Agreement, the County has the obligation to provide a total of 738 spaces, comprised of 693 full-size non-exclusive unreserved parking spaces, 37 compact non-exclusive unreserved parking spaces, and 8 ADA accessible non-exclusive unreserved parking spaces all located within the existing multistory parking structure adjacent to 555 County Center Drive which spaces are shared by Court and County employees on a first-come, first served basis and which are located on the basement and floors 2, 3, 4 and 5. If employee parking spaces in the existing parking structure are to be rezoned for use by jurors, please provide more information as to the location of the planned off-site parking spaces and anticipated shuttle schedule.

B3

<u>Judicial Officer parking</u> – the Transfer Agreement provides that the County is required to provide ten full-size premium reserved spaces, dedicated for use by judges, located in a parking lot on the northeast corner of the intersection of County Center and Marshall Streets, along with 15 full-size premium, reserved spaces, dedicated for use by judges, located under 555 County Center Drive. The DEIR does not include a provision for the replacement of the ten full-size

B4

Ms. Deborah Bazan Re: County Government Center Campus Development Project - DEIR March 5, 2018 Page 3

premium reserved spaces for judicial officers as required by the Transfer Agreement, section 4.3.4 of equal number and type, and reasonably similar size and convenience. Clarification is requested as to the County's plan to provide the replacement judicial officer parking spaces.

B4 (Cont'd)

Potential Closure of Hamilton Street and County Center Drive: in the event Judicial Council and the County are unable to reach agreement as to the disposition of the Traffic Court property located at 500 County Center Drive, the DEIR is silent as to whether or not the County will be retaining both Hamilton Street and County Center Drive as public streets (as they are today) or if one or both streets will be closed in the event the Traffic Court remains in service and is not moved into the Hall of Justice. Judicial Council requests that an alternative analysis be provided for that situation.

B5

Noise, Vibration, and Dust: in the event Judicial Council and the County are unable to reach agreement as to the disposition of the Traffic Court property located at 500 County Center Drive and relocation of the Traffic Court operations into the Hall of Justice (or another location), the Traffic Court and its operations will continue in place. And even if the Traffic Court is permanently relocated, throughout demolition and construction of the Government Center Campus Development Project the Court will continue operations in the Hall of Justice, with judicial officers presiding over hearings and trials. Noise, vibration and dust levels caused by demolition and construction activity is of significant concern. Table S-1, Impact NOI-1 states that demolition and construction activities will occur for a period of approximately 18 – 26 months. Throughout the demolition and construction period Judicial Council requests that the County install physical barriers capable of achieving maximum noise reduction in order to minimize interference with the judicial officers' abilities to conduct court hearings and trials in both the Traffic Court and Hall of Justice, and schedule the most intrusive (loudest, dustiest, etc.) work after hours, weekends and holidays to the maximum extent possible.

B6

Potential Increase in Courtrooms, Court Staff, Jurors and Public at Hall of Justice: the County has expressed interest in acquiring the Traffic Court located at 500 County Center Drive, the Central Branch Courthouse (a three courtroom courthouse located in San Mateo), and Courtroom "O" located at the Northern Branch Jail Annex in South San Francisco. In the event negotiations between the County and Judicial Council result in replacement of the five courtrooms inside of the Hall of Justice the impact of the additional courtrooms (and resultant increase in court staff, jurors, attorneys, witnesses, etc.) would need to be taken into account with respect to impacts on traffic, public transit and parking.

B7

Judicial Council hereby specifically requests that it be provided written notice of future communications regarding the County Government Center Campus Development Project. My

Ms. Deborah Bazan

Re: County Government Center Campus Development Project - DEIR

March 5, 2018

Page 4

mailing address is 455 Golden Gate Ave., 8th floor, San Francisco, California 94102; email: eunice.calvert-banks@jud.ca.gov

If you have any questions regarding the content of this submittal please do not hesitate to contact me.

Sincerely,

Eunice Calvert-Banks

Manager, Real Estate

Judicial Council of California

Facilities Services

ECB/

cc: Hon. Susan I. Etezadi, Presiding Judge, Superior Court of California, County of San

Mateo

Ms. Rodina Catalano, Court Executive Officer, Superior Court of California, County of

San Mateo

Community Development Department

Planning and Housing Division 1017 Middlefield Road Redwood City, CA 94063



(650) 780-7234 planning@redwoodcity.org www.redwoodcity.org

Comment Letter C

March 5, 2018

Deborah Bazan San Mateo County Project Development Unit 1402 Maple Street Redwood City, CA 94063

Re: County of San Mateo Government Center Draft Environmental Impact Report

Dear Ms. Bazan:

Thank you for the opportunity to review the County of San Mateo Government Center Project (Project) Draft Environmental Impact Report. The following are our comments:

Redwood City's Downtown Precise Plan

The Draft EIR correctly states that the Project is not subject to the DTPP, in that the use of the proposed Project is for public agencies (DTPP, Section 2.0.1(f)). The DTPP states that the City shall encourage cooperative planning with public agencies in order to achieve the DTPP goals and visions. The City is available to discuss the Project's consistency with the DTPP during the Project's design development phase.

C1

Summary

Page S-9 Use of Recycled Water – Redwood City's recycled water complies with all applicable federal, state and local laws and regulations. Use of recycled water does not require a written agreement between the County and the City regarding assurances of water quality and protective measures. The Project will be responsible for proper design, construction, installation, operation, and maintenance of its recycled water facilities intended recycled water use, including compliance with all applicable federal, state, and local laws and regulations.

C2

Project Description

2.4.4 Lathrop House Relocation- The existing parking lot behind the History Museum is oriented with a one-way drive aisle that enters on Hamilton and exits on Middlefield. Use of

the remaining lot (after the placing of the Lathrop House) would require reconfiguring the parking spaces and drive aisle to accommodate two-way traffic from Middlefield.

C3 (Cont'd)

2.4.5 Promenade and Plaza – Hamilton Street and Bradford Street within the Project site contain Redwood City utilities that will require protection during the Project; the holder of right-of-way over these roadways has not been verified by Redwood City.

C4

2.5.1 Water- Redwood City's recycled water complies with all applicable federal, state and local laws and regulations. Use of recycled water does not require a written agreement between the County and the City regarding assurances of water quality and protective measures. The Project will be responsible for proper design, construction, installation, operation, and maintenance of its recycled water facilities intended recycled water use, including compliance with all applicable federal, state, and local laws and regulations.

C5

2.5.2 Sanitary Sewer- Redwood City has exceeded its Peak Wet Weather Flow (PWWF) capacity in the past. A methodology to reduce inflow and infiltration (I/I) by pipe replacement has been determined by Redwood City. The City requests that the Project reduce (I/I) to offset increased sewer demand from the Project by replacing aged sewer mains or pay an equivalent in-lieu fee. The length of pipe replacement required or the amount of fee will be based on the Project's sewage generation projection (Attachment L of the City's Engineering Standards).

C6

2.6.3 Temporary Parking- This section identifies an approach to address the parking shortage during construction for employees, but does not address where construction workers (est. 125) will park during construction of the parking structure. The City request that the EIR include details on where the off-site employee parking might be.

C7

2.8.2 Responsible Agencies, City of Redwood City- The City requests that this section be revised as follows: ...construction encroaching into Redwood City right-of-way for "activities such as public improvements or" for utility connection...

C8

<u>Aesthetics</u>

3.2.2 Regulatory Setting- City of Redwood City Downtown Precise Plan (DTPP)- The Draft EIR correctly states that the Project is not subject to the DTPP, in that the use of the proposed facilities is for public agencies (DTPP, Section 2.0.1(f)). The DTPP states that the City shall encourage cooperative planning with public agencies in order to achieve the DTPP goals and visions. The City is available to discuss the Project's consistency with the DTPP when architectural details are available.

C9

3.3.4 Visual Character or Quality- the City requests that a shadow study be prepared to identify impacts to the sensitive receptors identified in Table 4-2, as well as existing and proposed open space areas, plazas, and paseos.

C10

Biological Resources

Mitigation Measure BIO-3 Removal of Significant Trees: The City requests that the Draft EIR describe the conditions and permitting process required for removal of Significant Trees

and planting of replacement trees, consistent with the County of San Mateo Significant Tree Ordinance.

C11 (Cont'd)

Climate Change and Energy

6.3.7 Flood Hazard Areas- The City requests that this section discuss the preliminary flood insurance rate maps which, though not even effect at the time of public of the Draft EIR, may be in effect at the start of building construction. The preliminary flood insurance rate maps show that the Project site will be in a 100-year flood zone area.

C12

Cultural Resources

7.1.4.2 Local Historic Resource Inventory- The DTPP identifies Historic Resources to be Preserved, Historic Resources which may be Altered, Relocated, or Removed. The Draft EIR preparers shall consult DTPP Section 2.1 (Historic Resources Preservation Guidelines) and update Section 7.1.4.2 and Figure 7-1 to include sites not identified in the Draft EIR but listed in the DTPP, including 605 Middlefield Road. 727 Middlefield Road, and 2201 through 2227 Broadway (Fox Theater Complex). The City requests that Section 7.3.2 Historical Resources be updated to include analysis of these sites (if not previously provided).

C13

7.3.2 Historical Resources, Lathrop House- The City of Redwood City's Historic Resources Advisory Committee (HRAC) held a meeting on February 8, 2018 to review and provide comments on the Cultural Resources Chapter of the Draft EIR. At the meeting, HRAC focused on the following issues:

C14

- HRAC members asked about a relocation plan (plan) for the Lathrop House move. County representatives indicated that a relocation plan had been developed. The plan does not appear in the Draft EIR. The City requests that the plan be included with the other historic reports and any findings resulting from the plan be analyzed and considered for consistency with the regulatory setting applicable to cultural resources.
- Keep Lathrop House in Place Alternative- HRAC members commented on this alternative and offered perspectives regarding how this alternative could meet the County's Project objectives. The City requests that the Draft EIR Cultural Resources chapter provide additional detail regarding consistency or inconsistency with specific Project objectives and specifically how this alternative, if found to meet the Project objectives, could feasibly address the Secretary of the Interior's Standards guidance about relocation.
- National Register Listing- the HRAC had the following questions, which the City requests to be addressed in the Cultural Resources Chapter:
 - Could the relocation of the Lathrop House affect the exiting National Register historic designation?
 - What is the process for re-evaluation of the Lathrop House for National Register historic designation given the intent for relocation?
 - What is the timeline for receipt of the findings as a result of reevaluation?
 - What are the implications if the Lathrop House is not eligible for National register listing as a result of relocation?

The City requests the reevaluation results to be completed in order to understand the impacts of re-location and the mitigations required to reduce impacts to a less than significant level.	C14 (Cont'd)
 Land Use 8.2 Regulatory Setting- the City requests that the Draft EIR include references and descriptions of the following: Redwood City General Plan (2010): The Project site contains a land use designation of Mixed Use – Downtown, applicable to the City's historic Downtown core (General Plan, Page BE-47). Redwood City Zoning Code: The Project site contains a zone district designation of Planned Community District (P), as described in Zoning Code, Article 52. 	C15
8.3 Applicable Land Use Plan, Policy or Regulation- The City requests that the Draft EIR be corrected to state that the DTPP does not apply to public agencies designated throughout the DTPP area. This has been interpreted to mean County and other public agency functions conducted within the DTPP area are not subject to the DTPP. Non-public agency functions, such as private offices or housing would be subject to the DTPP.	C16
<u>Traffic</u> 10.1.1 Existing Roadway Network- The City requests that Interstate 280 be added to the list of the regional roadways used to access the Project.	C17
10.1.2 Bicycle Facilities – Veterans Boulevard between Whipple Avenue and Chestnut Street generally has a Class II bicycle facility, however, the Project frontage of southbound Veterans Boulevard between Middlefield Road and Brewster Avenue is not wide enough for a 5 foot wide and fully striped bicycle lane and right turn lane. The City requests that the County review with Redwood City staff the ability to adjust the southbound Veterans Boulevard curb line to improve the Class II bicycle facility and right turn movements towards the Project site.	C18
10.1.3 Pedestrian Facilities- The City requests that the County consult with the City regarding design and construction of pedestrian facilities in order to provide better connectivity with Downtown and the CalTrain station.	C19
10.3.3.1 Trip Generation- Include baseline information on travel patterns of jury members and whether any changes are expected due to the Project. Include the source of existing commute patterns for County employees.	C20
10.3.3.2 Street Conversion and Parking Relocation- Clarify how trip making patterns of unmet employee parking demand (260 spaces) is accounted for in the trip distribution assumptions.	C21
10.5 Cumulative Impacts- The City requests that the County add language about the Background + Project impact at Main/Woodside Road Westbound Ramp. Language about	C22

the cumulative impact at the same intersection suggests that it isn't possible for the County to mitigate their impact. A fair-share contribution to the signal would effectively mitigate the Project's impact and potentially eliminate the significant and unavoidable impact that is currently identified.

C22 (Cont'd)

Mitigation Measure TRA-2- the City requests that the County add Background + Project impact and fair share payment. Although not called out by name, the signalization of the intersection is included in the City's 5-year CIP program under the "Traffic Signal Improvements" program.

C23

Other Traffic Mitigations- the City suggest including the other recommendations from the Transportation Impact Analysis (TIA) in this section (e.g. full site operations analysis, signage program)

C24

Appendix F: Transportation Impact Analysis. The City requests that the County consider the following:

- P. 19 Consider reviewing LOS analysis results for Veterans/Woodside (B/F), Jefferson/Middlefield (D/D), and Main/Woodside Ramps (C/F) which had different results than recent EIRs completed for the City (our results shown in the parenthesis).
- P. 23 Consider clarification of how trip making patterns of unmet employee parking demand (260 spaces) is accounted for in the trip distribution assumptions.
- Table 7 Consider adding NB off-ramp at 101/Whipple in the analysis. The capacity of the SB off-ramp to Veterans/Whipple should be 3800, not 2000
- P.30 Consider Background conditions that reflect the changes to the Middlefield/Woodside intersection that is under construction.
- P. 31 Typographical change: 1035 El Camino Real should be 1305 El Camino Real
- P. 34 Consider Background + Project conditions that reflect the changes to the Middlefield/Woodside intersection that are under construction.
- P. 38 Consider Cumulative conditions that reflect changes to the Middlefield/Woodside intersection that are under construction.

CEQA Required Assessments

12.3 Cumulative Projects and Impact- the City requests that the County review the cumulative projects list with City staff and requests the following corrections and additions:

- Stanford in Redwood City (577,000 sf <u>administrative</u> office)
- 801 Brewster (<u>250</u>-unit multifamily residential)
- 1548 Maple Street (131-unit multifamily residential) is not listed in Section 12.3 or in Appendix F, Section 4 Traffic Volumes. This project is proposed, but not yet approved. The City requests that it be considered as a "cumulative" project.
- 320-350 Blomquist Street (1,179,747 sq office) is listed in Section 12.3, but does not appear in Appendix F, Section 4 Traffic Volumes. This project is proposed, but not yet approved. The City requests that it be considered as a "cumulative" project.

_ _ _

C26

• 557 East Bayshore (336, multifamily residential, 100,000 commercial recreation). This project is proposed, but not yet approved. The City requests that it be considered as a "cumulative" project.

• 1629 Main Street (24,700 square foot office) is an approved project (August 2016) under construction and should be considered in background conditions.

(Cont'd)

• Kaiser Hospital Phase 2 (197,800 square feet medical office) was approved in February 2018 and should be considered in background conditions

12.4.6 Population and Housing- the Project would consolidate County uses and provide office space for approximately 616 employees. The City requests that the County consider the impacts of this increased employee population on the demand for existing childcare services near the Project and the need to establish new childcare facilities.

12.4.8 Recreation- the City requests that the County describe the potential uses of the new open space areas (extent of the areas open to the public, availability for public events, etc.)

12.4.9 Utilities, Water, and Wastewater – Redwood City's recycled water complies with all applicable federal, state and local laws and regulations. Use of recycled water does not require a written agreement between the County and the City regarding assurances of water quality and protective measures. The Project will be responsible for proper design, construction, installation, operation, and maintenance of its recycled water facilities intended recycled water use, including compliance with all applicable federal, state, and local laws and regulations.

12.4.9 Utilities, Water, and Wastewater- Redwood City has exceeded its Peak Wet Weather Flow (PWWF) capacity in the past. A methodology to reduce inflow and infiltration (I/I) by pipe replacement has been determined by Redwood City. The City requests that the Project reduce (I/I) to offset increased sewer demand from the Project by replacing aged sewer mains or pay an equivalent in-lieu fee. The length of pipe replacement required or the amount of fee will be based on the Project's sewage generation projection (Attachment L of the City's Engineering Standards).

C30

12.4.9 Utilities, Stormwater – The City requests that the Project comply with Redwood City's Drainage Guidelines for Commercial Development regarding stormwater detention.

12.4.9 – Utilities, Stormwater – The City requests that the EIR discuss Green Infrastructure. Even if an agency has not completed a Green Infrastructure Plan required by the MRP, it should still be evaluating Green Infrastructure to ensure no missed opportunities. The City requests that the County look for opportunities to treat stormwater from existing buildings and courtyards where possible, as well as from adjoining street rights-of-way.

Please feel free to contact me if you have any questions or to request Redwood City information and data that would be helpful in responding to the comments presented in this letter.

Sincerely,

Steven Turner Planning Manager

cc. Aaron Aknin, Assistant City Manager



Comment Letter D

March 5, 2018

Deborah Bazan, Director County Manager's Office, Project Development Unit 1402 Maple Street Redwood City, CA 94063

RE: Public Comment on Draft Environmental Impact Report (DEIR) for the County of San Mateo Government Center Development Project

Dear Ms. Bazan,

As a lead planning partner for Build Up for San Mateo County's Children, a county-wide initiative designed to grow and improve the supply of child care and preschool, I am writing to ask that the County of San Mateo consider assessing how the County's proposed development of an expanded Government Center in Redwood City will impact the already strained child care supply for County-employed working parents.

The County of San Mateo has been a leader in providing access to child care for its employees. However, the current center in downtown Redwood City already has 130 county-employees on the waitlist, out of a total waitlist of 535 families. Undoubtedly, some of the approximately 400 new county employees moving to this location with be parents to children under age five that need child care. With a countywide child care shortage of close to 11,000 spaces, many of those parents would choose to bring their children with them to downtown Redwood City if child care was made available.

If there was an opportunity to expand child care spaces on the county campus, the County could work with an experienced child care operator, as it does now. Build Up partners can assist the County should a child care operator need to be identified. At the existing child care center, the County has set an example for other employers by providing space (both indoor and outdoor) for the child care operator and underwriting a portion of the center's costs, primarily to serve as scholarships.

In addition to examining how the new Government Center will impact access to child care, we are also asking that you consider conducting a shade study to understand how the proposed new parking structure may impact the sunlight that reaches the existing child care center. Natural daylight is a crucial component for high quality early childhood education environments, contributing to children's learning and wellbeing.

D3

D2

D1



Thank you for consideration of how this proposed development will impact the county's employees and their young children. If you would like further information on Build Up and the need for child care and preschool facilities in San Mateo County, please contact us at buildupsmc@gmail.com.

Sincerely,

David Fleishman Executive Director

cc: Mike Callagy, Assistant County Manager

Ken Rolandelli 2466 Oregon Avenue Redwood City, CA 94061-2510

March 2, 2018

Comment Letter E

Ms. Debra Bazan Provisional Director Project Development Unit County Manager's Office 1402 Maple Street Redwood City, CA 94063

Dear Ms. Bazan,

Please accept this letter as comments to the Draft Environmental Impact Report for the County Government Center Campus Development Project.

As I did in my letter on the scope and content of the Environmental Impact Report, I will again mention that I am writing as an individual, representing no one other than myself, and that I am a longtime member of the City of Redwood City Historic Resources Advisory Committee and a former longtime chair of the Committee. I have nearly four decades of experience in the appropriate treatment of historic resources and have had numerous hours of relevant training over the years.

I am also a member of the Board of Directors and a former president of the Redwood City Heritage Association, the group that has operated the Lathrop House as an historic house museum for decades.

My comments to the Draft EIR are as follows:

- 1. While there is reference to "expert review" in the Draft EIR concluding that the historic status of Lathrop House would not be compromised were it to be relocated as proposed (reference page 7-14) and reasoning for that conclusion (reference page 7-13), there is no actual report included that evaluates or addresses impacts on the relocation of Lathrop House itself. The report on the Lathrop House Receiver Site specifically states in the introduction, "This report does not address the impacts, if any, on the relocation of Lathrop House." Such a report should be included. At the February 8, 2018, Historic Resources Advisory Committee meeting, project manager, Jim Mosier, indicated that it would be.
- 2. The County should apply the Secretary of the Interior's Standards for the Treatment of Historic Properties, "Relocation shall only be considered if no other treatment outlined in the Secretary of Interior's Standards is practical or feasible." On pages 11-5 and 11-6 of the Draft EIR, under the Keep Lathrop House in Place alternative, it indicates that the county's objectives of consolidating County functions and increased office space would

E1

E2

still be met were Lathrop House to remain at its present location and that the issue is "designing around Lathrop House would limit the County's ability to create a visually cohesive design of civic buildings on the County Government Center campus and interfere with the objectives of designing a vibrant public plaza and strong sense of identity and arrival". This is subjective. Rather than considering Lathrop House as not fitting in, it should be embraced.

The most appropriate treatment for this historic property would be to leave it in place by incorporating it into the project. With will and imagination it could easily be done. The Lathrop House would be an impressive feature of the County Government Center campus both visually because of its architectural appeal and significance as well as thematically as a representation of the early history of San Mateo County government due to its connection with the original owner, Benjamin Gordon Lathrop, who was San Mateo County's first Clerk and Recorder (1856 – 1863) and a member and chairman of the County Board of Supervisors (1865 – 1867).

Best Regards,

Ken Rolandelli

E2 (Cont'd)

Comment Letter F

REQUEST TO PROVIDE COMMENT(s)
PLEASE COMPLETE THIS FORM AND HAND IT TO ONE OF THE PDU STAFF MEMBERS
February 27, 2018 – County Government Center Campus Development Project
Name Martin T, Fox (Pronouced)
Address/City/Zip Code 1016 Lassen Dr. Belmat 94002
If Speaking on Behalf of an Organization, Please Identify Leteraus Coalition
Please Provide a Brief Summary of Your Comment:
Please mitigate the loss of use of Law hibrary
services by increasing the use of COB3 by county
1) Provide written comments tonight to a PDU staff member tonight. employees and the public
2) Mail written comments to the County: San Mateo County Manager's Office, PDU, Attn: Karen Rodgers 1402 Maple Street, Redwood City, CA 94063
3) E-mail comments to the County: Karen Rodgers at <u>krodgers@smcgov.org</u> , Subject: County Office Building EIR Scoping Comments
Submit written comments by: Monday, March 5, 2018

F1

Chapter 4 RESPONSES TO COMMENTS ON DRAFT EIR

This chapter provides a written response by the County, as Lead Agency for the project, to each comment raising a significant environmental issue submitted on the Draft EIR. A brief summary of each comment is provided for reference. Each comment letter is presented in Chapter 3 and should be referred to for viewing the full text of the comment.

4.1 RESPONSE TO COMMENTS FROM CALTRANS

Comment A1: This project should include design features to encourage walking and multimodal access to be consistent with the Downtown Redwood City Priority Development Area designation. The Lead Agency should identify design elements that promote active public spaces and incorporate them into the project, including the proposed plaza and pedestrian promenade. The Lead Agency should identify project-generated travel demand and estimate the costs of transit and active transportation improvements necessitated by the proposed project; viable funding sources such as development and/or transportation impact fees should also be identified.

We encourage a sufficient allocation of fair share contributions toward multimodal and regional transit improvements to fully mitigate cumulative impacts to regional transportation. Caltrans also notes the addition of the signalization of the intersection at SR 84 (Woodside Road) and Main Street to the Traffic Impact Fee (TIF) project list and looks forward to working with the Lead Agency regarding this project.

Response to Comment A1: The proposed project includes pedestrian design features of a promenade and plaza to encourage walking and access to regional transit centers. The County identified Transportation Demand Management (TDM) measures and incorporated them into the project design. The existing transportation network is sufficient to handle projected increase in vehicle and transit trips. There are no impacts or known deficiencies in the transit system that requires mitigation. The Transportation Impact Analysis prepared for the project (EIR Appendix F) concludes:

The project is not expected to cause any impacts to the local transit services. Based on surveys conducted of existing County Government Center employees, it is expected that 11 percent of the new employees (44 employees) would commute to the campus using transit. This increase in 44 riders would not result in an impact on local transit services due to the relatively large availability of bus and train services within walking distance of the project site.

The Main Street/Woodside Road Westbound Ramp intersection is under the jurisdiction of the City of Redwood City. The City, not the County, is the Lead Agency responsible for signalization improvements at this intersection. The County also looks forward to working with the City as Lead Agency for street signalization improvements.

Comment A2: The project's primary and secondary effects on pedestrians, bicyclists, disabled travelers and transit users should be evaluated, including countermeasures and trade-offs resulting from mitigating VMT increases. Access for pedestrians and bicyclists to transit facilities must be maintained.

Response to Comment A2: The Transportation Impact Analysis prepared for the project (EIR Appendix F) concludes:

The project would improve the pedestrian environment in the project vicinity by creating a large pedestrian promenade as part of the closure of County Center

and Hamilton Street. This pedestrian promenade would provide a safe pedestrian environment, connecting all office buildings in the Government Center. The County will consult with the City of Redwood City on potential pedestrian improvements to crosswalks at the following three intersections: Middlefield Road and Marshall Street, Middlefield Road and Bradford Street, and Jefferson Avenue and Bradford Street. Elsewhere, the existing pedestrian network in Downtown Redwood City provides safe and comfortable access between the COB3 and transit services.

Likewise, the pedestrian promenade would provide safe access for bicyclists to the office buildings on the County Government Center campus. Off-campus access to transit facilities by bicyclists would not be impacted by the project.

Comment A3: The Draft EIR has identified a parking shortage in Downtown Redwood City as an area of concern and had indicated that the parking structure capacity will still need to be determined. Caltrans is concerned that providing an excess of parking on-site would discourage employees and visitors from accessing the project via transit or active means. Please provide the parking study, which the Draft EIR notes should be completed by February 2018, to Caltrans for analysis.

Response to Comment A3: The parking study was directly sent to Caltrans for review as requested. The study is also attached to the EIR as Appendix H. Discussion of the parking study is presented in Chapter 2, Additional Information.

Comment A4: Transportation Demand Management programs should be documented with annual monitoring reports by an onsite TDM coordinator to demonstrate effectiveness. If the project does not achieve the VMT reduction goals, the reports should also include next steps to take in order to achieve those targets. Also, reducing parking supply can encourage active forms of transportation, reduce regional VMT and lessen future transportation impacts on State facilities.

Response to Comment A4: The County of San Mateo's Office of Sustainability (OOS) shall be the designated Transportation Demand Management (TDM) contact for the duration of the proposed project. All proposed TDM measures shall be reviewed and approved by the Project Development Unit (PDU) prior to implementation.

A report shall be prepared by the OOS and submitted to the Project Development Unit for the project file, documenting compliance with Mitigation Measure TRA-1 during construction and three years after a certificate of occupancy has been granted.

If the project does not achieve the Vehicle Miles Traveled (VMT) reduction goals, the County shall provide an explanation of how and why the goal has not been reached and a detailed description of additional TDM measures that will be implemented in the coming year to attain the VMT reduction goals. Any and all additional measures must include an implementation schedule by month. OOS will confer with C/CAG and PDU staff to determine and implement additional TDM measures for compliance with TRA-1 Mitigation Measure Performance Standards.

Comment A5: As the Lead Agency, the County of San Mateo is responsible for all project mitigation, including any needed improvements to the STN. The project's fair share contribution, financing, scheduling, implementation responsibilities and lead agency monitoring should be fully discussed for all proposed mitigation measures.

Response to Comment A5: As identified in the EIR traffic discussion (EIR Chapter 10) and the supporting Transportation Impact Analysis (EIR Appendix F), the project does not involve improvements to any state roadways. No County sponsored mitigation is proposed for state roads. The project's impact at the Main Street/Woodside Road Westbound Ramp (State Route 84) is significant. As discussed in the EIR, the City of Redwood City is the lead agency for traffic improvements to that intersection. The TIF development fee does not provide a fair share funding mechanism which specifically targets traffic improvements at this intersection. Therefore, the impact is considered unavoidable. Please see response to Comment C22 from Redwood City for further discussion.

Comment A6: Please be advised that any work or traffic control that encroaches onto the state ROW requires an encroachment permit that is issued by the Department. Traffic-related mitigation measures should be incorporated into the construction plans during the encroachment permit process.

Response to Comment A6: Comment acknowledged. The proposed County Government Center Campus Development Project does not require work or traffic control measures on state ROWs. Future signalization improvements at the Main Street/Woodside Road Westbound Ramp intersection may occur within the State Route 84 ROW and would be undertaken by the City of Redwood City as a separate project.

4.2 RESPONSE TO COMMENTS FROM JUDICIAL COUNCIL OF CALIFORNIA

Comment B1: Two rows of juror parking adjacent to the planned parking structure could be at risk of damage during construction of the parking structure. The Draft EIR does not include a description of planned protective measures in order to ensure juror vehicles on the site do not sustain any damage.

Response to Comment B1: The juror parking adjacent to the planned parking structure will be relocated into the existing parking structure during construction of the new parking structure and would not be at risk of damage from construction activity. The Construction Manager will employ safety measures as required to protect pedestrian and vehicle traffic.

Comment B2: Table 2.1 provides that the existing surface parking lot(s) used by jurors located at Middlefield Road is 71,000 square feet in size. The temporary replacement juror parking to be constructed at the sites of Lathrop House and the adjacent vacant lot is a combined 19,100 square feet, only 26% +/- of the size of the existing surface parking lot(s). Clarification is requested as to the anticipated number and type of temporary replacement full-size juror parking stalls that will be provided on the Lathrop House and adjacent lot site.

Response to Comment B2: The County will provide 1:1 replacement of full-size juror spaces displaced by project construction. The County will maintain the full number of juror parking spaces during construction as required by the Transfer Agreement. All juror parking will be relocated to the existing parking structure. No jury parking will be located at the Lathrop House or adjacent lot site. The Draft EIR reference to juror parking provided on the Lathrop House lot is modified accordingly. See Final EIR Chapter 5, Errata and Revisions.

The following information regarding construction parking has been added to the Final EIR Chapter 2, Additional Information:

During project construction, County employee, judicial, and construction worker parking on the County Government Center campus will be allocated space in designated locations.

County Employees. Approximately 300 employee parking spaces will be relocated from the existing parking structure. The County will employ a shuttle service that will transport employees to and from the Government Center from designated off-site parking locations. The County is currently negotiating with several landowners near the project site. It is anticipated that the shuttle service will loop to and from the drop off and pick up sites every 15 minutes, continuously throughout the day, Monday through Friday.

Judicial Officers and Jurors. The existing parking structure will be rezoned for juror parking and provide 212 full-size parking spaces reserved for jurors. Ten full-sized premium reserved spaces for judicial officers will be relocated to the Law Library parking lot, directly across from the Hall of Justice. An additional 15 "Courts Judicial" parking spaces will remain in the basement under COB2.

Public. No changes will be made to the public parking spaces on the ground floor of the parking garage.

Construction Workers. A designated area for the construction workers parking is tentatively planned to be located on the Government Center site and/or the Bradford lot, a portion of which is rented by the County. All juror parking will be relocated to the existing parking structure (see Chapter 2, Additional Information). No jury parking will be located at the Lathrop House or adjacent lot site. The Draft EIR reference to juror parking provided on the Lathrop House lot is modified accordingly.

Comment B3: Pursuant to the Transfer Agreement, the County is obligated to provide 738 unreserved spaces within the existing parking structure for Court and County employees. If spaces are rezoned for jurors, provide more information as to the location of the planned off-site parking spaces and anticipated shuttle schedule.

Response to Comment B3: During project construction, the County will employ a shuttle service that will transport employees to and from the Government Center from designated off-site parking locations. It is anticipated that the shuttle service will loop every 15 minutes, continuously throughout the day, Monday thru Friday (see Chapter 2, Additional Information).

Comment B4 The Draft EIR does not include a provision for the replacement of the ten full-size premium reserved spaces for judicial officers as required by the Transfer Agreement. Clarification is requested as to the County's plan to provide the replacement judicial officer parking spaces.

Response to Comment B4: The County will provide 1:1 replacement of full-size juror spaces displaced by project construction. The County will maintain the full number of juror parking spaces during construction as required by the Transfer Agreement. See response to Comment 2 above for further parking plan details.

During the Government Center construction period the ten full-sized premium reserved spaces for judicial officers will be relocated to the Law Library parking lot, directly across from the Hall of Justice. All ten full-size reserved spaces for judicial officers will be maintained per the Transfer Agreement.

Comment B5: The Draft EIR is silent as to whether or not the County will be retaining both Hamilton Street and County Center Drive as public streets (as they are today) or if one or both streets will be closed in the event the Traffic Court remains in service and is not moved into the Hall of Justice. Judicial Council requests that an alternative analysis be provided for that situation.

Response to Comment B5: Street closure is planned as a key project element to create a public promenade irrespective of whether the traffic court remains open at this location. The EIR assumes the loss of on-street parking on Hamilton and County Center Drive will be fully mitigated by the measures described in the EIR. In the event the Traffic Court remains in service and is not moved into the Hall of Justice, there will still be street closure.

Comment B6: Noise, vibration and dust levels caused by demolition and construction activity is of significant concern. Throughout the demolition and construction period Judicial Council requests that the County install physical barriers capable of achieving maximum noise reduction in order to minimize interference with the judicial officers' abilities to conduct court hearings and trials in both the Traffic Court and Hall of Justice, and schedule the most intrusive (loudest, dustiest, etc.) work after hours, weekends and holidays to the maximum extent possible.

Response to Comment B6: The County will employ Best Management Practices during construction to reduce dust generation per requirements of the Bay Area Air Quality Management District (BAAQMD). For all construction projects, the BAAQMD recommends implementing all the Basic Construction Mitigation Measures identified in Draft EIR Table 2-5. Projects that implement these fugitive dust BMPs meet the BAAQMD's best management threshold for fugitive dust, and therefore impacts associated with fugitive dust emissions would not be significant.

The Draft EIR identifies noise best management practices in Table 2-5 and additional noise controls in Mitigation Measure NOI-1 (see Draft EIR Table S-1). A detailed construction plan will be prepared providing coordination with noise-sensitive facilities so that construction activities and events can be scheduled to minimize noise disturbance. Physical barriers and/or acoustic panels would be used to achieve a 14-dB reduction in construction noise at sensitive receptor locations. Per the County noise control ordinance, construction hours would be limited to weekdays between 7 a.m. to 6 p.m. and Saturdays 9 a.m. to 5 p.m. (Draft EIR Table 2-5). Weekend and night hours are not recommended for noise generating activities due to increased impact on residential sensitive receptors and inconsistency with applicable noise ordinance standards. As detailed in Draft EIR Section 9.3.4, pgs. 9-16 and 9-17, impacts related to vibration at neighboring structures were evaluated and found to be less than significant.

Comment B7: In the event negotiations between the County and Judicial Council result in replacement of the five courtrooms inside of the Hall of Justice, the impact of the additional courtrooms (and resultant increase in court staff, jurors, attorneys, witnesses, etc.) would need to be taken into account with respect to impacts on traffic, public transit, and parking.

Response to Comment B7: The proposed relocation of the Traffic Court would move one court function into two court rooms within the Hall of Justice building. The relocation would not change the function of the Traffic Court or its case load or staffing. The relocation is a redistribution of activities within the County Government Center. There would be no increase in vehicle trips, public transit, or parking demands at the County Government Center campus caused by relocating the Traffic Court.

The proposed project does not involve a potential for placement of five courtrooms in Hall of Justice. The proposed County project does not propose importing new court function. If the Judicial Council proposes future changes in its court facilities, the impacts of those changes would be evaluated by the Judicial Council as its own Lead Agency at the time they are proposed.

4.3 RESPONSE TO COMMENTS FROM CITY OF REDWOOD CITY

Comment C1: Redwood City's Downtown Precise Plan. The DTPP states that the City shall encourage cooperative planning with public agencies in order to achieve the DTPP goals and visions. The City is available to discuss the Project's consistency with the DTPP during the Project's design development phase.

Response to Comment C1: The County of San Mateo is engaged in cooperative planning with the City. The County PDU staff has held meetings with the City Mayor, City Manager, and executive staff for input. Meetings with the City Economic Development Department and Planning Commission are planned. The County will continue to provide the City with notifications of all County approvals during this project development process. The City will have several opportunities to comment on project consistency with the DPP during design development, and the County encourages and welcomes the City's input at the appropriate milestones.

Comment C2: Summary Page S-9 Use of Recycled Water. Redwood City's recycled water complies with all applicable federal, state and local laws and regulations. Use of recycled water does not require a written agreement between the County and the City regarding assurances of water quality and protective measures. The Project will be responsible for proper design, construction, installation, operation, and maintenance of its recycled water facilities intended recycled water use, including compliance with all applicable federal, state, and local laws and regulations.

Response to Comment C2: The COB3 and parking garage structure will be plumbed for use of recycle water. The referenced need for written agreement and assurances is deleted. Please see Chapter 5, Errata and Revisions.

Comment C3: Project Description 2.4.4 Lathrop House Relocation. The existing parking lot behind the History Museum is oriented with a one-way drive aisle that enters on Hamilton and exits on Middlefield. Use of the remaining lot (after the placing of the Lathrop House) would require reconfiguring the parking spaces and drive aisle to accommodate two-way traffic from Middlefield.

Response to Comment C3: Correct. A conceptual design site plan showing reconfigured parking and a two-way traffic drive aisle is shown in attached in Appendix I.

Comment C4: 2.4.5 Promenade and Plaza. Hamilton Street and Bradford Street within the Project site contain Redwood City utilities that will require protection during the Project; the holder of right-of-way over these roadways has not been verified by Redwood City.

Response to Comment C4: The County will work collaboratively with the City to verify utility locations and provide protection as needed.

Comment C5: 2.5.1Water. Redwood City's recycled water complies with all applicable federal, state and local laws and regulations. Use of recycled water does not require a written agreement between the County and the City regarding assurances of water quality and protective measures.

The Project will be responsible for proper design, construction, installation, operation, and maintenance of its recycled water facilities intended recycled water use, including compliance with all applicable federal, state, and local laws and regulations.

Response to Comment C5: See response to Comment C2.

Comment C6: 2.5.2 Sanitary Sewer. Redwood City has exceeded its Peak Wet Weather Flow (PWWF) capacity in the past. A methodology to reduce inflow and infiltration (I/I) by pipe replacement has been determined by Redwood City. The City requests that the Project reduce (I/I) to offset increased sewer demand from the Project by replacing aged sewer mains or pay an equivalent in-lieu fee. The length of pipe replacement required, or the amount of fee will be based on the Project's sewage generation projection.

Response to Comment C6: Comment acknowledged. The County will offset inflow and infiltration by pipe replacement or pay an equivalent in-lieu fee. This statement has been added to the EIR. Please see Chapter 5, Errata and Revisions.

Comment C7: 2.6.3 Temporary Parking. This section identifies an approach to address the parking shortage during construction for employees but does not address where construction workers (est. 125) will park during construction of the parking structure. The City request that the EIR include details on where the off-site employee parking might be.

Response to Comment C7: Please see additional information provided in Section 2.2, Construction Plan Parking. Construction parking will be provided at 1402 Maple Street next to the County's Project Development Unit offices.

Comment C8: 2.8.2 Responsible Agencies, City of Redwood City. The City requests that this section be revised as follows: ...construction encroaching into Redwood City right-of-way for "activities such as public improvements or" for utility connection...

Response to Comment C8: Text has been added. Please see Chapter 5, Errata and Revisions.

Comment C9: Aesthetics 3.2.2 Regulatory Setting. The Draft EIR correctly states that the Project is not subject to the DTPP, in that the use of the proposed facilities is for public agencies (DTPP, Section 2.0.1(f)). The DTPP states that the City shall encourage cooperative planning with public agencies in order to achieve the DTPP goals and visions. The City is available to discuss the Project's consistency with the DTPP when architectural details are available.

Response to Comment C9: Comment acknowledged. The County will work collaboratively with the City during the project design process.

Comment C10: 3.3.4 Visual Character or Quality. The City requests that a shadow study be prepared to identify impacts to the sensitive receptors identified in Table 4-2, as well as existing and proposed open space areas, plazas, and paseos.

Response to Comment C10: See additional information provided in Section 2.4 Shading Study. The County's shading study identifies all shading impacts on existing and proposed development. No significant impacts to adjacent receptors were identified.

Comment C11: Biological Resources. Mitigation Measure BIO-3 Removal of Significant Trees. The City requests that the Draft EIR describe the conditions and permitting process required for removal of Significant Trees and planting of replacement trees, consistent with the County of San Mateo Significant Tree Ordinance.

Response to Comment C11: The County of San Mateo Significant Tree Ordinance was enacted to protect heritage trees in unincorporated areas by establishing a permitting process governing their removal. The County project, located within city boundaries, is not subject to the permit requirement process under the Significant Tree Ordinance. As stated in Measure BIO-3, if the two redwood trees adjacent to Lathrop House cannot be preserved in place, they will be replaced. Redwood trees are not native to the baylands. Landscape trees planted on the project site will be species biologically suited for the location as recommended by an arborist. The redwood trees at the Lathrop House site will be replaced.

Comment C12: Climate Change and Energy. 6.3.7 Flood Hazard Areas. The City requests that this section discuss the preliminary flood insurance rate maps which, though not even effect at the time of public of the Draft EIR, may be in effect at the start of building construction. The preliminary flood insurance rate maps show that the Project site will be in a 100-year flood zone area.

Response to Comment C12: The County is aware of the preliminary flood insurance rate maps and will address flood zone concerns in its design process.

Comment C13: Cultural Resources. 7.1.4.2 Local Historic Resource Inventory. The DTPP identifies Historic Resources to be Preserved, Historic Resources which may be Altered, Relocated, or Removed. The Draft EIR preparers shall consult DTPP Section 2.1 (Historic Resources Preservation Guidelines) and update Section 7.1.4.2 and Figure 7-1 to include sites not identified in the Draft EIR but listed in the DTPP, including 605 Middlefield Road, 727 Middlefield Road, and 2201 through 2227 Broadway (Fox Theater Complex). The City requests that Section 7.3.2 Historical Resources be updated to include analysis of these sites (if not previously provided).

Response to Comment C13: The historic resources to be preserved are shown on the Historic Resource Preservation Regulations Map in DTPP Section 2.1 and presented in Figure 1 of the Review for Potential Impacts on Adjacent Resources (Brandi 2017c). 605 Middlefield (labeled KK in the DTPP) is identified in the DTPP as a resource which may be altered, relocated or removed; Draft EIR Figure 7-1 only lists historic resources which are to be preserved. Resource KK was not specifically identified in the evaluation of project impacts on adjacent resources given that the structure is not identified as a historic resource to be protected. The adjacent resource at 611 Middlefield (labeled as LL in the DTPP) was included in the analysis and found not to be impacted. The same conclusions would apply to 605 Middlefield.

Richard Brandi, an architectural historian, reviewed the historic resources identified in the DTPP and determined only resources adjacent to the development site had the potential to be impacted; the scope of the impact analysis was limited to these resources. 727 Middlefield (labeled MM in the DTPP) is a historic resource designated for preservation and is shown in Figure 7-1 as well as in the Brandi (2017c) report. 727 Middlefield is not considered adjacent to the project development and was dismissed from further consideration in the impact analysis (Brandi 2017c). Similarly, 2201 through 2227 Broadway is not adjacent to the project site and would not be impacted by the County development project.

Comment C14: 7.3.2 Historical Resources, Lathrop House.

- The Lathrop House relocation plan does not appear in the Draft EIR. The City requests that the plan be included with the other historic reports and any findings resulting from the plan be analyzed and considered for consistency with the regulatory setting applicable to cultural resources.
- Keep Lathrop House in Place Alternative. The City requests that the Draft EIR Cultural Resources chapter provide additional detail regarding consistency or inconsistency with specific Project objectives and specifically how this alternative, if found to meet the Project objectives, could feasibly address the Secretary of the Interior's Standards guidance about relocation.
- The City requests the Cultural Resources Chapter address: 1) the impact of relocation on the National Register; 2) the process for re-evaluation given the intent for relocation; 3) the timeline for receipt of the findings as a result of reevaluation; and 4) the implications if Lathrop House is not eligible for National Register listing as a result of relocation.

The City requests the reevaluation results to be completed in order to understand the impacts of re-location and the mitigations required to reduce impacts to a less than significant level.

Response to Comment C14: The Lathrop House Relocation Plan concept drawing is attached in EIR Appendix I. The supporting documentation prepared by Garavaglia Architecture (2017a) referenced in the Draft EIR is also attached in Appendix I and has been provided to the City for review.

The Keep Lathrop House in Place Alternative partially meets the County's project objectives by providing building space for consolidating dispersed department functions. However, the alternative does not meet the County's design objectives of creating a visually cohesive sense of identity and arrival and creating a vibrant public plaza. After the Lathrop House is relocated, the rehabilitation process will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (see Appendix I).

The proposed relocation would have no effect on the listing of Lathrop House on the National Register of Historic Places. Documentation provided by Garavaglia Architecture (2017a; EIR Appendix I) concluded that relocation would not alter the integrity of the resource. The State Historic Resource Commission (SHRC) concurred with that finding at its meeting on May 17, 2017 and approved the relisting of Lathrop House on the National Register of Historic Places at its proposed new location adjacent to the County historic courthouse. The SHRC will forward its approval of the relocation to the National Park Service. The National Park Service generally follows the recommendation of the SHRC regarding listing of historic resources on the National Register. There is a 45-day Keeper Review Period from the time the SHRC approves the relocation before it is adopted by the National Park Service.

Comment C15: Land Use. 8.2 Regulatory Setting. The City requests that the Draft EIR include references and descriptions of the following:

- Redwood City General Plan (2010): The Project site contains a land use designation of Mixed Use Downtown, applicable to the City's historic Downtown core (General Plan, Page BE-47).
- Redwood City Zoning Code: The Project site contains a zone district designation of Planned Community District (P), as described in Zoning Code, Article 52.

Response to Comment C15: Comment acknowledged. References to the City General Plan and Zoning Code have been added to Land Use Regulatory Setting in new Section 8.2.3. See Chapter 5, Errata and Revisions.

Comment C16: 8.3 Applicable Land Use Plan, Policy or Regulation. The City requests that the Draft EIR be corrected to state that the DTPP does not apply to public agencies designated throughout the DTPP area. This has been interpreted to mean County and other public agency functions conducted within the DTPP area are not subject to the DTPP. Non-public agency functions, such as private offices or housing would be subject to the DTPP.

Response to Comment C16: The comment is acknowledged, and text is clarified in Chapter 5, Errata and Revisions for Section 8.2.2 and 8.3.3. The project proposes solely public agency functions to be conducted within the DPP area. No non-public agency functions are proposed or were studied. The County would analyze any non-public agency functions within the DPP area if any were proposed by the project.

Comment C17: Traffic. 10.1.1 Existing Roadway Network. The City requests that Interstate 280 be added to the list of the regional roadways used to access the Project.

Response to Comment C17: The Traffic Impact Analysis report has been revised to include the following text: "I-280 is a north/south freeway that extends from San Francisco to San Jose. In the project vicinity, I-280 has eight mixed-flow lanes. I-280 provides access to Downtown Redwood City via full interchanges at Edgewood Road and Farm Hill Boulevard." Please see updated traffic report in Appendix F.

Comment C18: 10.1.2 Bicycle Facilities. Veterans Boulevard between Whipple Avenue and Chestnut Street generally has a Class II bicycle facility; however, the Project frontage of southbound Veterans Boulevard between Middlefield Road and Brewster Avenue is not wide enough for a 5-foot wide and fully striped bicycle lane and right turn lane. The City requests that the County review with Redwood City staff the ability to adjust the southbound Veterans Boulevard curb line to improve the Class II bicycle facility and right turn movements towards the Project site.

Response to Comment C18: The County will coordinate with the City of Redwood City to improve the Class II bicycle facility and right-turn movement from southbound Veterans Boulevard to westbound Middlefield Road.

Comment C19: 10.1.3 Pedestrian Facilities- The City requests that the County consult with the City regarding design and construction of pedestrian facilities in order to provide better connectivity with Downtown and the CalTrain station.

Response to Comment C19: Refer to response to Caltrans Comment A2 above. The project would improve the pedestrian environment in the project vicinity by creating a large pedestrian promenade as part of the closure of County Center and Hamilton Street. This pedestrian promenade would provide a safe pedestrian environment, connecting all office buildings in the Government Center. The County will consult with the City of Redwood City on potential pedestrian improvements to crosswalks at the following three intersections: Middlefield Road and Marshall Street, Middlefield Road and Bradford Street, and Jefferson Avenue and Bradford Street. Elsewhere, the existing pedestrian network in Downtown Redwood City provides safe and comfortable access between the COB3 and transit services.

Comment C20: 10.3.3.1 Trip Generation-Include baseline information on travel patterns of jury members and whether any changes are expected due to the Project. Include the source of existing commute patterns for County employees.

Response to Comment C20: The proposed project does not involve changes to the court functions on the County campus. The existing travel patterns of jurors is determined by the juror selection process run by the State court system and is independent of the San Mateo County government functions; it is not documented by the County. Baseline travel patterns of jury members would not be changed by the proposed development on the County campus.

The County provided the residence zip codes for existing County Government Center employees. The zip code data were aggregated to determine the percentage of Government Center employees approaching and departing from each direction. It was assumed that new employees and visitors of COB3 would follow the same trip distribution as that of the existing Government Center employees.

Comment C21: 10.3.3.2 Street Conversion and Parking Relocation- Clarify how trip making patterns of unmet employee parking demand (260 spaces) is accounted for in the trip distribution assumptions.

Response to Comment C21: As detailed in the parking study, it is estimated that the existing Government Center parking demand exceeds the available on-site parking supply by 282 spaces. The excess parking demand results in County employees and visitors parking in nearby on-street parking spaces and City parking lots and garages. The construction of Parking Structure 2 is expected to provide ample parking to allow all County employees and visitors to park within the County Government Center. Thus, the project will shift the trips associated with the excess parking demand from an unknown off-site location to Parking Structure 2.

The number of peak-hour trips associated with the existing excess parking demand was estimated based on the ratio of existing peak-hour trips to parking spaces at the existing Government Center parking structure. The existing parking garage serves approximately 0.52 and 0.44 vehicle trips per parking space during the AM and PM peak hours, respectively. Applying these rates to the estimated unmet parking demand (282 spaces) yields 147 AM peak-hour trips and 124 PM peak-hour trips.

Because these trips already involve travel to and from Downtown Redwood City, the trips would not be new trips at most study intersections. Thus, these trips were merely added to the turning-movements to and from the driveways serving the proposed new parking structure (intersections 9 and 10). An equivalent reduction was applied to the through traffic volume on Jefferson Avenue and Winslow Street at these intersections to account for trips to and from US 101 via Veterans Boulevard, which are assumed to travel on these roadway segments enroute to other off-site parking facilities in the downtown area. To be conservative, no volume reductions were assumed at any other study intersection due to the reassignment or trips associated with the existing excess parking demand.

Comment C22: 10.5 Cumulative Impacts. The City requests that the County add language about the Background + Project impact at Main/Woodside Road Westbound Ramp. Language about the cumulative impact at the same intersection suggests that it isn't possible for the County to mitigate their impact. A fair-share contribution to the signal would effectively mitigate the

Project's impact and potentially eliminate the significant and unavoidable impact that is currently identified.

Response to Comment C22: The project would cause a significant impact under the Background plus Project condition at the Main Street/Woodside Road Westbound Ramp intersection. Additionally, the LOS analysis at this intersection was revised per the City's comments resulting in a significant impact under the Existing plus Project condition (see revised TIA in Appendix F). The Draft EIR recognizes that the project's contribution of traffic to this intersection is significant and unavoidable and agrees that fair share contribution would effectively mitigate the project addition of vehicle trips to this intersection to a less than significant level. However, as stated in the Draft EIR:

As such, County payment into the City's Traffic Impact Fee would not be directly applied toward improvements at this intersection and, therefore, would not provide effective mitigation of the project impact. Without a funding mechanism directly addressing this specific intersection, the project's 14 trip contribution to the deficient traffic condition at this intersection is **significant and unavoidable**.

The County is willing to work with the City for a fair share funding solution that effectively pays for the project impact. Until this agreement is reached, the impact remains significant and unavoidable.

Comment C23: Mitigation Measure TRA-2. The City requests that the County add Background + Project impact and fair share payment. Although not called out by name, the signalization of the intersection is included in the City's 5-year CIP program under the "Traffic Signal Improvements" program.

Response to Comment C23: The EIR text is revised to clearly identify Background plus Project impact as a significant impact as identified in the Draft EIR traffic study. Additionally, the EIR text is revised to identify Existing plus Project impacts as significant per the revised traffic analysis requested in City comment.

EIR text is corrected in Section 5.0 Errata and Revisions to reflect that the Main Street/Woodside Road Westbound Ramp intersection is included in the City's 5-year CIP traffic Signal improvement program.

Fair share payment is discussed in response to Comment C22 above.

Comment C24: Other Traffic Mitigations. The City suggests including the other recommendations from the Transportation Impact Analysis (TIA) in this section (e.g. full site operations analysis, signage program)

Response to Comment C24: Comment acknowledged. All recommendations of the traffic impact analysis will be incorporated into the project as a condition of project approval.

Comment C25: Appendix F. Transportation Impact Analysis. The City requests that the County consider the following:

- P. 19 Consider reviewing LOS analysis results for Veterans/Woodside (B/F), Jefferson/Middlefield (D/D), and Main/Woodside Ramps (C/F) which had different results than recent EIRs completed for the City (our results shown in the parenthesis).
- P. 23 Consider clarification of how trip making patterns of unmet employee parking demand (260 spaces) is accounted for in the trip distribution assumptions.

- Table 7 Consider adding NB off-ramp at 101/Whipple in the analysis. The capacity of the SB off-ramp to Veterans/Whipple should be 3800, not 2000
- P.30 Consider Background conditions that reflect the changes to the Middlefield/Woodside intersection that is under construction.
- P. 31 Typographical change: 1035 El Camino Real should be 1305 El Camino Real
- P. 34 Consider Background + Project conditions that reflect the changes to the Middlefield/Woodside intersection that are under construction.
- P. 38 Consider Cumulative conditions that reflect changes to the Middlefield/Woodside intersection that are under construction.

Response to Comment C25: The Traffic Impact Analysis was revised in response to these comments. Please see Appendix F.

- P. 19 In order to be consistent with the recent EIRs completed for Redwood City projects, the level of service analysis was revised at the following intersections: Veterans Boulevard and Whipple Avenue, Veterans Boulevard and Woodside Road, Middlefield Road and Jefferson Avenue, Main Street and Woodside Road Westbound Ramps. The Traffic Impact Analysis report has been revised accordingly. While the delay and level of service at some intersections changed somewhat, the conclusions regarding project impacts and required mitigation measures are essentially unchanged. The only difference is that the revised analysis shows that the project would cause a significant impact under existing plus project conditions in addition to the previously identified impacts under background plus project and cumulative conditions. The EIR text is revised accordingly. Please see Chapter 5, Errata and Revisions.
- P. 23 See the response to Comment C21 above.
- Table 7 The project is estimated to add only 10 and 6 vehicle trips to the Northbound off ramp at the US 101/Whipple interchange during the AM and PM peak hours, respectively. The project trips at this ramp equate to less than one percent of the freeway ramp capacity. Thus, the project is expected to have a less than significant impact at this ramp. For this reason, this ramp was not evaluated in the Traffic Impact Analysis report.

The freeway ramp analysis (Table 7) has been revised to correct the capacity of the off ramp from Southbound US to Veterans Boulevard/Whipple Avenue per the City's comment. The Traffic Impact Analysis report has been revised accordingly. The revision did not alter the study conclusions. The project is expected to have an insignificant impact on freeway ramps.

- P. 30 The intersection of Middlefield Road and Woodside Road was not evaluated in the Traffic Impact Analysis report because the project is expected to add an insignificant number of trips at this intersection.
- P. 31 The Traffic Impact Analysis report has been revised to correct the typographical error per the City's comment. Please see Chapter 5, Errata and Revisions.
- P. 34 See above response to comment regarding P. 30.
- P. 38 See above response to comment regarding P. 30.

Comment C26: CEQA Required Assessments. 12.3 Cumulative Projects and Impact. The City requests that the County review the cumulative projects list with City staff and requests the following corrections and additions:

- Stanford in Redwood City (577,000 sf <u>administrative</u> office)
- 801 Brewster (<u>250</u>-unit multifamily residential)
- 1548 Maple Street (131-unit multifamily residential) is not listed in Section 12.3 or in Appendix F, Section 4 Traffic Volumes. This project is proposed, but not yet approved. The City requests that it be considered as a "cumulative" project.
- 320-350 Blomquist Street (1,179,747 sf office) is listed in Section 12.3, but does not appear in Appendix F, Section 4 Traffic Volumes. This project is proposed, but not yet approved. The City requests that it be considered as a "cumulative" project.
- 557 East Bayshore (336, multifamily residential, 100,000 commercial recreation). This project is proposed, but not yet approved. The City requests that it be considered as a "cumulative" project.
- 1629 Main Street (24,700 sf office) is an approved project (August 2016) under construction and should be considered in background conditions.
- Kaiser Hospital Phase 2 (197,800 sf medical office) was approved in February 2018 and should be considered in background conditions

Response to Comment C26: The Traffic Impact Analysis (TIA) has been revised as follows:

- Corrected typographical error to note that Stanford project will add administrative not medical office space. The trips associated with this project were obtained from the Stanford in Redwood City Precise Plan Draft EIR.
- The multifamily residential development at 801 Brewster Avenue has been approved. Trips associated with this project were included under background conditions.
- The trips that would be generated by the proposed multifamily residential development at 1548 Maple Street are accounted for by the use of a cumulative growth factor of 1.06 percent per year.
- The analysis of cumulative traffic conditions has been revised to add the trips associated with the proposed office development at 320-350 Blomquist Street (Harbor View Place). The TIA report has been modified accordingly. The conclusions regarding cumulative impacts and cumulative mitigation measures are unchanged.
- The trips that would be generated by the proposed mixed-use development at 557 East Bayshore Road are accounted for by the use of a cumulative growth factor of 1.06 percent per year.
- The analysis of background and cumulative traffic conditions have been revised to add the trips associated with the approved office development at 1629 Main Street. The TIA report has been modified accordingly. The conclusions regarding impacts and mitigation measures under background + project and cumulative conditions are unchanged.
- The Kaiser Hospital Phase 2 project was not previously included under background conditions because it was not approved until after the San Mateo County Government Center Improvement Project Notice of Preparation was published. Nevertheless, the analysis of background and cumulative traffic conditions have been revised to add the trips associated with the Kaiser Hospital Phase 2 project. The TIA report has been

modified accordingly. The conclusions regarding impacts and mitigation measures under background + project and cumulative conditions are unchanged.

Please see Chapter 5, Errata and Revisions.

Comment C27: 12.4.6 Population and Housing. The Project would consolidate County uses and provide office space for approximately 616 employees. The City requests that the County consider the impacts of this increased employee population on the demand for existing childcare services near the Project and the need to establish new childcare facilities.

Response to Comment C27: The socioeconomic impact of a project, such as increased demand for childcare, is not an environmental impact and is not addressed in this EIR. The County recognizes the need for increased childcare services in the county. See response to Comment D1.

Comment C28: 12.4.8 Recreation. The City requests that the County describe the potential uses of the new open space areas (extent of the areas open to the public, availability for public events, etc.).

Response to Comment C28: All outdoor areas on the County campus are expected to be accessible to the public. The plaza and promenade will be accessible and available for public events consistent with County policy.

Comment C29: 12.4.9 Utilities, Water, and Wastewater. Redwood City's recycled water complies with all applicable federal, state and local laws and regulations. Use of recycled water does not require a written agreement between the County and the City regarding assurances of water quality and protective measures. The Project will be responsible for proper design, construction, installation, operation, and maintenance of its recycled water facilities intended recycled water use, including compliance with all applicable federal, state, and local laws and regulations.

Response to Comment C29: Comment acknowledged. See response to Comment C2.

Comment C30: 12.4.9 Utilities, Water, and Wastewater. Redwood City has exceeded its Peak Wet Weather Flow (PWWF) capacity in the past. A methodology to reduce inflow and infiltration (I/I) by pipe replacement has been determined by Redwood City. The City requests that the Project reduce (I/I) to offset increased sewer demand from the Project by replacing aged sewer mains or pay an equivalent in-lieu fee. The length of pipe replacement required or the amount of fee will be based on the Project's sewage generation projection (Attachment L of the City's Engineering Standards).

Response to Comment C30: Comment acknowledged. See response to Comment C6 and Chapter 5, Errata and Revisions.

Comment C31: 12.4.9 Utilities, Stormwater. The City requests that the Project comply with Redwood City's Drainage Guidelines for Commercial Development regarding stormwater detention.

Response to Comment C31: The County will comply with Redwood City's Drainage Guidelines for Commercial Development regarding stormwater detention.

Comment C32: 12.4.9 – Utilities, Stormwater. The City requests that the EIR discuss Green Infrastructure. Even if an agency has not completed a Green Infrastructure Plan required by the MRP, it should still be evaluating Green Infrastructure to ensure no missed opportunities. The

City requests that the County look for opportunities to treat stormwater from existing buildings and courtyards where possible, as well as from adjoining street rights-of-way.

Response to Comment C32: Comment acknowledged. COB3 is a Regulated Project (it replaces greater than 10,000 square feet of impervious surface), as defined in Provision C.3.b.ii of the Municipal Regional Permit. Thus, the project is required to implement low impact development (LID) source control, site design, and stormwater treatment onsite, in accordance with Provisions C.3.c. and C.3.d. As required in the Municipal Regional Permit, the project will treat 100% of the amount of runoff identified in Provision C.3.d for the Regulated Project's drainage area with LID treatment measures onsite.

4.4 RESPONSE TO COMMENTS FROM 4CS

Comment D1: The County should consider assessing how the County's proposed development of an expanded government center in Redwood City will impact the already strained child care supply for County-employed working parents.

Response to Comment D1: Comment acknowledged. The County will continue to evaluate opportunity for expanding childcare services. Increased demand for childcare service is not considered an environmental impact under CEQA.

Comment D2: If there was an opportunity to expand child care spaces on the county campus, the County could work with an experienced child care operator, as it does now. Build Up partners can assist the County should a child care operator need to be identified. At the existing child care center, the County has set an example for other employers by providing space (both indoor and outdoor) for the child care operator and underwriting a portion of the center's costs, primarily to serve as scholarships.

Response to Comment D2: Comment acknowledged.

Comment D3: We are also asking that you consider conducting a shade study to understand how the proposed new parking structure may impact the sunlight that reaches the existing child care center. Natural daylight is a crucial component for high quality early childhood education environments, contributing to children's learning and wellbeing.

Response to Comment D3: A cursory shadow analysis based on the concept design has been included in the EIR for reference. The COB3 building and the parking structure would not impact the Marin School facilities on the County campus. Please see Chapter 2 for additional information.

4.5 RESPONSE TO COMMENTS FROM KEN ROLANDELLI

Comment E1: Provide the report referenced in the Draft EIR which concludes the historic status of Lathrop House would not be compromised.

Response to Comment E1: The report referenced in the EIR is attached in Appendix I. As discussed in the Draft EIR (Chapter 7), this report specifically evaluates whether the relocation of the structure impacts the integrity of the historic resource and its eligibility for listing on the National Register of Historic Places. The report concludes that relocating the house does not impact the historic integrity and therefore it remains eligible for listing.

This report was submitted to the State Office of Historic Preservation as part of the County's application to have Lathrop House relisted on the National Register of Historic

Places in its proposed new location at the historic County Courthouse site. On May 17, 2018 the State Historic Resources Commission approved the relisting. Also see response to Redwood City comment C14.

Comment E2: County should apply the Secretary of Interior's Standards for the Treatment of Historic Properties. The Keep Lathrop House in Place Alternative indicates project objectives can be met. The issue is one of design.

Response to Comment E2: After the Lathrop House is relocated, the rehabilitation process will be conducted in a manner consistent with the Secretary of the Interior's Standards for the Treatment of Historic Properties (see Appendix I).

The purpose of the Keep Lathrop House in Place Alternative would be to preserve the house in its location where it obtained its listing status. An in-place alternative is generally preferable when the historic resource site provides setting and context for the resource. In this case, the original surrounding environment of the Lathrop House no longer exists, so keeping Lathrop House in place does not preserve an historic aspect.

As stated in the Draft EIR alternative discussion, this alternative partially meets County objectives by providing building space for consolidating dispersed department functions. However, the alternative does not meet the County's design objectives of creating a visually cohesive sense of identity and arrival and creating a vibrant public plaza.

4.6 RESPONSE TO COMMENTS FROM MARTIN T. FOX

Comment F1: Mitigate the loss of use of law library services by increasing the use of COB3 by County employees and the public.

Response to Comment F1: The County Government Center Campus Development Project does not propose any changes to the law library. Services at the law library would remain unchanged. The County has no plans to provide law library services in the new COB3 building.

4.7 RESPONSE TO COMMENTS FROM RICHARD KEYES

Comment G1: I have an office on 620 Jefferson built in 1884. A 6-story Habitat for Humanity building is coming next door. Look at the history of the County. County buildings over time are not being used (e.g., jail, courthouse, buildings in San Mateo). Now traffic court and First American Title building. This issue has to be looked at.

Response to Comment G1: The comment expresses concern over building changes in downtown Redwood City. The proposed project would introduce more changes through demolition of the Traffic Court, First American Title Company and Lebsack buildings, relocation of the historic Lathrop House, and development of the site with a new County office building and public plaza. The environmental impacts associated with these changes have been evaluated in the Draft EIR. The project would not result in a significant adverse impact on the aesthetic character of the site (Draft EIR Chapter 3). Buildings proposed for demolition are not historic resources (Draft EIR Chapter 7). The one historic building on the site, the Lathrop House, would be preserved through relocation to the historic County courthouse site. The proposed use of the site for County government function is consistent with local land use plans (Draft EIR Chapter 8).

Responses to Comment on Draft EIR	Page 4-18
This page deliberately left blank.	

Chapter 5 ERRATA AND REVISIONS

This chapter includes the changes to the Draft EIR needed to respond to comments and clarify or amplify the information provided in the Draft EIR. The changes correct inaccuracies and clarify the analysis in the EIR. Text removed from the EIR is marked with strike-out. New text is indicated by <u>underline</u>.

Page S-1, second paragraph

COB3 would be designed as five to seven-story building ranging from 121,000 to 156,000 up to 186,000 square feet (sf).

Page S-3, Table S-1

Mitigation Measure GHG-1: To ensure the proposed Project does not conflict with future GHG reduction goals, the County shall require COB3 and the parking garage to collectively source at least 2030 percent of the buildings' electricity demand from on-site renewable energy (i.e., the PV system).

Page S-7, Table S-1

TRA-2 Impact: The Main Street and Woodside Road Westbound Ramps intersection would operate at an unacceptable LOS F under <u>existing</u>, <u>background</u>, <u>and</u> cumulative no project conditions during the PM peak hour. A small increase in Main Street traffic as little as three trips would create a significant impact. The project would add 14 trips to this intersection, causing the delay for the worst approach (westbound) at this intersection to increase by more than 5.0 seconds, which is the City's significance threshold.

Page S-9, last sentence

Existing County facilities using reclaimed water (e.g., Maple Street Facility) have experienced pipe and plumbing fixture damage due to corrosivity raising concern for its suitability for potential use in the project. Use of reclaimed water for the project would require verification of suitability and a written agreement between the County and the City regarding assurances of water quality and protective measures. The City is responsible for ensuring that the recycle water meets applicable quality standards.

Page 2-4, Section 2.4.2 County Office Building #3, second paragraph

COB3 would be designed as a five to seven-story building (63 to \$7112 feet; maximum occupied floor height of 75 feet) to provide \$121,000 to \$156,000 up to \$186,000 sf\$ of office space. Each above grade floor would be approximately \$24,000 sf\$. Architectural plans have not yet been developed. The building would be constructed with a basement roughly \$15\$ feet deep. The building mass is depicted in Figure 2-6. Plans will be subject to review and permitting by the County Planning and Building Department.

Page 2-6, Table 2-3

Existing Table 2-3 is replaced as follows:

Table 2-3. Project Parking Provision Demand							
Parking Stalls	Existing Stalls Displaced by Project	Proposed Parking Structure Stall Provision Project Parking Demand					

Jury Parking	151 <u>212</u>	151 <u>212</u>
Childcare Center	37 <u>67</u>	37 <u>67</u>
County Center/Hamilton Street	86 <u>104</u>	86 <u>104</u>
Lathrop House Lot	11	11
BOS/CMO/Courts	24	24
Motor Pool (credit union lots)	39	39 ^(A)
Bradford Lot	<u>30</u>	<u>30</u>
Rear Courthouse Parking History Museum Lot	12 <u>18</u>	12 _18
Unmet County Employee/Visitor Demand		0-260 282 ^(B)
COB3 Employees/Visitors		340-380 <u>332</u> (B,C)
Public metered (City sponsored)		150 -200 ^(D)
Parking Totals	850-1200 <u>1269</u>	
With additional TDM Measures to Redu	<u>1199^(E)</u>	
With additional TDM Measures to Redu	<u>1086^(E)</u>	

Sources: Dreyfuss and Blackford 2017; Hexagon 2017a; HOK 2017; Hexagon Transportation Consultants, Inc. Parking Study for Proposed San Mateo County Government Center Improvement Plan. May 10, 2018. (see Appendix H)

Page 2-9, Section 2.5.1 Water, last sentence

Existing County facilities using reclaimed (e.g., Maple Street Facility) have experienced equipment, piping and plumbing fixture damage raising concern for its suitability for project use. Use of reclaimed water for the project would require verification of suitability and a written agreement between the County and the City regarding assurances of water quality and protective measures. The City is responsible for ensuring that the recycle water meets applicable quality standards.

Page 2-9, Section 2.5.2 Sanitary Sewer, after last sentence

Redwood City has exceeded its Peak Wet Weather Flow (PWWF) capacity in the past and uses replacement of aging pipelines to reduce inflow and infiltration (I/I) as a means of offsetting increased sewer demand by new development. The County will replace an equivalent length of sewer main pipe based on the project's sewage generation rate or pay an equivalent in-lieu fee.

⁽A) Number of parking spaces displaced by Regional Operations Center construction at the Motor Pool site.

⁽B) Parking structure may be sized to serve existing employee demand for parking. Actual numbers will be determined by a County commissioned parking study expected to be completed by February 2018.

⁽C) Number of County employees relocating to County Government Center campus. Range reflects a minimum 5% transit use reduction in parking demand for the 400 employees relocated from off-site. Assumes no new TDM measures.

⁽D) Number of parking spaces to be provided for the public is an estimate and reflects a range being discussed between the City and County.

⁽E) TDM reduction is assumed to affect County employee parking at Hall of Justice, COB1, COB2, COB3, and the Maguire Correctional Facility except for those with assigned parking stalls.

Page 2-10, Section 2.6.3 Temporary Parking

During construction of the new parking garage, 151 juror parking stalls will be eliminated. The vacated Lathrop House site will be used to provide temporary jury parking spaces. The County may also will rezone employee parking in existing parking structure to provide additional juror parking spaces. This would be implemented along with establishing off-site employee parking stalls and dedicated shuttle services for employees displaced from the parking garage by juror parking.

Page 2-10, Table 2-4

Phase 3: COB3 Construction and Promenade Development (October September 2018 October December 2020; 2427 months)					
Site Preparation	610 weeks (October September – Mid-November; 2018)				
Grading	4 weeks (Mid November – Mid-December; 2018)				
Sub-Structure (below ground) Construction	16 weeks (Mid December 2018 – Mid-April 2019)				
Super Structure (above ground) development	7684 weeks (Mid-April 2019 – October December 2020)				

Page 2-14, last paragraph

City of Redwood City: COB3 and Parking Structure construction encroaching into Redwood City right-of-way for <u>activities such as public improvements or</u> utility connection requires an Encroachment Permit. Disturbance and replacement of city sidewalk and driveway for the Lathrop House relocation would also require an Encroachment Permit.

Page 2-11, Section 2.6.5.1, first paragraph

Backfilling behind the COB3 basement walls is expected. Grading plans prepared by the project contractor would be subject to review and approval by the County as part of the building permit approval process.

Page 2-11, Section 2.6.5.1, second paragraph

A temporary de-watering system may be installed for the COB3 basement foundation excavation dependent upon groundwater conditions encountered.

Page 3-7, Section 3.3.5, new third paragraph

The COB3 exterior will feature glass elements in its architectural design. Architectural glazing would be treated with glare reduction properties. As a result, the building would not become a significant source of glare. The impact is *less than significant*.

Page 4-13, first full paragraph

Construction activities are anticipated to begin in May 2018 with the relocation of Lathrop House, and conclude in October December 2020 with paving of the promenade completion of COB3.

Page 4-13, fourth paragraph

The project's potential construction emissions were modeled using the California Emissions Estimator Model (CalEEMod), Version 2016.3.42 (see Appendix B).

Page 4-13, last paragraph

As shown in Table 4-7, application of Mitigation Measure AIR-1 would reduce maximum average daily NOx emissions from 73.672.9 lbs/day to 50.749.9 lbs/day, which is less than the BAAQMD threshold of 54 lbs/day.

Page 4-14, Table 4-6

Table 4-6 Estimated I	Project Co	onstruction	Emissions ((Unmitigated)

	Pollutant Emissions (Average Pounds per Day) (A)							
Construction Year	DOC	NO.	CO	PN	I_{10}	PM	PM _{2.5}	
	ROG	NOX	NOx CO		Exhaust	Dust	Exhaust	
2018	3.1 3.2	37.1 38.9	21.0 21.8	2.1	1.5 - <u>1.6</u>	0.9	1.4 <u>1.5</u>	
2019 ^(B)	16.2 7.5	73.6 72.9	56.0 55.5	3.1 <u>3.0</u>	3.3	0.8	3.1	
2020	6.0 12.7	49.1 44.8	39.4 36.1	2.4 <u>2.0</u>	2.3 <u>2.1</u>	0.8 <u>0.7</u>	2.1 <u>2.0</u>	
BAAQMD CEQA Threshold	54	54		BMPs ^(C)	82	$BMPs^{(C)}$	82	
Potential Significant Impact?	No	Yes	No	No	No	No	No	

Sources: BAAQMD 2017a; MIG 2017, see Appendix B.

Page 4-14, Table 4-7

Table 4-7 Estimated Project Construction Emissions (Mitigated)

Pollutant Emissions (Average P

	Pollutant Emissions (Average Pounds per Day) (A)						
Construction Year	ROG	PM ₁₀ PM _{2.5}		PM_{10}		$I_{2.5}$	
	RUG	NOx	CO	Dust	Exhaust	Dust	Exhaust
2018	1.3 1.4	23.6 24.6	22.8 23.9	1.4	0.8 0.9	0.5	0.8 <u>0.9</u>
2019 ^(B)	12.7 4.0	50.7 49.9	61.1 60.5	3.1 <u>2.9</u>	2.0	0.8	2.0
2020	3.4 10.3	34.1 30.8	43.7 39.9	2.0 <u>1.7</u>	1.5 <u>1.3</u>	0.6 <u>0.5</u>	1.5 <u>1.3</u>

⁽A) Average daily emissions assume 110 active construction days in 2018, 264 days in 2019, 220264 days in 2020. (Assumes 22 days a month; 5 months in 2018, 12 months in 2019, 120 months in 2020, and 1 month in 2021).

⁽B) Although demolition of the traffic court building is tentative at this point, as a conservative approach it was modeled to occur in 2019 when the majority of the project's criteria air pollutant emissions would occur.

⁽C) For all projects, the BAAQMD recommends implementing eight basic construction BMPs to control fugitive dust from construction activities. As shown in Table 2-5 of the Project Description, the County incorporates BMPs into the planning, design, construction, operation and maintenance of its projects to minimize the potential adverse effects of the project on the surrounding community and the environment. Included in these BMPs are the BAAQMD Basic Construction Mitigation Measures that reduce fugitive dust emissions to a less-than-significant level.

BAAQMD CEQA Threshold	54	54	1	$BMPs^{(C)}$	82	$BMPs^{(C)}$	82
Potential Significant Impact?	No	No	No	No	No	No	No

Source: BAAQMD 2017a, MIG 2017, see Appendix B.

- (A) Average daily emissions assume 110 active construction days in 2018, 264 days in 2019, and 220264 days in 2020. (Assumes 22 days a month; 5 months in 2018, 12 months in 2019 and 2020).
- (B) Although demolition of the traffic court building is tentative at this point, as a conservative approach it was modeled to occur in 2019 when the majority of the project's criteria air pollutant emissions would occur.
- (C) For all projects, the BAAQMD recommends implementing eight basic construction BMPs to control fugitive dust from construction activities. As shown in Table 2-5 of the Project Description, the County incorporates BMPs into the planning, design, construction, operation and maintenance of its projects to minimize the potential adverse effects of the project on the surrounding community and the environment. Included in these BMPs are the BAAQMD Basic Construction Mitigation Measures that reduce fugitive dust emissions to a less-than-significant level.

Page 4-15, Section 4.3.3.2, Mobile Sources

The overall net trip generation for the project, which includes trip reductions due to proximity to regional transit, would be 2,976 trips per day (i.e., the COB3 would generate 19.0816.0 new trips per thousand square feet of building space).

Page 4-16, Table 4-8

Table 4-8 Estimated	Project (Operational	Emissions	(202 <u>01</u>)

	Pollutant Emissions (Tons per Year)							
Source	DOC	NO-	CO	PN	M ₁₀	PN	PM _{2.5}	
	ROG	NOx	СО	Dust	Exhaust	Dust	Exhaust	
Area	0.8 0.9	<0.0	<0.0	0.0	<0.0	0.0	<0.0	
Energy	<0.0	0.1 0.2	0.1	0.0	<0.0	0.0	<0.0	
Mobile	-0.4	- <u>0.9</u> - <u>0.8</u>	2.7 2.5	-0.4	-<0.0	-0.1	-<0.0	
Net Change	0.4 0.5	-0.7 -0.6	2.6 2.5	-0.4	<0.0	-0.1	<0.0	
BAAQMD CEQA Threshold	10	10	^(A)	None	82	None	82	
Potentially Significant Impact?	No	No	No	No	No	No	No	

Sources: BAAQMD 2017a; MIG 2017, see Appendix B.

⁽A) BAAQMD CO significant thresholds are based on ambient air quality standards (See Table 4-1). According to the BAAQMD screening criteria, a project does not result in significant CO impacts if it would be consistent with the CMP and not increase traffic volumes to 44,000 vehicles per hour at impacted intersections. The project would be consistent with the screening criteria and would not result in a significant CO impact.

Page 4-16, Section 4.3.5, second paragraph

This mitigation measure, which requires the County to use U.S. EPA Tier III construction equipment, would have the added benefit of reducing DPM emissions, a constituent of PM2.5, by 4241 percent in 2018, 3536 percent in 2019, and by 31 percent in 2020 (see Table 4-6 and Table 4-7).

Page 4-17, third full paragraph, first sentence

The proposed project would implement Mitigation Measure AIR-1, reducing DPM emissions by 31 - 4241 percent;

Page 6-7, Section 6.2.5, first paragraph, last sentence

On July 18, 2013, the Metropolitan Transportation Commission (MTC) and the Association of Bay Area Governments (ABAG) adopted Plan Bay Area 2013. The Clean Air Plan Bay Area includes two main elements: the Sustainable Communities Strategy (SCS) and the Regional Transportation Plan (RTP).

Page 6-8, first full paragraph, first sentence

Under SB 375, the Clean Air Plan Bay Area is required to demonstrate that the plan is capable of reducing per capita passenger vehicle and light duty truck CO₂ emissions...

Page 6-8, second full paragraph

The Clean Air Plan Bay Area identifies Priority Development Areas (PDAs) in nearly 200 locations throughout the Bay Area. PDAs are transit-oriented locations envisioned for infill development. The Clean Air Plan Bay Area identifies the downtown Redwood City area as one of these PDAs. The approximately 134-acres downtown Redwood City PDA is bounded by Veterans Boulevard to the north, El Camino to the south, Brewster Avenue to the west, and Maple Street to the east.

Page 6-12, first paragraph, second sentence

Since the proposed project is scheduled to become operational in late 2020 (with the full first year of operation occurring in 2021), the thresholds identified in Table 6-3 do not directly address the next GHG reduction target identified under SB 32, that is to reduce GHG emissions to 40 percent of 1990 levels by 2030.

Pages 6-12 and 6-13, Section 6.3.2

- Energy Use and Consumption. In addition to natural gas usage, the proposed project would generate GHG emissions from electricity use, water and waste water conveyance and treatment, and solid waste generation. As estimated using CalEEMod, the proposed project would consume approximately 3,390,6003,648,978 kWh of electricity annually. As described in greater detail below, the proposed project would incorporate a number of green building features that would offset energy demand from the grid and may further increase the energy efficiency of the building.
- Water Use and Wastewater Generation. As estimated in CalEEMod using default values, the proposed parking structure and COB3 would use approximately 2327 million gallons of water per year for outdoor use (e.g., landscaping purposes) and approximately 3743 million gallons of water per year for indoor use (e.g., bathroom faucets, showers, etc.).

• **Solid Waste Generation.** The proposed COB3 would produce solid waste that requires landfilling. As estimated using CalEEMod, the total solid waste that would be generated by the facility is estimated to be 203173 tons per year. This estimate does not reflect the County's waste diversion goal that is to divert 75 percent of waste by 2020 (see Section 6.2.10).

Page 6-14, Table 6-4

Table 6-4 Average VMT Generated per Worker by TAZ	Table 6-4	Average	VMT	Generated	per '	Worker	bv	TAZ
---	-----------	---------	------------	-----------	-------	--------	----	-----

Lacation	TAZID	Average VM	IT per Worker
Location	TAZ ID	2020 ^(B)	2030
County Government Center	315	22.82	21.99
San Mateo Medical Center	284	23.31	22.06
2000 Alameda de las Pulgas	282	29.44	26.96
801 Gateway	212	25.80	24.69
Weighted VMT for Off-site Offices ^(A)	284, 282, 212	24.27	22.95

Source: MTC 2017

Page 6-15, Table 6-5

Table 6-5 Unmitigated Project Construction and Operational GHG Emissions									
Samos	GHG Emissions (Metric Tons/Year)								
Source	CO ₂	CH ₄	N ₂ O	Total MTCO2e					
Construction	Construction								
Total Construction GHG	Total Construction GHG 2,539.4 2,788.6 0.5 0.0 2								
30-Year Average	84.7 <u>93.0</u>	< 0.0	0.0	85.1 <u>93.4</u>					
Operational: 202 01									
Area	< 0.0	< 0.0	0.0	< 0.0					
Energy	9 67.2 1,059.6	0.1	<0.0	973.7 1.066.7					
Mobile	-469.1 <u>457.5</u>	-<0.0	0.0	-469.7 <u>458.1</u>					
Waste	4 1.2 <u>35.1</u>	2.4 <u>2.1</u>	0.0	102.1 <u>87.0</u>					
Water	68.3 <u>58.2</u>	1.4 <u>1.2</u>	<0.0	114.0 <u>97.1</u>					
20201 Project GHG Emissions(A)	692.4 <u>695.4</u>	3.9 <u>3.3</u>	0.1 < <u>0.0</u>	805.3 <u>886.1</u>					
BAAQMD Threshold				1,100					

⁽A) Weighted VMT was calculated by taking the number of employees at each off-site office (i.e., 290 for the Medical Center, 30 for 2000 Alameda de las Pulgas, and 80 for 801 Gateway), multiplying through by the average VMT per worker, and dividing out by the total number of employees transferred to COB3 (i.e., 400).

⁽B) Although the proposed project's first full year of operation would be in 2021, TAZ data is only available for 2020. Thus, the 2020 values are considered representative of conditions in 2021.

Exceeds BAAQMD Threshold?				No			
Operational: 2030							
Area	< 0.0	< 0.0	0.0	< 0.0			
Energy	762.9 839.7	0.1	< 0.0	769.4 <u>846.8</u>			
Mobile	280.5	-<0.0	0.0	280.8			
Waste	4 1.2 <u>35.1</u>	2.4 <u>2.1</u>	0.0	102.1 <u>87.0</u>			
Water	54.5 <u>46.4</u>	1.4 <u>1.2</u>	< 0.0	100.2 <u>85.3</u>			
2030 Project GHG Emissions(A)	662.8 <u>640.8</u>	3.9 <u>3.3</u>	0.1 <u><0.0</u>	775.9 <u>831.7</u>			
Derived 2030 Goal	1	-		660			
Exceeds 2030 Goal?				Yes			

Source: MIG 2017, see Appendix B

Page 6-15, end of page

• Source at least 2030 percent of the buildings' electricity demand from on-site renewable energy (i.e., the PV system).

Page 6-16, Table 6-6

Table 6-6 Mitigated Project Construction and Operational GHG Emissions							
E	GHG Emissions (Metric Tons/Year)						
Emission Source	CO ₂ CH ₄		N ₂ O	Total MTCO2e			
Construction							
Total Construction GHG	2,539.4 2,788.6	0.5	0.0	2,552.1 2,800.1			
30-Year Average	84.7 <u>93.0</u>	< 0.0	0.0	85.1 <u>93.4</u>			
Operational: 202 0 1							
Area	< 0.0	< 0.0	0.0	< 0.0			
Energy	725.3 <u>799.3</u>	< 0.0	< 0.0	730.2 <u>804.6</u>			
Mobile	-469.1 <u>457.5</u>	-<0.0	0.0	-469.7 <u>458.1</u>			
Waste	4 1.2 <u>35.1</u>	2.4 <u>2.1</u>	0.0	102.1 <u>87.0</u>			
Water	68.3 <u>58.2</u>	1.4 <u>1.2</u>	< 0.0	114.0 <u>97.1</u>			
2020 Project GHG Emissions(A)	4 50.5 435.1	3.9 <u>3.3</u>	<0.0	561.7 <u>624.0</u>			
BAAQMD Threshold				1,100			
Exceeds BAAQMD Threshold?				No			
Operational: 2030							
Area	< 0.0	< 0.0	0.0	<0.0			
Energy	642.5 <u>645.4</u>	0.1	< 0.0	647.9 <u>650.7</u>			

⁽A) The project's GHG emissions account for the net change in operational emissions, and include amortized construction emissions.

Mobile	-280.5	-<0.0	0.0	-280.8
Waste	4 1.2 <u>35.1</u>	2.4 <u>2.1</u>	0.0	102.1 <u>87.0</u>
Water	54.5 <u>46.4</u>	1.4 <u>1.2</u>	< 0.0	100.2 <u>85.3</u>
2030 Project GHG Emissions(A)	542.4 <u>446.5</u>	3.9 <u>3.3</u>	<0.0	654.4 635.6 ^(B)
Derived 2030 Goal				660
Exceeds 2030 Goal?				No

Source: MIG 2017, see Appendix B

- (A) The project's GHG emissions account for the net change in operational emissions, and include amortized construction emissions.
- (B) The 2030 project GHG emissions are higher than those in 2020, because the VMT reduction between TAZ zones is less in 2030 than in 2020 (see Table 6-4).

Page 6-20, Section 6.3.9.1, third sentence

Construction of the parking garage and COB3 would begin in October 2018 and be completed by December October 2020.

Page 6-21, Section 6.4, first paragraph, fourth sentence

With implementation of Mitigation Measure GHG-1, at least 2030 percent of the buildings' electricity demand would be sourced from on-site renewable energy; the project's estimated emissions would be below BAAQMD thresholds and in line with future GHG reduction goals.

Page 6-21, Section 6.5

Mitigation Measure GHG-1: To ensure the proposed project does not conflict with the state's future GHG reduction goals, the County shall require COB3 and the parking garage to collectively source at least 2030 percent of the buildings' electricity demand from on-site renewable energy (i.e., the PV system).

Effectiveness: Requiring the proposed project to source at least $\frac{20}{30}$ percent of its

electricity from on-site renewable resources would reduce its consumption from the electricity grid. Electricity supplied from the grid may be generated through activities producing GHG emissions (e.g., combustion of fossil fuels).

Implementation: The County shall incorporate this mitigation measure into all appropriate

engineering and site plan (e.g., building, grading, etc.) documents.

Timing: Prior to any ground-disturbing activities associated with COB3 and/or the

parking structure.

Monitoring: The County shall review all engineering and site plan documents for inclusion

of this mitigation measure, and shall obtain a signed document / memorandum from the selected engineering firm confirming the project has been designed to source at least $\frac{20}{30}$ percent of its anticipated electricity generation for on-

site renewable energy.

Page 8-2, Section 8.2.2, third sentence

Although <u>t</u>The requirements of the DPP specifically do not apply to <u>other public agencies</u> <u>designated throughout the DPP area. Therefore, County functions on the County Government Center Campus Development Project as a County project on County owned land, <u>campus such as those proposed by the County Government Center Campus Development Project</u>, are not subject</u>

to the DPP. <u>*The DPP</u> does provide a regulatory framework for new development in the surrounding area and it is included here to provide a contextual background to understand project consistency with the regulatory land use requirements of the surrounding area.

Page 8-3, New Section 8.2.3 Redwood City General Plan and Zoning

The Redwood City General Plan (2010) presents the City's blueprint for growth and development in the City through 2030. The General Plan sets the broad policy framework for planning and decision making, with the policies implemented through specific regulations in the zoning and subdivision ordinances, specific plans and precise plans, design guidelines, and similar regulatory documents. Specific policies related to the downtown core are described in the Downtown Precise Plan (EIR Section 8.2.2).

The San Mateo County Government Center is located in the downtown area of Redwood City, which the General Plan designates as Mixed Use – Downtown.

The Mixed Use - Downtown category applies to Redwood City's historic Downtown core and is established to create a vibrant city center with offices, theaters, retail businesses, and restaurants serving the residences, day-time businesses, and night-time entertainment populations. In Downtown, open spaces are primarily public and urban in nature, with extra emphasis on high-quality public spaces and traditional urbanism. Parking is primarily in the form of shared public facilities. Uses specifically prohibited in Downtown, due to their incompatibility with a pedestrian-oriented mixed-use district, include vehicle sales and repair, industrial and manufacturing businesses, and wholesaling activities. Maximum heights Downtown will range from three stories at the edges, to 12 stories in the very center, with most areas having an 8-story height limit. (Redwood City General Plan; p. BE-47)

The Redwood City Zoning Code, Article 52, designates the zone district of the project site as Planned Community District (P). This district is designed to provide for uses or combination of uses, appropriately requiring flexibility under controlled conditions not otherwise attainable under other districts. This zoning district allows for the adoption of a Precise Plan "to delineate uses, relationships to other areas, intensity of use, circulation, design criteria, procedures for development review and special conditions." The City's Downtown Precise Plan was adopted for this purpose.

Page 8-4, Section 8.3.3, second paragraph

The project is located on land owned and operated by the County within the incorporated limits of the City of Redwood City. While the project is located within the City's DPP planning area, because the project pertains to functions of another agency (i.e., County of San Mateo) is a County project on County land, the project is not subject to the development requirements of the Redwood City Downtown Precise Plan. However, the project is consistent with development in the City's downtown core with civic buildings and does not introduce new land uses that would conflict with existing or planned uses in the project area.

Page 9-9, Section 9.3.2

• An approximately 156,000 sf, 7 186,000 sf five- to seven-story county office building (COB3);

Page 9-13, COB3 and Promenade Operational Noise

Upon completion of construction activities, the County Government Center would feature a new County office building of up to <u>156,000</u> sf and promenade connecting County departments within Redwood City.

Page 10-1, Section 10.1.1, new text

<u>I-280 is a north/south freeway that extends from San Francisco to San Jose. In the project vicinity, I-280 has eight mixed-flow lanes. I-280 provides access to Downtown Redwood City via full interchanges at Edgewood Road and Farm Hill Boulevard.</u>

Page 10-3, Section 10.1.6, second paragraph

The results of the analysis show that all signalized study intersections currently operate at an acceptable level of service during both peak hours. the intersection of Veterans Boulevard and Whipple Avenue and the intersection of Veterans Boulevard and Woodside Road currently operate at an unacceptable level of service during the PM peak hour. All other signalized study intersections currently operate at an acceptable level of service during both peak hours. Three of the unsignalized study intersections currently operate at an acceptable level of service during both peak hours, while the intersection of Main Street and woodside Road Westbound Ramps (an unsignalized intersection) operates at an unacceptable LOS $\pm \underline{F}$ during the PM peak hour.

Page 10-4, Table 10-1 Existing Levels of Service

See Appendix F Table 3 for entire table. Only changed data is shown.

ID Intersection	Peak Hour	Avg Delay	LOS
1 Veterans Blvd and Whipple Ave	AM	34.0 <u>36.0</u>	<u>C D</u>
	PM	33.9 <u>55.5</u>	<u>C</u> <u>E</u>
6 Veterans Blvd and Woodside Rd	AM	14.9	В
	PM	43.0 > 80	D <u>F</u>
12 Middlefield Rd and Jefferson Ave	AM	27.1 <u>27.6</u>	С
	PM	29.7 <u>30.3</u>	С
16 Main St and Woodside Rd WB Ramps	AM	17.0 <u>19.6</u>	С
	PM	37.4 >50	<u> </u>

Page 10-11, Section 10.3.3.2, first paragraph

The proposed project includes the conversion of County Center between Middlefield Road and Hamilton Street, and Hamilton Street between County Center and Marshall Street in order to create a plaza and pedestrian promenade within the San Mateo County Government Center. The project would also result in the elimination of several off-street parking lots on the site of the proposed new office building and a small number of off-street parking spaces at the County Museum lot, where the Lathrop House is to be relocated. Because County Center and Hamilton Street do not provide connections through the County Government Center, their use is limited to drivers parking on those blocks or parking in the lots accessed from those streets. In addition, the County currently leases a portion of the surface parking lot on Bradford Street east of Jefferson Avenue for use by County employees. It is anticipated that the proposed new parking structure would accommodate the County employees that currently use the Bradford lot. Thus, the County would terminate its lease of parking spaces in this off-site lot. In total, the project would result in the removal or relinquishment of 172226 parking spaces on or near the site of the new County

office building. This total excludes jury parking and childcare parking displacement (279 spaces; EIR Table 2-3) since these spaces will be replaced in essentially the same location and would not generate reassigned vehicle trips. It is assumed that those drivers currently parking in these 226 spaces would continue to drive to the County Government Center and instead park in the proposed new parking garage, which will include a sufficient number of spaces to replace the spaces eliminated by the project. Therefore, these trips were reassigned from their current parking locations to the proposed new parking structure.

Page 10-11, Section 10.3.3.2, second paragraph

As detailed in a separate stand-alone parking study, it is estimated that the existing Government Center parking demand exceeds the available on-site parking supply by 282 spaces. The excess parking demand results in County employees and visitors parking in nearby on-street parking spaces and City parking lots and garages in Downtown Redwood City. The construction of the new parking structure is expected to provide ample parking to allow all County employees and visitors to park within the County Government Center. Thus, the project will shift the trips associated with the excess parking demand from unknown off-site locations to the new parking structure. Overall, the new parking structure would result in the reassignment of vehicle trips associated with 508 parking spaces (226 County spaces eliminated by the project and 282 off-site public parking spaces currently used for excess unmet Government Center parking demand).

The number of peak-hour trips traveling to and from these existing parking spaces were calculated based on driveway counts conducted at the existing parking structure from 7:00-9:00 AM and 4:00-6:00 PM on a typical weekday in May 2015. The observed driveway counts were divided by the total number of employee spaces served by the driveway to calculate the trip rate per parking space. The existing parking garage serves approximately 0.52 and 0.44 vehicle trips per parking space during the AM and PM peak hours, respectively. Applying these rates to the 172 508 parking spaces relocated by the project yields 90 265 AM peak-hour trips and 76 224 PM peak-hour trips (see Table 10-3 below). These trips already travel to and from the County Government Center, and thus, are not new trips to most study intersections. The reassignment of these trips would only result in volume changes at the driveways serving the proposed new parking garage (intersections 9 and 10).

Page 10-12, Table 10-3 Trip Estimates for Relocated Parking

Table 10-3 is replaced as shown below. Changes include addition of Bradford Lot and unmet employee and visitor parking demand, which uses public parking.

		AM Peak Hour				PM Peak Hour			
		Trips				Trips			
	Size	Rate ¹	ln	Out	Total	Rate ¹	ln	Out	Total
Existing Parking Areas ²									
Hamilton Street/County Center	104 Spaces	0.52	52	2	54	0.44	5	41	46
Credit Union Lot	39 Spaces	0.52	19	1	20	0.44	2	15	17
Lathrop House Lot	11 Spaces	0.52	6	0	6	0.44	1	4	5
BOS/CMO/Courts Lot	24 Spaces	0.52	12	1	13	0.44	1	10	11
History Museum Lot									
(new Lathrop House site)	18 Spaces	0.52	9	0	9	0.44	1	7	8
Bradford Lot	30 Spaces	0.52	15	1	16	0.44	1	12	13
Existing Unmet Parking Demand	3								
Unspecified public parking in									
Downtown Redwood City	282 Spaces	0.52	141	6	147	0.44	14	110	124
Total Reassigned Trips	508 Spaces		254	11	265	-	25	199	224

Peak hour trip rate is based on drivew ay counts at the existing county parking structure conducted by Hexagon Transportation Consultants from 7-9 AM and 4-6 PM on Wednesday, May 20, 2015. Assume existing public spaces on the ground floor do not generate any trips during the peak commute hours. Therefore, public spaces were not included in the calculation. Observed drivew ay trips (488 AM and 411 PM) were divided by total employee spaces served by the drivew ay (125 in parking structure basement, 745 in parking structure floors 2-5, and 62 spaces in 555 County Center basement) to calculate observed trip rate (trips per employee space).

Page 10-12, Section 10.3.4, new second paragraph

Background traffic volumes were forecast based on the project trip assignments provided for the relevant approved but not yet completed projects. The list of projects that are approved or under construction was provided by Redwood City staff. The following approved or under construction projects were included under background conditions because they would contribute background trips to study intersections.

- 849 Veterans Boulevard 90-unit multi-family residential building
- Stanford in Redwood City four administrative office buildings totaling 577,000 s.f.
- Kaiser Hospital Phase 2 197,800 s.f. medical office building
- 801 Brewster Avenue 250-unit multi-family residential building (DTPP)
- 550 Allerton Street 69,486 s.f. office building (DTPP)
- 612 Jefferson Avenue 20-unit multi-family residential building (DTPP)
- 601 Marshall Street 129,235 s.f. office development (DTPP)
- 603 Jefferson Avenue 68 condominium units with 4,500 s.f. of ground floor retail (DTPP)
- 815 Hamilton Street 60,322 s.f. office building with 7,141 s.f. of retail space (DTPP)
- 2075 Broadway 80,000 s.f. office building with 2 multifamily dwelling units (DTPP)
- 103 Wilson Street 175-unit multi-family housing development (DTPP)
- 1409 El Camino Real 350-unit multi-family residential development (DTPP)
- 1305 El Camino Real 137-unit multi-family residential development (DTPP)
- 1629 Main Street 24,700 s.f. office building

Background peak-hour traffic volumes were calculated by adding to existing volumes the estimated traffic from approved developments. The trip generation and assignment for the first three projects listed above were obtained from each project's traffic impact analysis (TIA) or environmental impact report (EIR). Project trips for approved developments within the

² Includes 31 public (metered) spaces and 14 loading spaces on Hamilton/County Center. All other parking is reserved for County employees.

³ Employee and visitor parking demand in excess of existing parking supply at the County Government Center that currently makes use of other public parking in Downtow n Redwood City.

Downtown Precise Plan and for the approved office development at 1629 Main Street were estimated using rates from ITEs *Trip Generation Manual* and assigned to the study network based on the trip distribution included within the Downtown Precise Plan DEIR.

Page 10-12, Section 10.3.5

Section 10.3.5 Intersection Levels of Service

The results of the level of service analysis under existing plus project conditions are summarized

in Table 10-4, below. The results of the analysis show that all but one of the study intersections would continue to operate at an acceptable level of service based on Redwood City and C/CAG standards.

The Main Street and Woodside Road Westbound Ramps intersection is unsignalized and would operate at an unacceptable LOS E under existing plus project conditions during the PM peak hour. With the addition of project traffic, the delay for the worst (westbound) movement at this intersection would increase by 3.3 seconds of average delay. This increase is less than 5.0 seconds, and therefore is considered to be less than significant.

The intersection level of service calculation sheets are included in the please see Appendix C of the TIA (EIR Appendix F).

Page 10-13, Table 10-4 Existing Plus Project Intersection Level of Service

Table 10-4 is moved to from Section 10.3.5 to new Section 10.4.2.1 and revised as shown below. Only changed data is shown. See Appendix F Table 6 for entire table.

		Existing		Existing Plus Pro		oject
ID Intersection	Peak	Avg LOS		Avg Delay	Avg Delay LOS	
	Hour	Delay				Avg Delay
1 Veterans Blvd and Whipple Ave	AM	34.0 <u>36.0</u>	CD	34.7 <u>37.0</u>	<u>€</u> <u>D</u>	0.7 <u>1.0</u>
	PM	33.9 <u>55.5</u>	<u>C E</u>	34.2 <u>56.8</u>	€ E	0.3 <u>1.3</u>
6 Veterans Blvd and Woodside Rd	AM	14.9	В	17.6	В	2.7
	PM	43.0 <u>>80</u>	D <u>F</u>	47.5 <u>>80</u>	D <u>F</u>	4.5 <u>1.2</u>
12 Middlefield Rd and Jefferson	AM	27.1 <u>27.6</u>	С	27.1 <u>27.6</u>	С	0
Ave						
	PM	29.7 <u>30.3</u>	C	29.9 <u>30.6</u>	C	0.2 <u>0.3</u>
16 Main St and Woodside Rd WB	AM	17.0 <u>19.6</u>	С	17.3 <u>20.2</u>	С	0.3 <u>0.6</u>
Ramps						
	PM	37.4 >50	<u> </u>	4 0.7 >50	<u>₽</u> <u>F</u>	3.3 <u>7.9</u>

Page 10-15 Section 10.4.2

<u>Intersection Level of Service</u>. The results of the analysis show that all but one of the study intersections would continue to operate at an acceptable level of service based on Redwood City and C/CAG standards.

The Main Street and Woodside Road Westbound Ramps intersection is unsignalized and would operate at an unacceptable LOS E under existing plus project conditions during the PM peak hour. With the addition of project traffic, the delay for the worst (westbound) movement at this intersection would increase by 3.3 seconds of average delay. This increase is less than 5.0 seconds, and therefore the impact is considered to be *less than significant*.

Section 10.4.2.1 Existing Plus Project Conditions

Intersection Levels of Service. The results of the level of service analysis under existing plus project conditions are summarized in Table 10-4. The results of the analysis show that the following three intersections operate at an unacceptable level both without and with the project. All other study intersections would continue to operate at an acceptable level of service based on Redwood City and C/CAG standards.

<u>Veterans Boulevard and Whipple Avenue.</u> The Veterans Boulevard and Whipple Avenue intersection currently operates at an unacceptable LOS E under existing conditions during the PM peak hour. The addition of project trips under existing plus project conditions would increase the average delay at this intersection by 1.3 seconds. This increase in delay is less than 5.0 seconds, therefore, this impact would be *less than significant*.

<u>Veterans Boulevard and Woodside Road.</u> Based on observations, the Veterans Boulevard and Woodside Road intersection currently operates at an unacceptable LOS F under existing conditions during the PM peak hour. The addition of project trips under existing plus project conditions would increase the average delay at this intersection by 1.2 seconds. This increase in delay is less than 5.0 seconds, therefore, this impact would be *less than significant*.

Main Street and Woodside Road Westbound Ramps. The Main Street and Woodside Road Westbound Ramps intersection operates at an unacceptable LOS F under existing conditions during the PM peak hour. The stop-controlled westbound approach on the Woodside Road ramp encounters lengthy delays due to a lack of sufficient gaps on Main Street. Thus, even an extremely small increase in Main Street traffic as little as three trips would cause a significant impact. The project is expected to add 14 trips, causing the delay for the worst approach (westbound) at this intersection to increase by more than 5.0 seconds, which is the City's significance threshold. Additionally, based on the peak-hour signal warrant analysis for the intersection, signalization would be warranted under existing plus project conditions. Thus, by meeting these two criteria, the addition of project traffic would result in a *significant impact*.

This intersection was identified in the Downtown Precise Plan Draft EIR, dated August 26, 2010, as operating at an unacceptable LOS F during both peak hours under the cumulative conditions. Signalization of this intersection was identified in the DPP DEIR to mitigate this impact (Mitigation 9-12). This mitigation has been added to the Redwood City Traffic Impact Fee (TIF) projects list. The County will coordinate with the City to pursue implementation of this improvement. However, the improvement is within the Woodside Road (SR 84) right-of-way and will require Caltrans approval. If Caltrans does not approve, and the City cannot implement these improvements, this impact would be *significant and unavoidable*.

Page 10-15, new section 10.4.2.2 Background Plus Project Conditions Section 10.4.2.2 Background Plus Project Conditions

The results of the analysis show that the following study intersections would continue to operate an unacceptable level of service under background conditions both without and with the project.

<u>Veterans Boulevard and Whipple Avenue.</u> The Veterans Boulevard and Whipple Avenue intersection would operate at an unacceptable LOS E under background conditions during the PM peak hour. The addition of project trips under background plus project conditions would increase the average delay at this intersection by 2.5 seconds. This increase in delay is less than 5.0 seconds, therefore, this impact would be *less than significant*.

<u>Veterans Boulevard and Woodside Road.</u> The Veterans Boulevard and Woodside Road intersection would operate at an unacceptable LOS F under background conditions during the

PM peak hour. The addition of project trips under background plus project conditions would increase the average delay at this intersection by 2.3 seconds. This increase in delay is less than 5.0 seconds, therefore, this impact would be *less than significant*.

Main Street and Woodside Road Westbound Ramps. The Main Street and Woodside Road Westbound Ramps intersection would operate at an unacceptable LOS E and LOS F under background conditions during the AM and PM peak hours, respectively. During the AM peak hour, the addition of project trips would cause the delay for the stop-controlled westbound approach on the Woodside Road ramp to increase by 2.4 seconds, which is considered less than significant.

During the PM peak hour, vehicles on the stop-controlled approach encounter lengthy delays due to a lack of sufficient gaps on Main Street. Thus, even an extremely small increase in Main Street traffic as little as three trips would cause a significant impact. The project is expected to add 14 trips, causing the delay for the worst approach (westbound) at this intersection to increase by more than 5.0 seconds, which is the City's significance threshold. Additionally, based on the peak-hour signal warrant analysis for the intersection, signalization would be warranted under background plus project conditions. Thus, by meeting these two criteria, the addition of project traffic would result in a *significant impact*.

This intersection was identified in the Downtown Precise Plan Draft EIR, dated August 26, 2010, as operating at an unacceptable LOS F during both peak hours under the cumulative conditions. Signalization of this intersection was identified in the DPP DEIR to mitigate this impact (Mitigation 9-12). This mitigation has been added to the Redwood City Traffic Impact Fee (TIF) projects list. The County will coordinate with the City to pursue implementation of this improvement. However, the improvement is within the Woodside Road (SR 84) right-of-way and will require Caltrans approval. If Caltrans does not approve, and the City cannot implement these improvements, this impact would be *significant and unavoidable*.

Page 10-18, Section 10.4.9 Parking Capacity

The project includes the construction of a parking structure with the capacity for 850 to 1,200 parking stalls. This amount of parking exceeds the number of employees that are expected to be located at the proposed COB3 building, therefore the project would not result in inadequate parking capacity. The project would provide additional parking in an area with an existing identified parking deficit. It is estimated that the existing Government Center uses result in an unmet parking demand of 282 spaces. The proposed project would result in an increased parking demand of 332 spaces associated with the new COB3 building and 505 displaced parking spaces. In addition, the County has committed to provide 150 additional public parking spaces. In order to meet the estimated future parking demand, the County would need to construct 1,100 spaces in the proposed new parking structure and implement new TDM measures that would reduce County employee parking demand by at least 12 percent. Alternatively, the County could construct 1,200 spaces in the proposed new parking structure and implement new TDM measures that would reduce County employee parking demand by at least five percent. The County parking structure would be appropriately sized to meet parking demand. The impact is considered *less than significant*.

Page 10-18, Section 10.5 Cumulative Impacts

Cumulative traffic volumes were estimated by adding to background traffic volumes to the trips generated by the proposed Harbor View Place project and a growth factor to account for other

pending projects. The Harbor View Place Project would be located at 320-350 Blomquist Street, east of US 101, and would develop a high-tech office campus totaling 1,179,747 square feet.

The results of the level of service analysis show that the following three intersections would operate at an unacceptable level of service under cumulative conditions both without and with the project. All of the other study intersections are expected to operate at an acceptable level of service during both peak hours.

Veterans Boulevard and Whipple Avenue. The Veterans Boulevard and Whipple Avenue intersection would operate at an unacceptable LOS E under cumulative no project conditions during the PM peak hour. The addition of project trips under cumulative plus project conditions would increase the average delay at this intersection by 3.2 seconds. This increase in delay is less than 5.0 seconds, therefore, this impact is considered *less than significant*.

<u>Veterans Boulevard and Woodside Road.</u> The Veterans Boulevard and Woodside Road intersection would operate at an unacceptable LOS E under cumulative no project conditions during the PM peak hour. The addition of project trips under cumulative plus project conditions would increase the average delay at this intersection by <u>1.83.7</u> seconds. This increase in delay is less than 5.0 seconds, therefore, this impact is considered *less than significant*.

Main Street and Woodside Road Westbound Ramp. The Main Street and Woodside Road Westbound Ramps intersection would operate at an unacceptable LOS F under cumulative no project conditions during the PM peak hour. The stop controlled westbound approach on the Woodside Road ramp is expected to encounter lengthy delays due to a lack of sufficient gaps on Main Street. The Main Street and Woodside Road Westbound Ramps intersection would operate at an unacceptable LOS E and LOS F under cumulative no project conditions during the AM and PM peak hours, respectively. During the AM peak hour, the addition of project trips would cause the delay for the stop-controlled westbound approach on the Woodside Road ramp to increase by 3.3 seconds, which is considered less than significant. During the PM peak hour, vehicles on the stop-controlled approach encounter lengthy delays due to a lack of sufficient gaps on Main Street. Thus, even an extremely small increase in Main Street traffic as little as three trips would cause a significant impact. The project is expected to add 14 trips under cumulative plus project conditions, causing the delay for the worst approach (westbound) at this intersection to increase by more than 5.0 seconds, which is the City's significance threshold. Additionally, based on the peak-hour signal warrant analysis for the intersection, signalization would be warranted under cumulative plus project conditions. Thus, by meeting these two criteria, the addition of project traffic would result in a significant impact.

Page 10-19, third paragraph

The City assesses a Traffic Impact Fee on new development within the City that funds roadway improvements. Signalization of the Main Street/Woodside Road Westbound Ramp intersection has been added to the City's Traffic Impact Fee project list (Redwood City 2015); however, improvements to this intersection have not yet been planned nor are they identified in the City's 5-year Capital Improvement Program (2017-2022).

Page 10-20, TRA-2 Impact

The Main Street and Woodside Road Westbound Ramps intersection would operate at an unacceptable LOS F under <u>existing</u>, <u>background</u>, <u>and</u> cumulative no project conditions during the PM peak hour. A small increase in Main Street traffic as little as three trips would create a significant impact. The project would add 14 trips to this intersection, causing the delay for the

worst approach (westbound) at this intersection to increase by more than 5.0 seconds, which is the City's significance threshold.

Page 12-2, sixth paragraph

The following projects were considered for the cumulative impact analysis:

- Stanford in Redwood City (577,000 sf medical administrative office);
- 801 Brewster (20250-unit multifamily residential);
- 10351305 El Camino Real (137-unit multifamily residential);

Page 12-6, Airport Land Use Plan, second paragraph

At the project site location, a building height of 150 to 200 feet requires notification of the Federal Aviation Administration. The proposed maximum building heights of the project (87112 feet for COB3 and 105 feet for the parking structure) fall well below this limit; no federal notification is required.

Chapter 6 MITIGATION MONITORING AND REPORTING PROGRAM

This proposed Mitigation Monitoring and Reporting Plan (MMRP) has been prepared pursuant to the CEQA Guidelines, which state:

In order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency [the County of San Mateo] shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. (§15097(a))

The public agency may choose whether its program will monitor mitigation, report on mitigation, or both. "Reporting" generally consists of a written compliance review that is presented to the decision-making body or authorized staff person. A report may be required at various stages during project implementation or upon completion of the mitigation measure. "Monitoring" is generally an ongoing or periodic process of project oversight. There is often no clear distinction between monitoring and reporting and the program best suited to ensuring compliance in any given instance will usually involve elements of both. (§15097 (c))

Table 1, below, lists the potentially significant impacts and mitigation measures identified in the Mitigated Negative Declaration. Table 1 also describes the timing of and responsibility for implementing the mitigation measures related to the County Government Center Campus Development Project. The mitigation measures listed here will be implemented by the County of San Mateo, or by its appointee.

According to CEQA Guidelines Section 15126.4 (a)(2), "Mitigation measures must be fully enforceable through permit conditions, agreements, or other legally-binding instruments. In the case of the adoption of a plan, policy, regulation, or other public project, mitigation measures can be incorporated into the plan, policy, regulation, or project design." Therefore, the County of San Mateo will consider whether to adopt the mitigation measures when it considers whether to approve the project.

Environmental Protection Measures Incorporated into the Project

The Draft EIR identifies Best Management Practices (BMPs) related to air quality, cultural resources, storm water drainage, and noise (Section 2.7). These BMPs are part of the project, not mitigation measures, and are therefore not subject to the monitoring requirements of CEQA Guidelines Section 15097(a); however, the BMPs incorporated into the project are nonetheless listed in Table 2 below to provide a consolidated, complete reference to all the measures that will be implemented to avoid or reduce the project's potential adverse environmental effects to less than significant levels.

Mitigation Monitoring and Reporting Program	Page 6-2
This page deliberately left blank.	

Impact	Mitigation Measure	Implementation Responsibility/Timing	Monitoring Responsibility	Verified Implementation
	AIR QUALITY	(
construction would result in average daily NOx emissions that exceed BAAQMD threshold (54 lbs/day for NOx) and generate emissions of	 Mitigation Measure AIR-1: To reduce NOx emissions and potential adverse health risks associated with exposure to PM2.5 emissions, including DPM emissions, generated during project construction activities, the County and/or its designated contractors, contractor's representatives, or other appropriate personnel shall apply the following construction equipment restrictions to the proposed project: Utilize on-site electrical hook-ups instead of diesel powered equipment (e.g., diesel generators)) to the maximum extent feasible. All construction equipment with a rated power-output of 50 horsepower or greater shall meet U.S. EPA Tier III Emissions Standards. 	Implementation: San Mateo County or its Contractor shall incorporate this air quality mitigation measure into all appropriate engineering and site plan (e.g., building, grading, etc.) documents. Timing: Prior to any demolition and/or ground-disturbing activities, unless otherwise specified.	Monitoring: The County shall review all engineering and site plan documents for inclusion of emissions control measures and contractor's evidence / verification that equipment complies with the control requirements.	Plan Submittal Initials: Date: Monitoring Completion Initials: Date:
	BIOLOGY			
in nest abandonment if nesting is present in nearby landscape trees, which would have an	Mitigation Measure BIO-1a: Nesting Bird Survey. To avoid impacts to nesting birds and violation of state and federal laws pertaining to birds, all construction-related activities (including but not limited to mobilization and staging, clearing, grubbing, vegetation removal, fence installation, demolition, and grading) should occur outside the avian nesting season (generally prior to February 1 or after August 31). If construction and construction noise occurs within the avian nesting season (from February 1 to August 31 or according to local requirements), all suitable habitats located within the project's area of disturbance including staging and storage areas plus a 250-foot buffer (passerines), 500-foot buffer (small raptors, such as accipiters), and 1,000-foot buffer (large raptors, such as buteos) around these	Implementation: San Mateo County or its Contractor Timing: February 1 through August 31, no more than five days in advance of the start of project construction.	Monitoring: The biologist shall prepare a written record of survey results and implementation of any avoidance/ minimization measures to be kept on file at the San Mateo County Manager's Office, Project Development Unit office. The biologist shall monitor any active nests to determine when young have matured sufficiently to have fledged.	Initials:

Table 1: Impacts, Mitigation Measures, and Timing of and Responsibility for Implementing the Mitigation Measures					
Impact	Mitigation Measure	Implementation Responsibility/Timing	Monitoring Responsibility	Verified Implementation	
Significance of Impact After Mitigation: Less than Significant	areas shall be thoroughly surveyed, as feasible, for the presence of active nests by a qualified biologist no more than five days before commencement of any site disturbance activities and equipment mobilization. The bird survey buffer radius may be modified in consultation with CDFW. If project activities are delayed by more than five days, an additional nesting bird survey shall be performed. Active nesting is present if a bird is sitting in a nest, a nest has eggs or chicks in it, or adults are observed carrying food to the nest. The results of the surveys shall be documented. If it is determined that birds are actively nesting within the survey area, Mitigation Measure BIO-1b shall apply. Conversely, if the survey area is found to be absent of nesting birds, Mitigation Measure BIO-1b: If pre-construction nesting bird surveys result in the location of active nests, no site disturbance or mobilization of heavy equipment (including but not limited to equipment staging, fence installation, clearing, grubbing, vegetation removal, fence installation, demolition, and grading), shall take place within 250 feet of non-raptor nests, 500-feet of small raptor nests, and 1,000 feet of large raptor nests, or as determined by a qualified biologist in consultation with CDFW, until the chicks have fledged. Monitoring shall be required to ensure compliance with the MBTA and relevant California Fish and Game Code requirements. Monitoring dates and findings shall be documented.			Avoidance / Minimization Measures Initials: Date:	

Table 1: Impa	Table 1: Impacts, Mitigation Measures, and Timing of and Responsibility for Implementing the Mitigation Measures					
Impact	Mitigation Measure	Implementation Responsibility/Timing	Monitoring Responsibility	Verified Implementation		
Impact BIO-2: Tree removal and/or demolition of the existing buildings could result in the removal or disturbance of bat roost habitat and may result in significant impacts to bat populations if an occupied or perennial (but unoccupied) maternity or colony roost is disturbed or removed. Significance of Impact Before Mitigation: Potentially Significant Significance of Impact After Mitigation: Less than Significant	Mitigation Measure BIO-2: To avoid impacting breeding, roosting, or hibernating bats protected by CDFW, pre-construction surveys of potential bat roost habitat will be performed in all trees and buildings subject to removal or demolition and within a 50-foot buffer for evidence of maternal or colony bat roosts (e.g., guano accumulation, acoustic, or visual detections) within 48 hours of project disturbance. If an occupied maternity or colony roost is detected or evidence of bat occupancy is found, CDFW will be consulted to determine the appropriate mitigation measures, which may include exclusion prior to removal if the roost cannot be avoided, a buffer zone, seasonal restrictions on construction work, and/or construction noise reduction measures.	Implementation: San Mateo County or its Contractor Timing: Year-round, no more than 48 hours in advance of the start of project construction.	Monitoring: The biologist shall prepare a written record of survey results and implementation of any avoidance/ minimization measures to be kept on file at the San Mateo County Manager's Office, Project Development Unit office. The biologist shall coordinate with CDFW to determine the appropriate mitigation and monitoring if a roost is found.	Initials: Date: Avoidance / Minimization Measures		
Impact BIO-3: Project construction could remove two County Significant Trees adjacent to the Lathrop House: a redwood 104 inches in circumference and a sequoia 73 inches in circumference. Significance of Impact Before Mitigation: Potentially Significant Significance of Impact After Mitigation: Less than Significant	Mitigation Measure BIO-3: San Mateo County shall pursue a project design that preserves the two County Significant Trees in their current location. If trees are preserved, protection measures shall be implemented during project construction per recommendation of a certified arborist. If tree removal cannot be avoided, the County shall plant similar replacement trees on the project site.	Implementation: San Mateo County or its Contractor Timing: Project design and construction.	Monitoring: Preservation or removal shall be determined prior to the planning review and permitting. A tree protection plan shall be submitted by a certified arborist and implementation of protective measures shall be inspected prior to start of construction. If removal is planned, tree replacement shall be identified on project plans.	Initials: Date: Monitoring Completion		

Table 1: Impa	Table 1: Impacts, Mitigation Measures, and Timing of and Responsibility for Implementing the Mitigation Measures					
Impact	Mitigation Measure	Implementation Responsibility/Timing	Monitoring Responsibility	Verified Implementation		
	CLIMATE CHANGE AN	ND ENERGY				
Impact GHG-1: The proposed project would generate GHG emissions that could exceed the levels necessary to achieve the state's long-term reduction goals. Significance of Impact Before Mitigation: Potentially Significant Significance of Impact After Mitigation: Less than Significant	Mitigation Measure GHG-1: To ensure the proposed project does not conflict with the state's future GHG reduction goals, the County shall require COB3 and the parking garage to collectively source at least 30 percent of the buildings' electricity demand from on-site renewable energy (i.e., the PV system).	Implementation: The County or its Contractor shall incorporate this mitigation measure into all appropriate engineering and site plan (e.g., building, grading, etc.) documents. Timing: Prior to any ground-disturbing activities associated with COB3 and/or the parking structure.	Monitoring: The County shall review all engineering and site plan documents for inclusion of this mitigation measure and shall obtain a signed document / memorandum from the selected engineering firm confirming the project has been designed to source at least 20 percent of its anticipated electricity generation for on-site renewable energy.	Plan Submittal Initials: Date:		

Table 1: Impa	Table 1: Impacts, Mitigation Measures, and Timing of and Responsibility for Implementing the Mitigation Measures					
Impact	Mitigation Measure	Implementation Responsibility/Timing	Monitoring Responsibility	Verified Implementation		
	CULTURAL, HISTORICAL, AND TRIBAL RESOURCES					
Impact CUL-1: Relocation of a historic resource. Significance of Impact Before Mitigation: Potentially Significant Significance of Impact After Mitigation: Less than Significant	Mitigation Measure CUL-1: All work to be carried out on Lathrop House will conform to the Secretary of the Interior's Standards for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. Any loose material and furniture that can be removed in the house shall be removed and cataloged under the supervision of a historian qualified to the Secretary of the Interior's standards prior to any moving activity. It shall be stored in a place appropriate for historical artifacts before being returned to the house. Any furniture that cannot be removed must be braced in place during the house move. Doors and windows are to be braced open or closed at the discretion of the engineer in charge of moving operations. Detailed photographs will be taken by a state qualified historian or architectural historian of all aspects of the house prior to the move and prior to the removal of the pony wall to ensure that any damage sustained can be repaired in keeping with the current existing conditions and as a historic record of the house in its current position. Any damage sustained during moving operations will be fixed according to the Secretary of the Interior's Standards for Preserving, Rehabilitating, Restoring, and Reconstructing Historic Buildings. All repairs will be approved by a state qualified historian or architectural historian.	Implementation: San Mateo County or its Contractor Timing: Prior to building movement. Repair, if applicable, is to be carried out as soon as feasible after movement is completed.	Monitoring: A state qualified historian or architectural historian shall catalog all material removed from and remaining in the house. Detailed photographs will be taken prior to the move by the (architectural) historian and will be used to replace items as they were, and also in the case of damage to aid repair. A report of repairs will be submitted to the County.	Catalog and Photographs Initials: Date: Repairs Initials: Date:		
Impact CUL-2: Potential disturbance of unknown prehistoric or historic cultural resources, including human remains, during project construction. Significance of Impact Before Mitigation:	Mitigation Measure CUL-2A: Due to the moderate to high potential of historic and prehistoric archaeological remains existing at the receiver site of the Lathrop House, Archaeological Sensitivity Training will be carried out prior to ground moving activity by a qualified archaeologist for all personnel who will engage in or supervise ground disturbing activities on the site. Mitigation Measure CUL-2B: In the event that archaeological remains from either a historic or	Implementation: San Mateo County and its Contractor. Timing: Prior to the start of project construction and ongoing throughout ground moving activity.	Monitoring: The archaeologist shall, if applicable, prepare a written record of survey results, archaeological discovery, and evaluation methodology to be submitted to the County and the Northwest	Training Session Initials: Date:		

Table 1: Impacts, Mitigation Measures, and Timing of and Responsibility for Implementing the Mitigation Measures					
Impact	Mitigation Measure	Implementation Responsibility/Timing	Monitoring Responsibility	Verified Implementation	
Potentially Significant Significance of Impact After Mitigation: Less than Significant	prehistoric period are discovered (or have been suspected to have been discovered) during project construction, all ground disturbing work within a 100' radius buffer of the discovery will cease. An archaeologist who meets the Secretary of the Interior's Standards for Archaeology will be brought in to assess the discovery before any additional ground disturbing work within the 100' buffer will be allowed to continue. No further ground disturbing work will be allowed to continue until the archaeologist has fully evaluated the find and permits work to continue. Dependent on the evaluation by the archaeologist, archaeological excavation and recordation may be required before construction can continue. Archaeological monitoring will be enacted on the site at the discretion of the archaeologist. Should the newly discovered artifacts be determined to be Native American in origin, Native American Tribes/Representatives will be contacted and consulted as directed by the NAHC and Native American construction monitoring will be initiated. All Native American in nature are to be considered as significant tribal cultural resources until the County has determined otherwise with the consultation of a qualified archaeologist and local tribal representative(s) as directed by the NAHC. In the event of an archaeological discovery, the County shall coordinate with the archaeologist to develop an appropriate treatment plan for the resources. The plan may include implementation of archaeological data recovery excavations to address treatment of the resource along with subsequent laboratory processing and analysis. An archaeological finds and submitted to the County and the Northwest Information Center.		Information Center. The Native American monitor shall, if applicable, record tribal resources for submittal to the Native American Heritage Commission.	Record of Survey Results (if applicable) Initials: Date:	

Table 1: Impacts, Mitigation Measures, and Timing of and Responsibility for Implementing the Mitigation Measures				
Impact	Mitigation Measure	Implementation Responsibility/Timing	Monitoring Responsibility	Verified Implementation
Impact CUL-3: Potential disturbance of a paleontological resource. Significance of Impact Before Mitigation: Potentially Significant Significance of Impact After Mitigation: Less than Significant	Mitigation Measure CUL-3A: Due to the moderate to high potential of historic and prehistoric archaeological remains existing at the receiver site of the Lathrop House, Paleontological Sensitivity Training will be carried out prior to ground moving activity by a qualified paleontologist or archaeologist for all personnel who will engage in or supervise ground disturbing activities on the site. Mitigation Measure CUL-3B: In the event that paleontological resources are discovered during project construction all ground disturbing work within a 100' radius buffer of the discovery will cease. A qualified paleontologist will be brought in to assess the discovery before any additional ground disturbing work within the 100' buffer will be allowed to continue. No further ground disturbing work will be allowed to continue until the paleontologist has fully evaluated the resource and permits work to continue. Dependent on the evaluation by the paleontologist, paleontological excavation and recordation may be required before construction can continue. Paleontological monitoring will be enacted on the site at the discretion of the paleontologist. In the event of a paleontological discovery, the County shall coordinate with the paleontologist to develop an appropriate treatment plan for the resources. A paleontological report will be written detailing all paleontological finds and submitted to the County and the University of California Museum of Paleontology at Berkeley.	Implementation: San Mateo County and its Contractor. Timing: Prior to the start of project construction and ongoing throughout ground moving activity.	Monitoring: The paleontologist shall, if applicable, prepare a written record of survey results, paleontological discovery, and evaluation methodology to be submitted to County and the University of California Museum of Paleontology at Berkeley.	Training Session Initials:

Table 1: Impacts, Mitigation Measures, and Timing of and Responsibility for Implementing the Mitigation Measures						
Impact	Mitigation Measure	Implementation Responsibility/Timing	Monitoring Responsibility	Verified Implementation		
	NOISE					
Impact NOI-1: Project demolition and construction activities could generate noise levels in excess of 10 dB above ambient conditions at sensitive receptor locations for several hours a day for a period of approximately 18 to 26 months. Significance of Impact Before Mitigation: Potentially Significant Significance of Impact After Mitigation: Less than Significant	 Mitigation Measure NOI-1: To reduce demolition and construction noise impacts on adjacent land uses, the County shall require the following construction-period noise abatement measures: Construction Plan. Prepare a detailed construction plan identifying the schedule for major noise-generating construction activities. The construction plan shall identify a procedure for coordination with nearby noise-sensitive facilities so that construction activities and events can be scheduled to minimize noise disturbance. This plan shall be provided to all noise-sensitive land uses within 500 feet of the construction site. Construction Traffic. Route all construction traffic to and from the construction site via designated truck routes to the maximum extent feasible. Prohibit construction-related heavy truck traffic in residential areas where feasible. Temporary Barriers. The County shall install and maintain throughout the duration of all demolition and construction activities, one or more physical barriers capable of achieving a minimum reduction in predicated noise levels of 14 dB. Potential options would include: A concrete, wood, or other barrier installed atgrade (or mounted to structures located atgrade, such as K-Rail) along the project property line. Such a wall/barrier shall consist of material that has a minimum rated transmission loss value of 24 dB (or equivalent rating), and shall contain no gaps in the structure through which noise may pass. Commercially available acoustic panels or other products such as acoustic barrier blankets 	Implementation: The County shall incorporate this mitigation measure into all appropriate engineering and site plan (e.g., building, grading, etc.) documents. Timing: Prior to any demolition and/or ground-disturbing activities.	Monitoring: The County shall review all engineering and site plan documents for inclusion of this requirement. The final type, placement, and design of the project's temporary noise barrier(s) shall be reviewed by a qualified acoustical consultant prior to installation to ensure proper function and a minimum attenuation of 14 dBs in construction noise levels.	Plan Submittal Initials: Date: Monitoring Completion Initials: Date:		

Table 1: Impa	cts, Mitigation Measures, and Timing of and Resp	onsibility for Implemen	ting the Mitigation Meas	sures
Impact	Mitigation Measure	Implementation Responsibility/Timing	Monitoring Responsibility	Verified Implementation
	installed along the project property line, building envelope or, if feasible and necessary, at or near sensitive residential receptor areas. O Any combination of noise barriers and			
	commercial products capable of achieving a 14- dB reduction in construction noise levels at sensitive receptor locations.			
	TRANSPORTAT	ION		
TRA-1 Impact: The proposed project will increase traffic volumes on freeways and the local roadway system contributing to peak-hour congestion without TDM measures incorporated into the project to offset the increase in peak-hour trips.	TRA-1 Mitigation Measure: The TIA prepared for the proposed project takes credit for implementation of TDM in the calculation of trips generated by the project. To ensure the credits have been appropriately applied to the project the County shall prepare a TDM Plan specific to the project. The TDM Plan shall identify specific TDM measures that will be implemented by the County, consistent with County practices and current standards of transportation management. Table 10-5 of this Draft EIR presents measures available to the County for implementation. The TDM Plan shall include the	Implementation: San Mateo County. Timing: Site Plans showing TDM measures shall be submitted prior to project permitting. Effectiveness of TDM measures shall be evaluated three years	Monitoring: The County Office of Sustainability shall submit a report three years after building occupancy to document the success of the TDM Plan and whether the identified performance standards have been achieved. If the identified performance standards	Plan Submittal Initials: Date: Monitoring Completion:
Significance of Impact Before Mitigation: Potentially Significant Significance of Impact After Mitigation: Less than Significant	 implementation. The TDM Plan shall include the following: Identification of Performance Standards: This EIR assumed a five percent peak-hour and four percent daily trip reduction to the net new trips generated by the COB3 office to account for the high level of transit use at this location. After applying the trip reductions for relocated employees and transit usage, the project is estimated to generate 2,976 net new daily trips, including a net 232 AM peak-hour trips and a net 300 PM peak-hour trips (see Table 10-2, of the Draft EIR). The TDM Plan shall identify this information as the performance standard that the County shall achieve; Identification of specific TDM measures applied to the project; 	after building occupancy.	performance standards have not been achieved, the County will undertake a process to identify steps that will be taken to ensure the performance are met.	Initials: Date:

Table 1: Impa	Table 1: Impacts, Mitigation Measures, and Timing of and Responsibility for Implementing the Mitigation Measures				
Impact	Mitigation Measure	Implementation Responsibility/Timing	Monitoring Responsibility	Verified Implementation	
	Plan Implementation: A description of how each identified measure will be implemented and maintained over the life of the project, including, but not limited to, the transportation demand management goals targeted for the various measures;				
	Designated TDM Contact. Designation of a County Department and staff person as the official contact for the TDM Plan; and				
	Site Plan. The project plans shall identify TDM design elements including:				
	 External: preferential parking areas, paid parking areas, bicycle connections, bicycle parking, location of on-site amenities, passenger loading areas, land dedicated for transit facilities and bus shelters, direct route to transit, and pedestrian connections; and Internal: showers/lockers, information boards/kiosks, employee incentive and education programs, ATM, convenience retail, post office, cafeteria, limited food service establishment, exercise facilities. 				
TRA-2 Impact: The Main Street and Woodside Road Westbound Ramps intersection would operate at an unacceptable LOS F under existing, background, and cumulative no project conditions during the PM peak hour. A small increase in Main Street traffic as little as three trips would create a significant impact. The project would add 14 trips to this intersection,	Mitigation for this intersection is outside the control of the County and under the jurisdiction of the City of Redwood City. No funding mechanism or mitigation plan currently exists specifically addressing the impacted intersection. The impact is significant and unavoidable.				

Table 1: Impacts, Mitigation Measures, and Timing of and Responsibility for Implementing the Mitigation Measures				
Impact	Mitigation Measure	Implementation Responsibility/Timing	Monitoring Responsibility	Verified Implementation
causing the delay for the worst approach (westbound) at this intersection to increase by more than 5.0 seconds, which is the City's significance threshold.				
Impact is Significant and Unavoidable.				

Note: For all Biology mitigation measures, a "qualified" biologist/botanist shall have suitable training or expertise with the species and/or habitats addressed by the measure.

Table 2: Environmental Protection Measures Incorporated into the Project

Air Quality BMPs

The County and/or its contractor shall implement the following BAAQMD Basic Construction Mitigation Measures during project construction:

- 1) All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- 2) All haul trucks transporting soil, sand, or other loose material off-site shall be covered.
- 3) All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.
- 4) All vehicle speeds on unpaved roads shall be limited to 15 mph.
- 5) All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- 6) Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- 7) All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specification. All equipment shall be checked by a certified visible emissions evaluator.
- 8) Post a publicly visible sign with the telephone number and person to contact at the County Manager's Office, Project Development Unit regarding dust complaints. The Project Development Unit shall respond and take corrective action within 48 hours. The publicly visible sign shall also include the contact phone number for the Bay Area Air Quality Management District (BAAQMD) to ensure compliance with applicable regulations.

Cultural Resources BMPs

The County and/or its contractor shall implement the following BMPs during project construction to avoid potential impacts on unanticipated and previously unknown cultural resources:

- 1) In the event that any archaeological or paleontological resources are encountered at any time during construction, it will be the responsibility of the construction/project manager to stop work within 50 feet of any discovery and contact a qualified archaeologist. Work in the area shall be suspended until the archaeologist prepares a plan for the evaluation of the resource and the plan is submitted to the County for approval.
- 2) Pursuant to Section 7050.5 of the Health and Safety Code and Section 5097.94 of the Public Resources Code of the State of California, in the event of the discovery of human remains during construction, the construction manager shall stop work and notify the San Mateo County Coroner. If the Coroner determines that the remains are not subject to his/her authority, he/she shall notify the NAHC who shall attempt to identify descendants of the deceased.

Storm Water and Drainage Control BMPs

The County and/or its contractor shall prepare and implement a storm water and drainage control plan in compliance with the San Mateo Countywide Water Pollution Prevention Program, Provision C.3 of the County's Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit. The plan shall specify best management practices for the control and prevention of storm water pollution. The plan shall address both construction-phase and post-construction pollutant impacts from development.

Construction-phase measures shall include: erosion control measures such as installing fiber rolls, silt fences, gravel bags, or other erosion control devices around and/or downslope of work areas and around storm drains prior to earthwork and before the onset of any anticipated storm events; monitoring and maintaining all erosion and sediment control devices; designating a location away from storm drains when refueling or maintaining equipment; scheduling grading and excavation during dry weather; and removing vegetation only when absolutely necessary.

Table 2: Environ	mental Protection Measures Incorporated into the Project						
	Post-construction drainage controls shall be specified to capture and treat storm water onsite.						
Noise Control BMPs (Construction)	The construction contractor shall implement measures to reduce the noise levels generated by construction equipment operating at the project site during project grading and construction phases. The construction contractor shall include in construction contracts the following requirements or measures shown in the sole discretion of the Planning and Building Director to be equally effective:						
	 Hours of construction activity shall be limited to Monday to Friday, from 7:00 AM to 6:00 PM, and Saturdays 9:00 AM to 5:00 PM in accordance with the County of San Mateo Ordinance Code. All construction equipment shall be equipped with improved noise muffling, and maintain the manufacturers' recommended noise abatement measures, such as mufflers, engine covers, and engine isolators in good working condition. Stationary construction equipment that generates noise levels in excess of 65 dBA Leq shall be located as far away from existing residential areas as possible. Heavy-duty vehicle storage and start-up areas shall be located as far away from occupied residences where feasible. All equipment shall be turned off if not in use for more than five minutes. Drilled piles or the use of sonic or vibratory pile drivers shall be used instead of impact pile drivers. Prior to the commencement of grading or construction at the project site, an information sign shall be posted at the entrance to each construction site that identifies the permitted construction hours and provides a telephone number to call and receive information about the construction project or to report complaints regarding excessive noise levels. The County shall rectify all received complaints within one business day.						

Mitigation Monitoring and Reporting Program		Page 6-16
	This page deliberately left blank.	
County Government Center Campus Development Project		Final EIR

San Mateo County Government Center Campus Development Project

Appendix B: Air Quality/GHG Calculations

Appendix B		
	This page deliberately left blank.	
	This page deliberately left blank.	
	This page deliberately left blank.	
	This page deliberately left blank.	
	This page deliberately left blank.	
	This page deliberately left blank.	
	This page deliberately left blank.	

San Mateo County Government Center Campus Development Project

Appendix B-1: Summary of CalEEMod Emission Estimates

Appendix B-1		

This page deliberately left blank.

San Mateo County Government Center Campus Development Project FEIR

Appendix B-1

Summary of CalEEMod Emission Estimates

Prepared by MIG, Inc.

Note: Appendix B-1 summarizes the raw CalEEMod output files contained in Appendix B-2. For estimating daily construction emissions, it was assumed there would be 110 days in 2018, 264 days in 2019, and 264 days in 2020. For operational emissions, contribution from mobile source have been net out since the proposed Project would result in a net decrease in VMT.

UNMITIGATED: CONSTRUCTION CRITERIA AIR POLLUTANT EMISSIONS

Table B-1.1: Lathrop House Move - Unmitigated Criteria Air Pollutant Construction Emissions

Ī	Voor	tons/yr							
	Year	ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5
ĺ	2018	5.50E-04	4.80E-03	2.98E-03	1.00E-05	4.10E-04	2.00E-04	2.20E-04	1.90E-04

Table B-1.2: Parking Structure, Demolition of Credit Union, Temporary Parking Lot - Unmitigated Criteria Air Pollutant Construction Emissions

Year		tons/yr									
	ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5			
2018	0.1186	1.3634	0.7724	1.81E-03	0.0929	0.0566	0.0408	0.0525			
2019	0.6074	5.5306	4.2552	9.93E-03	0.2963	0.2348	0.0805	0.2195			
2020	0.2787	1.5706	1.2574	2.99E-03	0.0911	0.0649	0.0248	0.0606			

Table B-1.3: COB3 and Demolition of Traffic Court Building - Unmitigated Criteria Air Pollutant Construction Emissions

Year	tons/yr									
Teal	ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5		
2018	0.059	0.773	0.4252	1.16E-03	0.0242	0.0298	8.54E-03	0.0277		
2019	0.3809	4.0873	3.0665	5.79E-03	0.0959	0.2038	0.0253	0.1878		
2020	1.3038	3.575	2.8372	5.37E-03	0.0852	0.1744	0.0232	0.1606		

Table B-1.4: Promenade - Unmitigated Criteria Air Pollutant Construction Emissions

	Year		tons/yr								
		ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5		
	2020	0.0941	0.7685	0.6703	1.13E-03	0.0855	0.0404	0.042	0.0373		

Table B-1.5: Unmitigated Criteria Air Pollutant Construction Emissions Compilation

Year	tons/yr									
fear	ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5		
2018	0.1782	2.1412	1.2006	0.0030	0.1175	0.0866	0.0496	0.0804		
2019	0.9883	9.6179	7.3217	0.01572	0.3922	0.4386	0.1058	0.4073		
2020	1.6766	5.9141	4.7649	0.0095	0.2618	0.2797	0.0900	0.2585		
Year	lbs/day									
Teal	ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5		
2018	3.2391	38.9309	21.8287	0.0542	2.1365	1.5745	0.9011	1.4616		
2019	7.4871	72.8629	55.4674	0.1191	2.9712	3.3227	0.8015	3.0856		
2020	12.7015	44.8038	36.0977	0.0719	1.9833	2.1189	0.6818	1.9583		

Table B-1.6: Lathrop House Move - Mitigated Criteria Air Pollutant Construction Emissions

Voor		tons/yr								
Year	ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5		
2018	5.50E-04	4.80E-03	2.98E-03	1.00E-05	4.10E-04	2.00E-04	2.20E-04	1.90E-04		

Table B-1.7: Parking Structure, Demolition of Credit Union, Temporary Parking Lot - Mitigated Criteria Air Pollutant Construction Emissions

Year		tons/yr									
real	ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5			
2018	0.0479	0.8157	0.8279	1.81E-03	0.0553	0.0295	0.022	0.0295			
2019	0.3817	3.988	4.6006	9.93E-03	0.2963	0.1456	0.0805	0.145			
2020	0.2141	1.1569	1.3645	2.99E-03	0.0911	0.0417	0.0248	0.0415			

Table B-1.8: COB3 and Demolition of Traffic Court Building - Mitigated Criteria Air Pollutant Construction Emissions

Year		tons/yr									
Teal	ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5			
2018	0.0271	0.5352	0.4856	1.16E-03	0.0195	0.0181	6.20E-03	0.018			
2019	0.147	2.5985	3.3839	5.79E-03	0.0918	0.1166	0.0247	0.1164			
2020	1.1007	2.3641	3.1347	5.37E-03	0.0852	0.1063	0.0232	0.1062			

Table B-1.9: Promenade - Mitigated Criteria Air Pollutant Construction Emissions

Year				ton	s/yr			
rear	ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5
2020	0.0487	0.5415	0.76	94 1.13E-03	0.0425	0.0298	0.02	0.0298

Table B-1.10: Mitigated Criteria Air Pollutant Construction Emissions Compilation

Year				ton	s/yr				
real	ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5	
2018	0.0756	1.3557	1.3165	0.0030	0.0752	0.0478	0.0284	0.0477	
2019	0.5287	6.5865	7.9845	0.01572	0.3881	0.2622	0.1052	0.2614	
2020	1.3635	4.0625	5.2686	0.0095	0.2188	0.1778	0.0680	0.1775	
Year		lbs/day							
Teal	ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5	
2018	1.3736	24.6491	23.9360	0.0542	1.3675	0.8691	0.5167	0.8671	
2019	4.0053	49.8977	60.4886	0.1191	2.9402	1.9864	0.7970	1.9803	
2020	10.3295	30.7765	39.9136	0.0719	1.6576	1.3470	0.5152	1.3447	

Table B-1.11: PM2.5 Reductions

Year	lbs/d	% Reduction	
rear	Unmitigated	Mitigated	% Reduction
2018	1.4616	0.8671	41%
2019	3.0856	1.9803	36%
2020	1.9583	1.3447	31%

OPERATIONAL CRITERIA AIR POLLUTANT EMISSIONS

Table B-1.12: 2021 Operational - Mitigated Criteria Air Pollutant Emissions

	2. 2021 Operational Witigated Circent Vill Foliatant Emissions									
Source				ton	s/yr					
Source	ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5		
Area	0.8709	0.0001	0.0068	0.0000	0.0000	0.0000	0.0000	0.0000		
Energy	0.0194	0.1762	0.1481	0.0011	0.0000	0.0134	0.0000	0.0134		
Mobile	0.3625	0.8032	2.5472	0.0050	0.4016	0.0054	0.1079	0.0050		
Total	0.5278	-0.6269	-2.3923	-0.0040	-0.4016	0.0080	-0.1079	0.0084		
Source		lbs/day								
Source	ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5		
Area	4.7721	0.0003	0.0371	0.0000	0.0000	0.0001	0.0000	0.0001		
Energy	0.1063	0.9655	0.8115	0.0058	0.0000	0.0734	0.0000	0.0734		
Mobile	1.9863	4.4011	13.9573	0.0275	2.2005	0.0296	0.5912	0.0276		
Total	2.8921	-3.4353	-13.1087	-0.0216	-2.2005	0.0439	-0.5912	0.0460		

Table B-1.13: 2030 Operation - Mitigated Criteria Air Pollutant Emissions

	•		/							
Source				ton	s/yr					
Source	ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5		
Area	0.8708	0.0001	0.0067	0.0000	0.0000	0.0000	0.0000	0.0000		
Energy	0.0194	0.1762	0.1481	0.0011	0.0000	0.0134	0.0000	0.0134		
Mobile	0.2345	0.5735	1.4495	0.0031	0.2870	0.0030	0.0771	0.0028		
Total	0.3993	-0.7122	-2.6145	-0.0043	-0.4016	0.0046	-0.1079	0.0050		
Source		lbs/day								
Source	ROG	NOx	СО	SO2	Fug. PM10	Exh. PM10	Fug. PM2.5	Exh. PM2.5		
Area	4.7715	0.0003	0.0368	0.0000	0.0000	0.0001	0.0000	0.0001		
Energy	0.1063	0.9655	0.8115	0.0058	0.0000	0.0734	0.0000	0.0734		
Mobile	1.2849	3.1425	7.9425	0.0167	1.5726	0.0164	0.4225	0.0152		
Total	3.5929	-2.1767	-7.0942	-0.0109	-1.5726	0.0572	-0.4225	0.0584		

CONSTRUCTION GREENHOUSE GAS EMISSIONS

Table B-1.14: Lathrop House Move - Unmitigated GHG Construction Emissions

Year	Metric tons / yr			
rear	CO2	CH4	N2O	CO2e
2018	0.6887	1.80E-04	0	0.6933

Table B-1.15: Parking Structure, Demolition of Credit Union, Temporary Parking Lot - Unmitigated GHG Construction Emissions

Voor	Metric tons / yr					
Year	CO2	CH4	N2O	CO2e		
2018	169.2136	0.0366	0	170.1277		
2019	905.2185	0.1509	0	908.9915		
2020	270.1523	0.0447	0	271.2687		

Table B-1.16: COB3 and Demolition of Traffic Court Building - Unmitigated GHG Construction Emissions

Year	Metric tons / yr					
Teal	CO2	CH4	N2O	CO2e		
2018	169.2137	0.0366	0	170.1278		
2019	905.219	0.1509	0	908.9917		
2020	270.1524	0.0447	0	271.2689		

Table B-1.17: Promenade - Unmitigated GHG Construction Emissions

Year		Metric tons / yr				
Teal	CO2	CH4	N2O	CO2e		
2020	98.7576	0.0293	0	99.4906		

Table B-1.18: Unmitigated GHG Construction Emissions Compilation

Year	Metric tons / yr					
fear	CO2	CH4	N2O	CO2e		
2018	339.116	0.07338	0	340.9488		
2019	1810.4375	0.3018	0	1817.9832		
2020	639.0623	0.1187	0	642.0282		
Total	2788.6158	0.49388	0	2800.9602		
Amortized	92.95386	0.016463	0	93.36534		

OPERATIONAL GHG EMISSIONS

Table B-1.19: 2021 Operational - Unmitigated GHG Emissions

Source	Metric tons / yr						
Source	CO2	CH4	N2O	CO2e			
Area	0.0131	0.0000	0.0000	0.0140			
Energy	1059.6305	0.0723	0.0177	1066.7126			
Mobile	457.5489	0.0228	0.0000	458.1185			
Waste	35.1134	2.0751	0.0000	86.9919			
Water	58.2016	1.2077	0.0292	97.0930			
Total	695.4097	3.3323	0.0469	792.6930			

Table B-1.20: 2021 Operational - Mitigated GHG Emissions

Source	Metric tons / yr						
Source	CO2	CH4	N2O	CO2e			
Area	0.0131	0.0000	0.0000	0.0140			
Energy	799.3003	0.0517	0.0135	804.5998			
Mobile	457.5489	0.0228	0.0000	458.1185			
Waste	35.1134	2.0751	0.0000	86.9919			
Water	58.2016	1.2077	0.0292	97.0930			
Total	435.0795	3.3117	0.0427	530.5802			

Table B-1.21: 2030 Operational - Unmitigated GHG Emissions

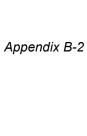
	· '			
Source		Metric	tons / yr	
Source	CO2	CH4	N2O	CO2e
Area	0.0131	0.0000	0.0000	0.0140
Energy	839.7330	0.0723	0.0177	846.8151
Mobile	280.4722	0.0132	0.0000	280.8018
Waste	35.1134	2.0751	0.0000	86.9919
Water	46.4236	1.2077	0.0292	85.3150
Total	640.8109	3.3419	0.0469	738.3342

Table B-1.22: 2030 Operational - Mitigated GHG Emissions

	l l		0	
Source		Metric	tons / yr	
Source	CO2	CH4	N2O	CO2e
Area	0.0131	0.0000	0.0000	0.0140
Energy	645.3721	0.0517	0.0135	650.6716
Mobile	280.4722	0.0132	0.0000	280.8018
Waste	35.1134	2.0751	0.0000	86.9919
Water	46.4236	1.2077	0.0292	85.3150
Total	446.4500	3.3213	0.0427	542.1907

San Mateo County Government Center Campus Development Project

Appendix B-2: CalEEMod Outputs



This page deliberately left blank.

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

COB3 - Lathrop House Move (Construction) San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	1.00	1000sqft	0.02	1,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	70
Climate Zone	5			Operational Year	2020
Utility Company	Pacific Gas & Electric Co	mpany			
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

Date: 11/27/2017 11:38 AM

Project Characteristics - PTG - Model run to capture emissions from moving the Lathrop House

Land Use - PTG - Arbitrary land use selected since this will be strictly a run for moving the house.

Construction Phase - PTG - Grading is a default phase used to generate emissions from moving the house. House movement is anticipated to occur over 1 day.

Off-road Equipment - PTG - ARCH COAT - Equipment removed since no arch coat phase.

Off-road Equipment - PTG - BUILDING CONSTRUCTION - Equipment removed since no building construction phase

Off-road Equipment - PTG - DEMO - Equipment removed since no demo phase.

Off-road Equipment - PTG - GRADING - Garavaglia Architecture, Inc. via email on 6/12/17 - anticipated equipment is one small gasoline powered generator (50 hp) run 6hrs and one tractor (450 hp) run 6hrs.

Off-road Equipment - PTG - PAVING - Equipment removed since no paving phase.

Off-road Equipment - PTG - SITE PREP - Equipment removed since no site prep phase.

Trips and VMT -

Architectural Coating -

Fleet Mix - PTG - No operational trips generated, therefore no fleet mix.

Area Coating -

Energy Use -

Table Name	Column Name	Default Value	New Value
tblConstructionPhase	NumDays	10.00	0.00
tblConstructionPhase	NumDays	1.00	0.00
tblConstructionPhase	NumDays	2.00	1.00
tblConstructionPhase	NumDays	100.00	0.00
tblConstructionPhase	NumDays	5.00	0.00
tblConstructionPhase	NumDays	5.00	0.00
tblFleetMix	HHD	6.3230e-003	0.00
tblFleetMix	LDA	0.49	1.00
tblFleetMix	LDT1	0.05	0.00
tblFleetMix	LDT2	0.25	0.00

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

Page 3 of 31

tblFleetMix	LHD1	0.02	0.00
tblFleetMix	LHD2	6.5260e-003	0.00
tblFleetMix	MCY	8.7710e-003	0.00
tblFleetMix	MDV	0.14	0.00
tblFleetMix	MH	7.4100e-004	0.00
tblFleetMix	MHD	0.02	0.00
tblFleetMix	OBUS	3.9430e-003	0.00
tblFleetMix	SBUS	4.3500e-004	0.00
tblFleetMix	UBUS	3.2780e-003	0.00
tblOffRoadEquipment	HorsePower	97.00	450.00
tblOffRoadEquipment	HorsePower	84.00	50.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	. 0.00

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	⁻ /yr		
2018	5.5000e- 004	4.8000e- 003	2.9800e- 003	1.0000e- 005	4.1000e- 004	2.0000e- 004	6.1000e- 004	2.2000e- 004	1.9000e- 004	4.1000e- 004	0.0000	0.6887	0.6887	1.8000e- 004	0.0000	0.6933
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	5.5000e- 004	4.8000e- 003	2.9800e- 003	1.0000e- 005	4.1000e- 004	2.0000e- 004	6.1000e- 004	2.2000e- 004	1.9000e- 004	4.1000e- 004	0.0000	0.6887	0.6887	1.8000e- 004	0.0000	0.6933

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2018	5.5000e- 004	4.8000e- 003	2.9800e- 003	1.0000e- 005	4.1000e- 004	2.0000e- 004	6.1000e- 004	2.2000e- 004	1.9000e- 004	4.1000e- 004	0.0000	0.6887	0.6887	1.8000e- 004	0.0000	0.6933
2019	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Maximum	5.5000e- 004	4.8000e- 003	2.9800e- 003	1.0000e- 005	4.1000e- 004	2.0000e- 004	6.1000e- 004	2.2000e- 004	1.9000e- 004	4.1000e- 004	0.0000	0.6887	0.6887	1.8000e- 004	0.0000	0.6933

Page 5 of 31

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

Date: 11/27/2017 11:38 AM

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
		Highest		

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	MT/yr										
Area	9.0000e- 005	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.1018	0.1018	0.0000	0.0000	0.1022
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste			i i			0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000	1 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1018	0.1018	0.0000	0.0000	0.1022

CalEEMod Version: CalEEMod.2016.3.2 Page 6 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton		MT/yr									
Area	9.0000e- 005	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.1018	0.1018	0.0000	0.0000	0.1022
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste	#;		1			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water			1 1			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	9.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.1018	0.1018	0.0000	0.0000	0.1022

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

Page 7 of 31

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/1/2019	7/31/2019	5	0	
2	Site Preparation	Site Preparation	8/1/2019	7/31/2019	5	0	
3	Grading	Grading	8/1/2018	8/1/2018	5	1	
4	Building Construction	Building Construction	8/1/2019	7/31/2019	5	0	
5	Paving	Paving	8/1/2019	7/31/2019	5	0	
6	Architectural Coating	Architectural Coating	8/1/2019	7/31/2019	5	0	'

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.02

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 60 (Architectural Coating – sqft)

OffRoad Equipment

Page 8 of 31

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Grading	Concrete/Industrial Saws	0	8.00	81	0.73
Grading	Generator Sets	1	6.00	50	0.74
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Tractors/Loaders/Backhoes	1	6.00	450	0.37
Grading	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Cranes	0	4.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Building Construction	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	0	7.00	130	0.42
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Architectural Coating	Air Compressors	0	6.00	78	0.48

Trips and VMT

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr							MT/yr								
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

3.2 Demolition - 2019

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

3.2 Demolition - 2019

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 Site Preparation - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
l agilivo Buoi	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

3.3 Site Preparation - 2019
Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

3.3 Site Preparation - 2019

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.4 Grading - 2018

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					3.8000e- 004	0.0000	3.8000e- 004	2.1000e- 004	0.0000	2.1000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	5.4000e- 004	4.7900e- 003	2.8900e- 003	1.0000e- 005		2.0000e- 004	2.0000e- 004		1.9000e- 004	1.9000e- 004	0.0000	0.6607	0.6607	1.8000e- 004	0.0000	0.6654
Total	5.4000e- 004	4.7900e- 003	2.8900e- 003	1.0000e- 005	3.8000e- 004	2.0000e- 004	5.8000e- 004	2.1000e- 004	1.9000e- 004	4.0000e- 004	0.0000	0.6607	0.6607	1.8000e- 004	0.0000	0.6654

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

3.4 Grading - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
VVOINCI	1.0000e- 005	1.0000e- 005	1.0000e- 004	0.0000	3.0000e- 005	0.0000	3.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0280	0.0280	0.0000	0.0000	0.0280
Total	1.0000e- 005	1.0000e- 005	1.0000e- 004	0.0000	3.0000e- 005	0.0000	3.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0280	0.0280	0.0000	0.0000	0.0280

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					3.8000e- 004	0.0000	3.8000e- 004	2.1000e- 004	0.0000	2.1000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.4000e- 004	4.7900e- 003	2.8900e- 003	1.0000e- 005		2.0000e- 004	2.0000e- 004		1.9000e- 004	1.9000e- 004	0.0000	0.6607	0.6607	1.8000e- 004	0.0000	0.6653
Total	5.4000e- 004	4.7900e- 003	2.8900e- 003	1.0000e- 005	3.8000e- 004	2.0000e- 004	5.8000e- 004	2.1000e- 004	1.9000e- 004	4.0000e- 004	0.0000	0.6607	0.6607	1.8000e- 004	0.0000	0.6653

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
VVOINCI	1.0000e- 005	1.0000e- 005	1.0000e- 004	0.0000	3.0000e- 005	0.0000	3.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0280	0.0280	0.0000	0.0000	0.0280
Total	1.0000e- 005	1.0000e- 005	1.0000e- 004	0.0000	3.0000e- 005	0.0000	3.0000e- 005	1.0000e- 005	0.0000	1.0000e- 005	0.0000	0.0280	0.0280	0.0000	0.0000	0.0280

3.5 Building Construction - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

3.5 Building Construction - 2019 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

3.5 Building Construction - 2019 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.6 Paving - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

3.6 Paving - 2019

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.7 Architectural Coating - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

3.7 Architectural Coating - 2019 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

3.7 Architectural Coating - 2019 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Parking Lot	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000

5.0 Energy Detail

Historical Energy Use: N

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category		tons/yr											MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.1018	0.1018	0.0000	0.0000	0.1022
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.1018	0.1018	0.0000	0.0000	0.1022
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	/yr	
Parking Lot	350	0.1018	0.0000	0.0000	0.1022
Total		0.1018	0.0000	0.0000	0.1022

5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Parking Lot	350	0.1018	0.0000	0.0000	0.1022
Total		0.1018	0.0000	0.0000	0.1022

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	9.0000e- 005	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Unmitigated	9.0000e- 005	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

6.2 Area by SubCategory <u>Unmitigated</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr											МТ	/yr		
04!	2.0000e- 005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
D 1 1	6.0000e- 005		1 1 1			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Total	8.0000e- 005	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr											МТ	⁻ /yr		
Architectural Coating	2.0000e- 005					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	6.0000e- 005		1 1			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005
Total	8.0000e- 005	0.0000	1.0000e- 005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	0.0000	2.0000e- 005

7.0 Water Detail

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 31 Date: 11/27/2017 11:38 AM

COB3 - Lathrop House Move (Construction) - San Mateo County, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		МТ	-/yr	
ga.ea	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e	
	MT/yr				
Willingutou	0.0000	0.0000	0.0000	0.0000	
Unmitigated	0.0000	0.0000	0.0000	0.0000	

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type Num	per Hours/Day	Number	Hours/Year	Horse Power	Load Factor	Fuel Type
--------------------	---------------	--------	------------	-------------	-------------	-----------

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

COB3 - Parking Garage (Construction)

San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Enclosed Parking Structure	490.00	1000sqft	1.64	490,000.00	0
Parking Lot	75.00	Space	0.68	30,000.00	0

1.2 Other Project Characteristics

Urbanization Urban Wind Speed (m/s) 2.2 Precipitation Freq (Days) 70

Climate Zone 5 Operational Year 2020

Utility Company Pacific Gas & Electric Company

 CO2 Intensity
 641.35
 CH4 Intensity
 0.029
 N20 Intensity
 0.006

 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)
 (lb/MWhr)

1.3 User Entered Comments & Non-Default Data

COB3 - Parking Garage (Construction) - San Mateo County, Annual

Date: 11/28/2017 10:22 AM

Project Characteristics - PTG - Model run to capture the construction of the parking structure and demolition of the vacant credit union building.

Land Use - PTG - Lot acreage altered to reflect a 7-story parking garage; each level is 70k sq ft. Parking lot entry is representative of the temporary parking lot that would be constructed where the Lathrop House is located.

Construction Phase - PTG - Phasing updated based on County's anticipated construction schedule. Paving for temporary parking lot. Demo for the credit union building. Paving phase not incorporated; 3 OCE input to account for concrete trucks delivering materials.

Off-road Equipment - PTG - PAVING - Lathrop House site is primarily developed and would require limited equipment to prepare site for temorary parking lot. Two (2) rollers removed.

Off-road Equipment -

Off-road Equipment - PTG - SITE PREP - One (1) sweeper scrubber added @ 2hrs/day for BAAQMD fugitive dust compliance.

Off-road Equipment - PTG - GRADING - One (1) sweeper/scrubber added @ 2hrs/day for BAAQMD fugitive dust compliance.

Off-road Equipment - PTG - FOUNDATION CONSTRUCTION - 1) remove crane from fnd work 2) rmve gen set since elect hook ups available 3) add 1 sweep/scrub for BAAQMD fug dust comp 4) add OCE 3 for conc dlvry/wrk 5) add 1 drill rig @ 4hrs/day for piers

Off-road Equipment - PTG - BUILDING CONSTRUCTION - 1) Remove gen set as elect hook up is avail 2) add three (3) OCE @ 8hrs/day for concrete dlvry/work.

Grading - PTG - Estimated excavation is anticipated to be three feet down across entire site. (70,000 sq ft * 3 ft = 210,000 ft^3 ; 210,000 ft^3 = 7,777.8 cubic vards)

Demolition - PTG - Demolition reflects the removal of the credit union building (7,534 sq ft).

Construction Off-road Equipment Mitigation - PTG - Mitigation applied to reflect that the County would require the use of Tier 3 construction equipment for all pieces greater than 50hp. Also updated to reflect compliance with BAAQMD BMPs for fugitive dust abatement.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00

Page 3 of 39

COB3 - Parking Garage (Construction) - San Mateo County, Annual

tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	220.00	85.00
tblConstructionPhase	NumDays	220.00	265.00
tblConstructionPhase	NumDays	6.00	20.00
tblConstructionPhase	NumDays	10.00	5.00
tblConstructionPhase	NumDays	3.00	35.00
tblGrading	AcresOfGrading	10.00	3.00
tblGrading	AcresOfGrading	52.50	4.50
tblGrading	MaterialExported	0.00	7,778.00
tblLandUse	LotAcreage	11.25	1.64
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

Page 4 of 39

COB3 - Parking Garage (Construction) - San Mateo County, Annual

tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	3.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Foundation Construction
tblOffRoadEquipment	PhaseName		Foundation Construction
tblOffRoadEquipment	PhaseName		Building Construction
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Grading
tblOffRoadEquipment	PhaseName		Foundation Construction

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							MT	/yr		
2018	0.1186	1.3634	0.7724	1.8100e- 003	0.0929	0.0566	0.1495	0.0408	0.0525	0.0933	0.0000	169.2137	169.2137	0.0366	0.0000	170.1278
2019	0.6074	5.5306	4.2552	9.9300e- 003	0.2963	0.2348	0.5311	0.0805	0.2195	0.3000	0.0000	905.2190	905.2190	0.1509	0.0000	908.9917
2020	0.2787	1.5706	1.2574	2.9900e- 003	0.0911	0.0649	0.1560	0.0248	0.0606	0.0854	0.0000	270.1524	270.1524	0.0447	0.0000	271.2689
Maximum	0.6074	5.5306	4.2552	9.9300e- 003	0.2963	0.2348	0.5311	0.0805	0.2195	0.3000	0.0000	905.2190	905.2190	0.1509	0.0000	908.9917

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	⁻/yr		
2018	0.0479	0.8157	0.8279	1.8100e- 003	0.0553	0.0295	0.0848	0.0220	0.0295	0.0515	0.0000	169.2136	169.2136	0.0366	0.0000	170.1277
2019	0.3817	3.9880	4.6006	9.9300e- 003	0.2963	0.1456	0.4418	0.0805	0.1450	0.2256	0.0000	905.2185	905.2185	0.1509	0.0000	908.9912
2020	0.2141	1.1569	1.3645	2.9900e- 003	0.0911	0.0417	0.1328	0.0248	0.0415	0.0663	0.0000	270.1523	270.1523	0.0447	0.0000	271.2687
Maximum	0.3817	3.9880	4.6006	9.9300e- 003	0.2963	0.1456	0.4418	0.0805	0.1450	0.2256	0.0000	905.2185	905.2185	0.1509	0.0000	908.9912

Page 6 of 39

COB3 - Parking Garage (Construction) - San Mateo County, Annual

Date: 11/28/2017 10:22 AM

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	35.94	29.58	-8.08	0.00	7.83	39.16	21.17	12.86	35.05	28.28	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2018	12-31-2018	1.4305	0.8389
2	1-1-2019	3-31-2019	1.4280	1.0777
3	4-1-2019	6-30-2019	1.5400	1.0814
4	7-1-2019	9-30-2019	1.5735	1.0938
5	10-1-2019	12-31-2019	1.5857	1.1061
6	1-1-2020	3-31-2020	1.4413	1.0460
7	4-1-2020	6-30-2020	0.3917	0.3140
		Highest	1.5857	1.1061

CalEEMod Version: CalEEMod.2016.3.2 Page 7 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category		tons/yr										MT/yr						
Area	0.0450	5.0000e- 005	5.2300e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0101	0.0101	3.0000e- 005	0.0000	0.0108		
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	811.2939	811.2939	0.0367	7.5900e- 003	814.4728		
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Waste	;					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Water	;					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Total	0.0450	5.0000e- 005	5.2300e- 003	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	2.0000e- 005	0.0000	811.3040	811.3040	0.0367	7.5900e- 003	814.4836		

CalEEMod Version: CalEEMod.2016.3.2 Page 8 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e		
Category		tons/yr										MT/yr						
Area	0.0450	5.0000e- 005	5.2300e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0101	0.0101	3.0000e- 005	0.0000	0.0108		
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	811.2939	811.2939	0.0367	7.5900e- 003	814.4728		
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Waste	7;		1			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Water			,			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		
Total	0.0450	5.0000e- 005	5.2300e- 003	0.0000	0.0000	2.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	2.0000e- 005	0.0000	811.3040	811.3040	0.0367	7.5900e- 003	814.4836		

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Page 9 of 39

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Paving	Paving	8/1/2018	8/7/2018	5	5	
2	Demolition	Demolition	10/1/2018	10/26/2018	5	20	
3	Site Preparation	Site Preparation	10/1/2018	11/16/2018	5	35	
4	Grading	Grading	11/18/2018	12/14/2018	5	20	
5	Foundation Construction	Building Construction	12/15/2018	4/12/2019	5	85	
6	Building Construction	Building Construction	4/13/2019	4/17/2020	5	265	
7	Architectural Coating	Architectural Coating	4/1/2020	4/21/2020	5	15	

Acres of Grading (Site Preparation Phase): 4.5

Acres of Grading (Grading Phase): 3

Acres of Paving: 2.32

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 31,200 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Paving	Cement and Mortar Mixers	1	8.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	0	8.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41

Page 10 of 39

COB3 - Parking Garage (Construction) - San Mateo County, Annual

Site Preparation	Scrapers	1	8.00	367	0.48
Site Preparation	Sweepers/Scrubbers	† 1	2.00	64	0.46
Site Preparation	Tractors/Loaders/Backhoes	 1	7.00	97	0.37
Grading	Graders	 1	8.00	187	0.41
Grading	Rubber Tired Dozers	 1	8.00	247	0.40
Grading	Sweepers/Scrubbers	 1	2.00	64	0.46
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Foundation Construction	Bore/Drill Rigs	1	4.00	221	0.50
Foundation Construction	Cranes	0	8.00	231	0.29
Foundation Construction	Forklifts	2	7.00	89	0.20
Foundation Construction	Generator Sets	0	8.00	84	0.74
Foundation Construction	Other Construction Equipment	3	8.00	172	0.42
Foundation Construction	Sweepers/Scrubbers	1	2.00	64	0.46
Foundation Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Foundation Construction	Welders	3	8.00	46	0.45
Building Construction	Cranes	1	8.00	231	0.29
Building Construction	Forklifts	2	7.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Other Construction Equipment	3	8.00	172	0.42
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Page 11 of 39

COB3 - Parking Garage (Construction) - San Mateo County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Paving	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	13.00	0.00	34.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	972.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Foundation	11	218.00	85.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	10	218.00	85.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	44.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment Water Exposed Area

3.2 Paving - 2018

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
1	2.2200e- 003	0.0232	0.0203	3.0000e- 005		1.2700e- 003	1.2700e- 003		1.1700e- 003	1.1700e- 003	0.0000	2.8269	2.8269	8.6000e- 004	0.0000	2.8483
1 ,	8.9000e- 004		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	3.1100e- 003	0.0232	0.0203	3.0000e- 005		1.2700e- 003	1.2700e- 003		1.1700e- 003	1.1700e- 003	0.0000	2.8269	2.8269	8.6000e- 004	0.0000	2.8483

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.2 Paving - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e- 005	6.0000e- 005	6.0000e- 004	0.0000	2.0000e- 004	0.0000	2.0000e- 004	5.0000e- 005	0.0000	5.0000e- 005	0.0000	0.1747	0.1747	0.0000	0.0000	0.1748
Total	8.0000e- 005	6.0000e- 005	6.0000e- 004	0.0000	2.0000e- 004	0.0000	2.0000e- 004	5.0000e- 005	0.0000	5.0000e- 005	0.0000	0.1747	0.1747	0.0000	0.0000	0.1748

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	8.8000e- 004	0.0157	0.0233	3.0000e- 005		8.4000e- 004	8.4000e- 004		8.4000e- 004	8.4000e- 004	0.0000	2.8269	2.8269	8.6000e- 004	0.0000	2.8483
1	8.9000e- 004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	1.7700e- 003	0.0157	0.0233	3.0000e- 005		8.4000e- 004	8.4000e- 004		8.4000e- 004	8.4000e- 004	0.0000	2.8269	2.8269	8.6000e- 004	0.0000	2.8483

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.2 Paving - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e- 005	6.0000e- 005	6.0000e- 004	0.0000	2.0000e- 004	0.0000	2.0000e- 004	5.0000e- 005	0.0000	5.0000e- 005	0.0000	0.1747	0.1747	0.0000	0.0000	0.1748
Total	8.0000e- 005	6.0000e- 005	6.0000e- 004	0.0000	2.0000e- 004	0.0000	2.0000e- 004	5.0000e- 005	0.0000	5.0000e- 005	0.0000	0.1747	0.1747	0.0000	0.0000	0.1748

3.3 **Demolition - 2018**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				MT	/yr					
Fugitive Dust	11 11 11				3.7100e- 003	0.0000	3.7100e- 003	5.6000e- 004	0.0000	5.6000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0248	0.2436	0.1511	2.4000e- 004		0.0144	0.0144	 	0.0134	0.0134	0.0000	21.6923	21.6923	5.5000e- 003	0.0000	21.8297
Total	0.0248	0.2436	0.1511	2.4000e- 004	3.7100e- 003	0.0144	0.0181	5.6000e- 004	0.0134	0.0140	0.0000	21.6923	21.6923	5.5000e- 003	0.0000	21.8297

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.3 Demolition - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	1.8000e- 004	6.2700e- 003	2.2700e- 003	1.0000e- 005	2.8000e- 004	3.0000e- 005	3.1000e- 004	8.0000e- 005	2.0000e- 005	1.0000e- 004	0.0000	1.4612	1.4612	1.7000e- 004	0.0000	1.4656
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e- 004	3.1000e- 004	3.1200e- 003	1.0000e- 005	1.0200e- 003	1.0000e- 005	1.0300e- 003	2.7000e- 004	1.0000e- 005	2.8000e- 004	0.0000	0.9084	0.9084	2.0000e- 005	0.0000	0.9090
Total	6.0000e- 004	6.5800e- 003	5.3900e- 003	2.0000e- 005	1.3000e- 003	4.0000e- 005	1.3400e- 003	3.5000e- 004	3.0000e- 005	3.8000e- 004	0.0000	2.3696	2.3696	1.9000e- 004	0.0000	2.3745

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	11 11 11				1.6700e- 003	0.0000	1.6700e- 003	2.5000e- 004	0.0000	2.5000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.6200e- 003	0.1210	0.1542	2.4000e- 004		7.1800e- 003	7.1800e- 003		7.1800e- 003	7.1800e- 003	0.0000	21.6923	21.6923	5.5000e- 003	0.0000	21.8297
Total	5.6200e- 003	0.1210	0.1542	2.4000e- 004	1.6700e- 003	7.1800e- 003	8.8500e- 003	2.5000e- 004	7.1800e- 003	7.4300e- 003	0.0000	21.6923	21.6923	5.5000e- 003	0.0000	21.8297

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.3 Demolition - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	1.8000e- 004	6.2700e- 003	2.2700e- 003	1.0000e- 005	2.8000e- 004	3.0000e- 005	3.1000e- 004	8.0000e- 005	2.0000e- 005	1.0000e- 004	0.0000	1.4612	1.4612	1.7000e- 004	0.0000	1.4656
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e- 004	3.1000e- 004	3.1200e- 003	1.0000e- 005	1.0200e- 003	1.0000e- 005	1.0300e- 003	2.7000e- 004	1.0000e- 005	2.8000e- 004	0.0000	0.9084	0.9084	2.0000e- 005	0.0000	0.9090
Total	6.0000e- 004	6.5800e- 003	5.3900e- 003	2.0000e- 005	1.3000e- 003	4.0000e- 005	1.3400e- 003	3.5000e- 004	3.0000e- 005	3.8000e- 004	0.0000	2.3696	2.3696	1.9000e- 004	0.0000	2.3745

3.4 Site Preparation - 2018

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					2.3900e- 003	0.0000	2.3900e- 003	2.6000e- 004	0.0000	2.6000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0346	0.4250	0.2319	4.4000e- 004		0.0177	0.0177		0.0163	0.0163	0.0000	40.2029	40.2029	0.0125	0.0000	40.5158
Total	0.0346	0.4250	0.2319	4.4000e- 004	2.3900e- 003	0.0177	0.0201	2.6000e- 004	0.0163	0.0165	0.0000	40.2029	40.2029	0.0125	0.0000	40.5158

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.4 Site Preparation - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e- 004	4.2000e- 004	4.2000e- 003	1.0000e- 005	1.3800e- 003	1.0000e- 005	1.3900e- 003	3.7000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2229	1.2229	3.0000e- 005	0.0000	1.2236
Total	5.7000e- 004	4.2000e- 004	4.2000e- 003	1.0000e- 005	1.3800e- 003	1.0000e- 005	1.3900e- 003	3.7000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2229	1.2229	3.0000e- 005	0.0000	1.2236

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					1.0700e- 003	0.0000	1.0700e- 003	1.2000e- 004	0.0000	1.2000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0108	0.2138	0.2472	4.4000e- 004		9.1600e- 003	9.1600e- 003	1 1 1	9.1600e- 003	9.1600e- 003	0.0000	40.2029	40.2029	0.0125	0.0000	40.5158
Total	0.0108	0.2138	0.2472	4.4000e- 004	1.0700e- 003	9.1600e- 003	0.0102	1.2000e- 004	9.1600e- 003	9.2800e- 003	0.0000	40.2029	40.2029	0.0125	0.0000	40.5158

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.4 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.7000e- 004	4.2000e- 004	4.2000e- 003	1.0000e- 005	1.3800e- 003	1.0000e- 005	1.3900e- 003	3.7000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2229	1.2229	3.0000e- 005	0.0000	1.2236
Total	5.7000e- 004	4.2000e- 004	4.2000e- 003	1.0000e- 005	1.3800e- 003	1.0000e- 005	1.3900e- 003	3.7000e- 004	1.0000e- 005	3.7000e- 004	0.0000	1.2229	1.2229	3.0000e- 005	0.0000	1.2236

3.5 Grading - 2018

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0623	0.0000	0.0623	0.0333	0.0000	0.0333	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0223	0.2496	0.1088	2.1000e- 004		0.0122	0.0122	 	0.0113	0.0113	0.0000	19.4265	19.4265	6.0500e- 003	0.0000	19.5777
Total	0.0223	0.2496	0.1088	2.1000e- 004	0.0623	0.0122	0.0745	0.0333	0.0113	0.0446	0.0000	19.4265	19.4265	6.0500e- 003	0.0000	19.5777

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.5 Grading - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	5.1700e- 003	0.1794	0.0649	4.1000e- 004	8.1300e- 003	7.4000e- 004	8.8700e- 003	2.2300e- 003	7.1000e- 004	2.9400e- 003	0.0000	41.7737	41.7737	4.9700e- 003	0.0000	41.8979
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e- 004	3.1000e- 004	3.1200e- 003	1.0000e- 005	1.0200e- 003	1.0000e- 005	1.0300e- 003	2.7000e- 004	1.0000e- 005	2.8000e- 004	0.0000	0.9084	0.9084	2.0000e- 005	0.0000	0.9090
Total	5.5900e- 003	0.1797	0.0680	4.2000e- 004	9.1500e- 003	7.5000e- 004	9.9000e- 003	2.5000e- 003	7.2000e- 004	3.2200e- 003	0.0000	42.6821	42.6821	4.9900e- 003	0.0000	42.8069

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	11 11 11				0.0280	0.0000	0.0280	0.0150	0.0000	0.0150	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.2000e- 003	0.1057	0.1263	2.1000e- 004		5.1000e- 003	5.1000e- 003		5.1000e- 003	5.1000e- 003	0.0000	19.4265	19.4265	6.0500e- 003	0.0000	19.5777
Total	5.2000e- 003	0.1057	0.1263	2.1000e- 004	0.0280	5.1000e- 003	0.0331	0.0150	5.1000e- 003	0.0201	0.0000	19.4265	19.4265	6.0500e- 003	0.0000	19.5777

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.5 Grading - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	5.1700e- 003	0.1794	0.0649	4.1000e- 004	8.1300e- 003	7.4000e- 004	8.8700e- 003	2.2300e- 003	7.1000e- 004	2.9400e- 003	0.0000	41.7737	41.7737	4.9700e- 003	0.0000	41.8979
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e- 004	3.1000e- 004	3.1200e- 003	1.0000e- 005	1.0200e- 003	1.0000e- 005	1.0300e- 003	2.7000e- 004	1.0000e- 005	2.8000e- 004	0.0000	0.9084	0.9084	2.0000e- 005	0.0000	0.9090
Total	5.5900e- 003	0.1797	0.0680	4.2000e- 004	9.1500e- 003	7.5000e- 004	9.9000e- 003	2.5000e- 003	7.2000e- 004	3.2200e- 003	0.0000	42.6821	42.6821	4.9900e- 003	0.0000	42.8069

3.6 Foundation Construction - 2018

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0205	0.1689	0.1291	2.0000e- 004		9.7400e- 003	9.7400e- 003		9.1100e- 003	9.1100e- 003	0.0000	17.6004	17.6004	5.1100e- 003	0.0000	17.7281
Total	0.0205	0.1689	0.1291	2.0000e- 004		9.7400e- 003	9.7400e- 003		9.1100e- 003	9.1100e- 003	0.0000	17.6004	17.6004	5.1100e- 003	0.0000	17.7281

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.6 Foundation Construction - 2018 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	2.4900e- 003	0.0635	0.0242	1.3000e- 004	3.0500e- 003	4.9000e- 004	3.5300e- 003	8.8000e- 004	4.7000e- 004	1.3500e- 003	0.0000	12.6370	12.6370	1.1200e- 003	0.0000	12.6651
1	3.9100e- 003	2.8400e- 003	0.0288	9.0000e- 005	9.4400e- 003	6.0000e- 005	9.5000e- 003	2.5100e- 003	6.0000e- 005	2.5700e- 003	0.0000	8.3785	8.3785	2.0000e- 004	0.0000	8.3834
Total	6.4000e- 003	0.0663	0.0530	2.2000e- 004	0.0125	5.5000e- 004	0.0130	3.3900e- 003	5.3000e- 004	3.9200e- 003	0.0000	21.0154	21.0154	1.3200e- 003	0.0000	21.0485

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0112	0.1064	0.1459	2.0000e- 004		5.9200e- 003	5.9200e- 003		5.9200e- 003	5.9200e- 003	0.0000	17.6004	17.6004	5.1100e- 003	0.0000	17.7281
Total	0.0112	0.1064	0.1459	2.0000e- 004		5.9200e- 003	5.9200e- 003		5.9200e- 003	5.9200e- 003	0.0000	17.6004	17.6004	5.1100e- 003	0.0000	17.7281

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.6 Foundation Construction - 2018 <u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.4900e- 003	0.0635	0.0242	1.3000e- 004	3.0500e- 003	4.9000e- 004	3.5300e- 003	8.8000e- 004	4.7000e- 004	1.3500e- 003	0.0000	12.6370	12.6370	1.1200e- 003	0.0000	12.6651
Worker	3.9100e- 003	2.8400e- 003	0.0288	9.0000e- 005	9.4400e- 003	6.0000e- 005	9.5000e- 003	2.5100e- 003	6.0000e- 005	2.5700e- 003	0.0000	8.3785	8.3785	2.0000e- 004	0.0000	8.3834
Total	6.4000e- 003	0.0663	0.0530	2.2000e- 004	0.0125	5.5000e- 004	0.0130	3.3900e- 003	5.3000e- 004	3.9200e- 003	0.0000	21.0154	21.0154	1.3200e- 003	0.0000	21.0485

3.6 Foundation Construction - 2019

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1257	1.0558	0.8590	1.3500e- 003		0.0594	0.0594		0.0555	0.0555	0.0000	116.8382	116.8382	0.0339	0.0000	117.6844
Total	0.1257	1.0558	0.8590	1.3500e- 003		0.0594	0.0594		0.0555	0.0555	0.0000	116.8382	116.8382	0.0339	0.0000	117.6844

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.6 Foundation Construction - 2019 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0149	0.4016	0.1542	8.5000e- 004	0.0205	2.7700e- 003	0.0233	5.9300e- 003	2.6500e- 003	8.5800e- 003	0.0000	84.1303	84.1303	7.4300e- 003	0.0000	84.3160
Worker	0.0239	0.0168	0.1731	6.0000e- 004	0.0635	4.1000e- 004	0.0639	0.0169	3.8000e- 004	0.0173	0.0000	54.6094	54.6094	1.1700e- 003	0.0000	54.6387
Total	0.0388	0.4184	0.3273	1.4500e- 003	0.0840	3.1800e- 003	0.0872	0.0228	3.0300e- 003	0.0259	0.0000	138.7397	138.7397	8.6000e- 003	0.0000	138.9547

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0692	0.7090	0.9756	1.3500e- 003		0.0383	0.0383		0.0383	0.0383	0.0000	116.8381	116.8381	0.0339	0.0000	117.6843
Total	0.0692	0.7090	0.9756	1.3500e- 003		0.0383	0.0383		0.0383	0.0383	0.0000	116.8381	116.8381	0.0339	0.0000	117.6843

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.6 Foundation Construction - 2019 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0149	0.4016	0.1542	8.5000e- 004	0.0205	2.7700e- 003	0.0233	5.9300e- 003	2.6500e- 003	8.5800e- 003	0.0000	84.1303	84.1303	7.4300e- 003	0.0000	84.3160
Worker	0.0239	0.0168	0.1731	6.0000e- 004	0.0635	4.1000e- 004	0.0639	0.0169	3.8000e- 004	0.0173	0.0000	54.6094	54.6094	1.1700e- 003	0.0000	54.6387
Total	0.0388	0.4184	0.3273	1.4500e- 003	0.0840	3.1800e- 003	0.0872	0.0228	3.0300e- 003	0.0259	0.0000	138.7397	138.7397	8.6000e- 003	0.0000	138.9547

3.7 Building Construction - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.3449	2.9992	2.2419	3.4600e- 003		0.1643	0.1643		0.1533	0.1533	0.0000	299.0421	299.0421	0.0867	0.0000	301.2105
Total	0.3449	2.9992	2.2419	3.4600e- 003		0.1643	0.1643		0.1533	0.1533	0.0000	299.0421	299.0421	0.0867	0.0000	301.2105

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.7 Building Construction - 2019 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0378	1.0148	0.3897	2.1400e- 003	0.0518	7.0100e- 003	0.0588	0.0150	6.7000e- 003	0.0217	0.0000	212.5995	212.5995	0.0188	0.0000	213.0688
Worker	0.0603	0.0425	0.4373	1.5300e- 003	0.1605	1.0300e- 003	0.1615	0.0427	9.5000e- 004	0.0437	0.0000	137.9995	137.9995	2.9500e- 003	0.0000	138.0733
Total	0.0980	1.0572	0.8270	3.6700e- 003	0.2123	8.0400e- 003	0.2203	0.0577	7.6500e- 003	0.0653	0.0000	350.5990	350.5990	0.0217	0.0000	351.1422

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.1757	1.8034	2.4708	3.4600e- 003		0.0961	0.0961		0.0961	0.0961	0.0000	299.0418	299.0418	0.0867	0.0000	301.2102
Total	0.1757	1.8034	2.4708	3.4600e- 003		0.0961	0.0961		0.0961	0.0961	0.0000	299.0418	299.0418	0.0867	0.0000	301.2102

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.7 Building Construction - 2019 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0378	1.0148	0.3897	2.1400e- 003	0.0518	7.0100e- 003	0.0588	0.0150	6.7000e- 003	0.0217	0.0000	212.5995	212.5995	0.0188	0.0000	213.0688
Worker	0.0603	0.0425	0.4373	1.5300e- 003	0.1605	1.0300e- 003	0.1615	0.0427	9.5000e- 004	0.0437	0.0000	137.9995	137.9995	2.9500e- 003	0.0000	138.0733
Total	0.0980	1.0572	0.8270	3.6700e- 003	0.2123	8.0400e- 003	0.2203	0.0577	7.6500e- 003	0.0653	0.0000	350.5990	350.5990	0.0217	0.0000	351.1422

3.7 Building Construction - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Cirrioda :	0.1315	1.1572	0.9188	1.4400e- 003		0.0617	0.0617		0.0576	0.0576	0.0000	122.4957	122.4957	0.0358	0.0000	123.3894
Total	0.1315	1.1572	0.9188	1.4400e- 003		0.0617	0.0617		0.0576	0.0576	0.0000	122.4957	122.4957	0.0358	0.0000	123.3894

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.7 Building Construction - 2020 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0129	0.3844	0.1530	8.8000e- 004	0.0216	1.9200e- 003	0.0235	6.2500e- 003	1.8300e- 003	8.0800e- 003	0.0000	87.8455	87.8455	7.6300e- 003	0.0000	88.0363
Worker	0.0232	0.0157	0.1655	6.2000e- 004	0.0669	4.2000e- 004	0.0674	0.0178	3.9000e- 004	0.0182	0.0000	55.7331	55.7331	1.0900e- 003	0.0000	55.7603
Total	0.0360	0.4001	0.3185	1.5000e- 003	0.0885	2.3400e- 003	0.0909	0.0241	2.2200e- 003	0.0263	0.0000	143.5786	143.5786	8.7200e- 003	0.0000	143.7965

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0682	0.7460	1.0259	1.4400e- 003		0.0386	0.0386	 	0.0386	0.0386	0.0000	122.4955	122.4955	0.0358	0.0000	123.3893
Total	0.0682	0.7460	1.0259	1.4400e- 003		0.0386	0.0386		0.0386	0.0386	0.0000	122.4955	122.4955	0.0358	0.0000	123.3893

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.7 Building Construction - 2020 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0129	0.3844	0.1530	8.8000e- 004	0.0216	1.9200e- 003	0.0235	6.2500e- 003	1.8300e- 003	8.0800e- 003	0.0000	87.8455	87.8455	7.6300e- 003	0.0000	88.0363
Worker	0.0232	0.0157	0.1655	6.2000e- 004	0.0669	4.2000e- 004	0.0674	0.0178	3.9000e- 004	0.0182	0.0000	55.7331	55.7331	1.0900e- 003	0.0000	55.7603
Total	0.0360	0.4001	0.3185	1.5000e- 003	0.0885	2.3400e- 003	0.0909	0.0241	2.2200e- 003	0.0263	0.0000	143.5786	143.5786	8.7200e- 003	0.0000	143.7965

3.8 Architectural Coating - 2020 <u>Unmitigated Construction On-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.1085					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8200e- 003	0.0126	0.0137	2.0000e- 005		8.3000e- 004	8.3000e- 004	 	8.3000e- 004	8.3000e- 004	0.0000	1.9149	1.9149	1.5000e- 004	0.0000	1.9187
Total	0.1103	0.0126	0.0137	2.0000e- 005		8.3000e- 004	8.3000e- 004		8.3000e- 004	8.3000e- 004	0.0000	1.9149	1.9149	1.5000e- 004	0.0000	1.9187

CalEEMod Version: CalEEMod.2016.3.2 Page 28 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.8 Architectural Coating - 2020 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	9.0000e- 004	6.1000e- 004	6.4200e- 003	2.0000e- 005	2.6000e- 003	2.0000e- 005	2.6100e- 003	6.9000e- 004	2.0000e- 005	7.1000e- 004	0.0000	2.1633	2.1633	4.0000e- 005	0.0000	2.1643
Total	9.0000e- 004	6.1000e- 004	6.4200e- 003	2.0000e- 005	2.6000e- 003	2.0000e- 005	2.6100e- 003	6.9000e- 004	2.0000e- 005	7.1000e- 004	0.0000	2.1633	2.1633	4.0000e- 005	0.0000	2.1643

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.1085					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	4.5000e- 004	0.0102	0.0137	2.0000e- 005		7.1000e- 004	7.1000e- 004		7.1000e- 004	7.1000e- 004	0.0000	1.9149	1.9149	1.5000e- 004	0.0000	1.9186
Total	0.1089	0.0102	0.0137	2.0000e- 005		7.1000e- 004	7.1000e- 004		7.1000e- 004	7.1000e- 004	0.0000	1.9149	1.9149	1.5000e- 004	0.0000	1.9186

CalEEMod Version: CalEEMod.2016.3.2 Page 29 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

3.8 Architectural Coating - 2020 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.0000e- 004	6.1000e- 004	6.4200e- 003	2.0000e- 005	2.6000e- 003	2.0000e- 005	2.6100e- 003	6.9000e- 004	2.0000e- 005	7.1000e- 004	0.0000	2.1633	2.1633	4.0000e- 005	0.0000	2.1643
Total	9.0000e- 004	6.1000e- 004	6.4200e- 003	2.0000e- 005	2.6000e- 003	2.0000e- 005	2.6100e- 003	6.9000e- 004	2.0000e- 005	7.1000e- 004	0.0000	2.1633	2.1633	4.0000e- 005	0.0000	2.1643

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

COB3 - Parking Garage (Construction) - San Mateo County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking Structure	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking Structure	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking Structure	0.490452	0.049742	0.253638	0.136789	0.017926	0.006526	0.021436	0.006323	0.003943	0.003278	0.008771	0.000435	0.000741
Parking Lot	0.490452	0.049742	0.253638	0.136789	0.017926	0.006526	0.021436	0.006323	0.003943	0.003278	0.008771	0.000435	0.000741

CalEEMod Version: CalEEMod.2016.3.2 Page 31 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	811.2939	811.2939	0.0367	7.5900e- 003	814.4728
Electricity Unmitigated				 		0.0000	0.0000		0.0000	0.0000	0.0000	811.2939	811.2939	0.0367	7.5900e- 003	814.4728
Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	 : : :	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 32 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 33 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Enclosed Parking Structure	2.7783e +006	808.2393	0.0366	7.5600e- 003	811.4063
Parking Lot	10500	3.0546	1.4000e- 004	3.0000e- 005	3.0665
Total		811.2939	0.0367	7.5900e- 003	814.4728

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	/yr	
Enclosed Parking Structure	2.7783e +006	808.2393	0.0366	7.5600e- 003	811.4063
Parking Lot	10500	3.0546	1.4000e- 004	3.0000e- 005	3.0665
Total		811.2939	0.0367	7.5900e- 003	814.4728

6.0 Area Detail

6.1 Mitigation Measures Area

CalEEMod Version: CalEEMod.2016.3.2 Page 34 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Mitigated	0.0450	5.0000e- 005	5.2300e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0101	0.0101	3.0000e- 005	0.0000	0.0108
Unmitigated	0.0450	5.0000e- 005	5.2300e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0101	0.0101	3.0000e- 005	0.0000	0.0108

6.2 Area by SubCategory Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							МТ	/yr		
Architectural Coating	0.0109		i i i			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0336					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9000e- 004	5.0000e- 005	5.2300e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0101	0.0101	3.0000e- 005	0.0000	0.0108
Total	0.0450	5.0000e- 005	5.2300e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0101	0.0101	3.0000e- 005	0.0000	0.0108

CalEEMod Version: CalEEMod.2016.3.2 Page 35 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

6.2 Area by SubCategory Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	⁷ /yr		
Architectural Coating	0.0109					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0336		1 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	4.9000e- 004	5.0000e- 005	5.2300e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0101	0.0101	3.0000e- 005	0.0000	0.0108
Total	0.0450	5.0000e- 005	5.2300e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0101	0.0101	3.0000e- 005	0.0000	0.0108

7.0 Water Detail

7.1 Mitigation Measures Water

COB3 - Parking Garage (Construction) - San Mateo County, Annual

	Total CO2	CH4	N2O	CO2e
Category		МТ	/yr	
Imagatou	0.0000	0.0000	0.0000	0.0000
Ommigatou	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	-/yr	
Enclosed Parking Structure	0/0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 37 of 39 Date: 11/28/2017 10:22 AM

COB3 - Parking Garage (Construction) - San Mateo County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	-/yr	
Enclosed Parking Structure	0/0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
		МТ	√yr	
Willingutou	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

COB3 - Parking Garage (Construction) - San Mateo County, Annual

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Enclosed Parking Structure	0	0.0000	0.0000	0.0000	0.0000
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

COB3 - Parking Garage (Construction) - San Mateo County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number
----------------	--------

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

COB3 - Promenade (Construction) San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	72.60	1000sqft	1.67	72,600.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	70
Climate Zone	5			Operational Year	2020
Utility Company	Pacific Gas & Electric Cor	mpany			
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

Page 2 of 31

Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

Project Characteristics - PTG - Model run to capture construction of the promenade.

Land Use - PTG - Promenade modeled as a parking lot to capture the additional development intensity for installing lights throughout the promenade.

Construction Off-road Equipment Mitigation - PTG - Mitigation applied to reflect that the County would require the use of Tier 3 construction equipment for all pieces greater than 50hp. Also updated to reflect compliance with BAAQMD BMPs for fugitive dust abatement.

Construction Phase - PTG - Demol and building const phases removed; site would be clear of structures by this point & does not involve the construction of a structure. Site prep and grading increased to allow more time for the site to be set for paving. Paving phaseincreased.

Off-road Equipment - PTG - DEMO - Construction equipment removed since there wouldn't be any demo involved.

Off-road Equipment - PTG - SITE PREP - One (1) sweeper scrubber added @ 2hrs/day for BAAQMD fugitive dust compliance.

Off-road Equipment - PTG - BUILDING CONSTRUCTION - Equipment removed since there would be no structure erected.

Off-road Equipment - PTG - GRADING - One (1) sweeper/scrubber added @ 2hrs/day for BAAQMD fugitive dust compliance.

Off-road Equipment -

Off-road Equipment -

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Page 3 of 31

COB3 - Promenade (Construction) - San Mateo County, Annual

Date: 11/29/2017 9:36 AM

tblConstructionPhase	NumDays	20.00	0.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	200.00	0.00
tblConstructionPhase	NumDays	4.00	20.00
tblConstructionPhase	NumDays	10.00	120.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	3.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	0.00	1.00
tblOffRoadEquipment	PhaseName		Site Preparation
tblOffRoadEquipment	PhaseName		Grading
tblTripsAndVMT	WorkerTripNumber	10.00	8.00
tblTripsAndVMT	WorkerTripNumber	10.00	8.00

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 4 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr												MT	/yr		
2020	0.0942	0.7685	0.6704	1.1300e- 003	0.0855	0.0404	0.1259	0.0420	0.0373	0.0793	0.0000	98.7576	98.7576	0.0293	0.0000	99.4906
Maximum	0.0942	0.7685	0.6704	1.1300e- 003	0.0855	0.0404	0.1259	0.0420	0.0373	0.0793	0.0000	98.7576	98.7576	0.0293	0.0000	99.4906

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr												MT	/yr		
2020	0.0487	0.5415	0.7694	1.1300e- 003	0.0425	0.0298	0.0723	0.0200	0.0298	0.0497	0.0000	98.7574	98.7574	0.0293	0.0000	99.4905
Maximum	0.0487	0.5415	0.7694	1.1300e- 003	0.0425	0.0298	0.0723	0.0200	0.0298	0.0497	0.0000	98.7574	98.7574	0.0293	0.0000	99.4905

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	48.30	29.54	-14.77	0.00	50.29	26.32	42.60	52.44	20.12	37.24	0.00	0.00	0.00	0.00	0.00	0.00

Page 5 of 31

Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	4-1-2020	6-30-2020	0.4454	0.2570
2	7-1-2020	9-30-2020	0.3084	0.2423
		Highest	0.4454	0.2570

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e			
Category		tons/yr											MT/yr						
Area	6.2700e- 003	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000	! !	0.0000	0.0000	0.0000	1.3000e- 003	1.3000e- 003	0.0000	0.0000	1.3800e- 003			
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.3921	7.3921	3.3000e- 004	7.0000e- 005	7.4210			
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Waste	6;		1			0.0000	0.0000	,	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Water			1 1 1			0.0000	0.0000	,	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			
Total	6.2700e- 003	1.0000e- 005	6.7000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	7.3934	7.3934	3.3000e- 004	7.0000e- 005	7.4224			

CalEEMod Version: CalEEMod.2016.3.2 Page 6 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	6.2700e- 003	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e- 003	1.3000e- 003	0.0000	0.0000	1.3800e- 003
Energy	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	7.3921	7.3921	3.3000e- 004	7.0000e- 005	7.4210
Mobile	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Waste			1			0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water		 	1 1 1			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	6.2700e- 003	1.0000e- 005	6.7000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	7.3934	7.3934	3.3000e- 004	7.0000e- 005	7.4224

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

COB3 - Promenade (Construction) - San Mateo County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	4/1/2020	3/31/2020	5	0	
2	Site Preparation	Site Preparation	4/1/2020	4/14/2020	5	10	
3	Building Construction	Building Construction	4/9/2020	4/8/2020	5	0	
4	Grading	Grading	4/14/2020	5/11/2020	5	20	
5	Paving	Paving	5/11/2020	10/23/2020	5	120	
6	Architectural Coating	Architectural Coating	10/14/2020	10/27/2020	5	10	

Acres of Grading (Site Preparation Phase): 5

Acres of Grading (Grading Phase): 7.5

Acres of Paving: 1.67

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 4,356 (Architectural Coating – sqft)

OffRoad Equipment

Page 8 of 31

Date: 11/29/2017 9:36 AM

	COB3 - Promo	enade (Construction) - San Mateo (County, Annual	
Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	0	8.00	81	0.73
Demolition	Rubber Tired Dozers	0	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	0	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Sweepers/Scrubbers	1	2.00	64	0.46
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Building Construction		0		0	
Building Construction	Cranes	0	6.00	231	0.29
Building Construction	Forklifts	0	6.00	89	0.20
Building Construction	Generator Sets	0	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	0	6.00	97	0.37
Building Construction	Welders	0	8.00	46	0.45
Grading	Graders	1	6.00	187	0.41
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Grading	Sweepers/Scrubbers	1	2.00	64	0.46
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors		6.00	78	0.48

Trips and VMT

Page 9 of 31

Date: 11/29/2017 9:36 AM

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	0	30.00	12.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	6.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment Water Exposed Area

3.2 **Demolition - 2020**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

3.2 Demolition - 2020

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

3.2 Demolition - 2020 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				MT	/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.3 Site Preparation - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	ii ii				0.0290	0.0000	0.0290	0.0148	0.0000	0.0148	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.4900e- 003	0.0946	0.0410	9.0000e- 005		4.3400e- 003	4.3400e- 003		3.9900e- 003	3.9900e- 003	0.0000	7.8424	7.8424	2.5400e- 003	0.0000	7.9058
Total	8.4900e- 003	0.0946	0.0410	9.0000e- 005	0.0290	4.3400e- 003	0.0333	0.0148	3.9900e- 003	0.0188	0.0000	7.8424	7.8424	2.5400e- 003	0.0000	7.9058

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

3.3 Site Preparation - 2020

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr				MT	/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e- 004	7.0000e- 005	7.8000e- 004	0.0000	3.1000e- 004	0.0000	3.2000e- 004	8.0000e- 005	0.0000	9.0000e- 005	0.0000	0.2622	0.2622	1.0000e- 005	0.0000	0.2623
Total	1.1000e- 004	7.0000e- 005	7.8000e- 004	0.0000	3.1000e- 004	0.0000	3.2000e- 004	8.0000e- 005	0.0000	9.0000e- 005	0.0000	0.2622	0.2622	1.0000e- 005	0.0000	0.2623

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0131	0.0000	0.0131	6.6500e- 003	0.0000	6.6500e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1800e- 003	0.0438	0.0515	9.0000e- 005		2.0000e- 003	2.0000e- 003	1 1 1	2.0000e- 003	2.0000e- 003	0.0000	7.8424	7.8424	2.5400e- 003	0.0000	7.9058
Total	2.1800e- 003	0.0438	0.0515	9.0000e- 005	0.0131	2.0000e- 003	0.0151	6.6500e- 003	2.0000e- 003	8.6500e- 003	0.0000	7.8424	7.8424	2.5400e- 003	0.0000	7.9058

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

3.3 Site Preparation - 2020 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.1000e- 004	7.0000e- 005	7.8000e- 004	0.0000	3.1000e- 004	0.0000	3.2000e- 004	8.0000e- 005	0.0000	9.0000e- 005	0.0000	0.2622	0.2622	1.0000e- 005	0.0000	0.2623
Total	1.1000e- 004	7.0000e- 005	7.8000e- 004	0.0000	3.1000e- 004	0.0000	3.2000e- 004	8.0000e- 005	0.0000	9.0000e- 005	0.0000	0.2622	0.2622	1.0000e- 005	0.0000	0.2623

3.4 Building Construction - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Oii rioda	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

3.4 Building Construction - 2020 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

3.4 Building Construction - 2020 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.5 Grading - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0491	0.0000	0.0491	0.0253	0.0000	0.0253	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0142	0.1567	0.0695	1.5000e- 004		7.3100e- 003	7.3100e- 003		6.7300e- 003	6.7300e- 003	0.0000	12.9479	12.9479	4.1900e- 003	0.0000	13.0526
Total	0.0142	0.1567	0.0695	1.5000e- 004	0.0491	7.3100e- 003	0.0565	0.0253	6.7300e- 003	0.0320	0.0000	12.9479	12.9479	4.1900e- 003	0.0000	13.0526

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

3.5 Grading - 2020
Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e- 004	1.5000e- 004	1.5600e- 003	1.0000e- 005	6.3000e- 004	0.0000	6.3000e- 004	1.7000e- 004	0.0000	1.7000e- 004	0.0000	0.5244	0.5244	1.0000e- 005	0.0000	0.5247
Total	2.2000e- 004	1.5000e- 004	1.5600e- 003	1.0000e- 005	6.3000e- 004	0.0000	6.3000e- 004	1.7000e- 004	0.0000	1.7000e- 004	0.0000	0.5244	0.5244	1.0000e- 005	0.0000	0.5247

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0221	0.0000	0.0221	0.0114	0.0000	0.0114	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.6100e- 003	0.0726	0.0856	1.5000e- 004		3.3600e- 003	3.3600e- 003	1 1 1 1	3.3600e- 003	3.3600e- 003	0.0000	12.9479	12.9479	4.1900e- 003	0.0000	13.0526
Total	3.6100e- 003	0.0726	0.0856	1.5000e- 004	0.0221	3.3600e- 003	0.0255	0.0114	3.3600e- 003	0.0147	0.0000	12.9479	12.9479	4.1900e- 003	0.0000	13.0526

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

3.5 Grading - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2000e- 004	1.5000e- 004	1.5600e- 003	1.0000e- 005	6.3000e- 004	0.0000	6.3000e- 004	1.7000e- 004	0.0000	1.7000e- 004	0.0000	0.5244	0.5244	1.0000e- 005	0.0000	0.5247
Total	2.2000e- 004	1.5000e- 004	1.5600e- 003	1.0000e- 005	6.3000e- 004	0.0000	6.3000e- 004	1.7000e- 004	0.0000	1.7000e- 004	0.0000	0.5244	0.5244	1.0000e- 005	0.0000	0.5247

3.6 Paving - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0504	0.5071	0.5326	8.1000e- 004		0.0282	0.0282		0.0260	0.0260	0.0000	70.5942	70.5942	0.0224	0.0000	71.1537
1 ,	2.1900e- 003		i i			0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0526	0.5071	0.5326	8.1000e- 004		0.0282	0.0282		0.0260	0.0260	0.0000	70.5942	70.5942	0.0224	0.0000	71.1537

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

3.6 Paving - 2020
Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1300e- 003	1.4400e- 003	0.0152	6.0000e- 005	6.1400e- 003	4.0000e- 005	6.1800e- 003	1.6300e- 003	4.0000e- 005	1.6700e- 003	0.0000	5.1131	5.1131	1.0000e- 004	0.0000	5.1156
Total	2.1300e- 003	1.4400e- 003	0.0152	6.0000e- 005	6.1400e- 003	4.0000e- 005	6.1800e- 003	1.6300e- 003	4.0000e- 005	1.6700e- 003	0.0000	5.1131	5.1131	1.0000e- 004	0.0000	5.1156

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0218	0.4150	0.6050	8.1000e- 004		0.0238	0.0238		0.0238	0.0238	0.0000	70.5941	70.5941	0.0224	0.0000	71.1536
Paving	2.1900e- 003	 	1			0.0000	0.0000	1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0240	0.4150	0.6050	8.1000e- 004		0.0238	0.0238		0.0238	0.0238	0.0000	70.5941	70.5941	0.0224	0.0000	71.1536

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

3.6 Paving - 2020 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.1300e- 003	1.4400e- 003	0.0152	6.0000e- 005	6.1400e- 003	4.0000e- 005	6.1800e- 003	1.6300e- 003	4.0000e- 005	1.6700e- 003	0.0000	5.1131	5.1131	1.0000e- 004	0.0000	5.1156
Total	2.1300e- 003	1.4400e- 003	0.0152	6.0000e- 005	6.1400e- 003	4.0000e- 005	6.1800e- 003	1.6300e- 003	4.0000e- 005	1.6700e- 003	0.0000	5.1131	5.1131	1.0000e- 004	0.0000	5.1156

3.7 Architectural Coating - 2020

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.0151		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2100e- 003	8.4200e- 003	9.1600e- 003	1.0000e- 005	 	5.5000e- 004	5.5000e- 004	1 1 1	5.5000e- 004	5.5000e- 004	0.0000	1.2766	1.2766	1.0000e- 004	0.0000	1.2791
Total	0.0164	8.4200e- 003	9.1600e- 003	1.0000e- 005		5.5000e- 004	5.5000e- 004		5.5000e- 004	5.5000e- 004	0.0000	1.2766	1.2766	1.0000e- 004	0.0000	1.2791

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

3.7 Architectural Coating - 2020 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	8.0000e- 005	6.0000e- 005	5.8000e- 004	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.1967	0.1967	0.0000	0.0000	0.1968
Total	8.0000e- 005	6.0000e- 005	5.8000e- 004	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.1967	0.1967	0.0000	0.0000	0.1968

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.0151		 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.2100e- 003	8.4200e- 003	9.1600e- 003	1.0000e- 005	 	5.5000e- 004	5.5000e- 004	1 1 1	5.5000e- 004	5.5000e- 004	0.0000	1.2766	1.2766	1.0000e- 004	0.0000	1.2791
Total	0.0164	8.4200e- 003	9.1600e- 003	1.0000e- 005		5.5000e- 004	5.5000e- 004		5.5000e- 004	5.5000e- 004	0.0000	1.2766	1.2766	1.0000e- 004	0.0000	1.2791

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

3.7 Architectural Coating - 2020 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.0000e- 005	6.0000e- 005	5.8000e- 004	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.1967	0.1967	0.0000	0.0000	0.1968
Total	8.0000e- 005	6.0000e- 005	5.8000e- 004	0.0000	2.4000e- 004	0.0000	2.4000e- 004	6.0000e- 005	0.0000	6.0000e- 005	0.0000	0.1967	0.1967	0.0000	0.0000	0.1968

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Parking Lot	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Parking Lot	0.490452	0.049742	0.253638	0.136789	0.017926	0.006526	0.021436	0.006323	0.003943	0.003278	0.008771	0.000435	0.000741

5.0 Energy Detail

Historical Energy Use: N

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

5.1 Mitigation Measures Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	7.3921	7.3921	3.3000e- 004	7.0000e- 005	7.4210
Electricity Unmitigated	,					0.0000	0.0000		0.0000	0.0000	0.0000	7.3921	7.3921	3.3000e- 004	7.0000e- 005	7.4210
NaturalGas Mitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	⁻/yr	
Parking Lot	25410	7.3921	3.3000e- 004	7.0000e- 005	7.4210
Total		7.3921	3.3000e- 004	7.0000e- 005	7.4210

5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		MT	-/yr	
Parking Lot	25410	7.3921	3.3000e- 004	7.0000e- 005	7.4210
Total		7.3921	3.3000e- 004	7.0000e- 005	7.4210

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr									MT	/yr					
Mitigated	6.2700e- 003	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e- 003	1.3000e- 003	0.0000	0.0000	1.3800e- 003
Unmitigated	6.2700e- 003	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e- 003	1.3000e- 003	0.0000	0.0000	1.3800e- 003

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

6.2 Area by SubCategory Unmitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr						MT/yr									
O ti	1.5100e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	4.6900e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e- 005	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e- 003	1.3000e- 003	0.0000	0.0000	1.3800e- 003
Total	6.2600e- 003	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e- 003	1.3000e- 003	0.0000	0.0000	1.3800e- 003

Mitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr						MT/yr									
Architectural Coating	1.5100e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	4.6900e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.0000e- 005	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e- 003	1.3000e- 003	0.0000	0.0000	1.3800e- 003
Total	6.2600e- 003	1.0000e- 005	6.7000e- 004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.3000e- 003	1.3000e- 003	0.0000	0.0000	1.3800e- 003

7.0 Water Detail

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 31 Date: 11/29/2017 9:36 AM

COB3 - Promenade (Construction) - San Mateo County, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category		МТ	√yr	
ga.ea	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	-/yr	
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	-/yr	
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e				
		MT/yr						
willigated	0.0000	0.0000	0.0000	0.0000				
Jgatea	0.0000	0.0000	0.0000	0.0000				

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		0.0000	0.0000	0.0000	0.0000

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

COB3 - COB 3 (Construction; Revised May 2018) San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Office Building	186.00	1000sqft	0.86	186,000.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	70
Climate Zone	5			Operational Year	2020
Utility Company	Pacific Gas & Elect	ric Company			
CO2 Intensity (lb/MWhr)	641.35	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

Date: 5/21/2018 8:16 AM

Project Characteristics - PTG - Model run for the construction of COB3.

Land Use - PTG - COB3 would be 6-stories tall (4 primary floors); each level ~41.9k sqft.

Construction Phase - PTG - Updated based on the County's anticipated construction schedule. Paving removed; emissions resulting from paving of the promanade are captured in the Promenade CalEEModrun. Demo for the County Traffic Court.

Off-road Equipment -

Off-road Equipment - BUILDING CONSTRUCTION - Add three (3) OCE @8hrs/day for concrete dlcry/work

Off-road Equipment -

Off-road Equipment - PTG - FOUNDATION CONSTRUCTION - 1) Remove crane from foundation work 2) Add (1) sweeper/scrubber for BAAQMD fug dust compliance 3) add (3) OCE @ 8hrs/day for concrete delivery/work 4) Add (1) drill rig @ 4hrs/day for piers

Off-road Equipment - PTG - GRADING - One (1) sweeper/scrubber added @ 2hrs/day for BAAQMD fugitive dust compliance.

Off-road Equipment - PAVING - Default paving equipment zero-ed out.

Off-road Equipment - PTG - SITE PREP - One (1) sweeper scrubber added @ 2hrs/day for BAAQMD fugitive dust compliance.

Demolition - PTG - Demolition of Traffic Court 14,939 square feet.

Grading - PTG - Estimated 3 ft excavation required across entire site $(31,200 \text{sqft}^3\text{ft}=93,600 \text{ft}^3;\text{plus} \text{ an additional 14ft down across 1/3 of the site } (31,200 \text{sqft}/3*14 \text{ft}=145,600 \text{ft}^3);93,600 \text{ft}^3=239,000 \text{ft}^3 \text{ [ie 8,859 cy]})$

Energy Use -

Construction Off-road Equipment Mitigation - PTG - Mitigation applied to reflect that the County would require the use of Tier 3 construction equipment for all pieces greater than 50hp. Also updated to reflect compliance with BAAQMD BMPs for fugitive dust abatement.

Table Name	Column Name	Default Value	New Value
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	4.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	1.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	6.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	2.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	3.00
tblConstEquipMitigation	NumberOfEquipmentMitigated	0.00	9.00
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3

Page 3 of 38

Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstEquipMitigation	Tier	No Change	Tier 3
tblConstructionPhase	NumDays	5.00	15.00
tblConstructionPhase	NumDays	100.00	85.00
tblConstructionPhase	NumDays	100.00	440.00
tblConstructionPhase	NumDays	10.00	20.00
tblConstructionPhase	NumDays	2.00	20.00
tblConstructionPhase	NumDays	5.00	0.00
tblConstructionPhase	NumDays	1.00	55.00
tblGrading	AcresOfGrading	27.50	0.90
tblGrading	MaterialExported	0.00	8,859.00
tblLandUse	LotAcreage	4.27	0.86
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 4 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	Year tons/yr									MT/yr						
2018	0.0590	0.7730	0.4252	1.1600e- 003	0.0242	0.0298	0.0540	8.5400e- 003	0.0277	0.0362	0.0000	110.3407	110.3407	0.0216	0.0000	110.8802
2019	0.3809	4.0873	3.0665	5.7900e- 003	0.0959	0.2038	0.2997	0.0253	0.1878	0.2131	0.0000	530.8167	530.8167	0.1263	0.0000	533.9752
2020	1.3038	3.5750	2.8372	5.3700e- 003	0.0852	0.1744	0.2596	0.0232	0.1606	0.1838	0.0000	485.5555	485.5555	0.1175	0.0000	488.4925
Maximum	1.3038	4.0873	3.0665	5.7900e- 003	0.0959	0.2038	0.2997	0.0253	0.1878	0.2131	0.0000	530.8167	530.8167	0.1263	0.0000	533.9752

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	Year tons/yr									MT/yr						
2018	0.0271	0.5352	0.4856	1.1600e- 003	0.0195	0.0181	0.0376	6.2000e- 003	0.0180	0.0242	0.0000	110.3406	110.3406	0.0216	0.0000	110.8802
2019	0.1470	2.5985	3.3839	5.7900e- 003	0.0918	0.1166	0.2084	0.0247	0.1164	0.1410	0.0000	530.8163	530.8163	0.1263	0.0000	533.9748
2020	1.1007	2.3641	3.1347	5.3700e- 003	0.0852	0.1063	0.1915	0.0232	0.1062	0.1294	0.0000	485.5551	485.5551	0.1175	0.0000	488.4921
Maximum	1.1007	2.5985	3.3839	5.7900e- 003	0.0918	0.1166	0.2084	0.0247	0.1164	0.1410	0.0000	530.8163	530.8163	0.1263	0.0000	533.9748

Page 5 of 38

Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	26.89	34.82	-10.67	0.00	4.25	40.95	28.67	5.17	36.03	31.97	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	10-1-2018	12-31-2018	0.7329	0.5173
2	1-1-2019	3-31-2019	1.0618	0.6865
3	4-1-2019	6-30-2019	1.0861	0.6534
4	7-1-2019	9-30-2019	1.1006	0.6549
5	10-1-2019	12-31-2019	1.2129	0.7447
6	1-1-2020	3-31-2020	1.0016	0.6383
7	4-1-2020	6-30-2020	0.9983	0.6350
8	7-1-2020	9-30-2020	1.0092	0.6420
		Highest	1.2129	0.7447

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

2.2 Overall Operational Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	gory tons/yr									MT/yr						
Area	0.8236	2.0000e- 005	1.7200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.3200e- 003	3.3200e- 003	1.0000e- 005	0.0000	3.5500e- 003
Energy	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	867.1501	867.1501	0.0342	9.8300e- 003	870.9363
Mobile	0.4151	1.3326	4.7276	0.0155	1.3808	0.0169	1.3977	0.3710	0.0159	0.3869	0.0000	1,412.406 7	1,412.406 7	0.0527	0.0000	1,413.723 4
Waste			,			0.0000	0.0000		0.0000	0.0000	35.1134	0.0000	35.1134	2.0751	0.0000	86.9919
Water	,,		,			0.0000	0.0000		0.0000	0.0000	10.4879	72.6683	83.1562	1.0805	0.0261	117.9509
Total	1.2581	1.5088	4.8774	0.0165	1.3808	0.0303	1.4111	0.3710	0.0293	0.4003	45.6013	2,352.228 4	2,397.829 7	3.2425	0.0360	2,489.606 1

CalEEMod Version: CalEEMod.2016.3.2 Page 7 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Area	0.8236	2.0000e- 005	1.7200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.3200e- 003	3.3200e- 003	1.0000e- 005	0.0000	3.5500e- 003
Energy	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	867.1501	867.1501	0.0342	9.8300e- 003	870.9363
Mobile	0.4151	1.3326	4.7276	0.0155	1.3808	0.0169	1.3977	0.3710	0.0159	0.3869	0.0000	1,412.406 7	1,412.406 7	0.0527	0.0000	1,413.723 4
Waste		,	1 1 1 1			0.0000	0.0000		0.0000	0.0000	35.1134	0.0000	35.1134	2.0751	0.0000	86.9919
Water		,	1 1 1 1			0.0000	0.0000		0.0000	0.0000	10.4879	72.6683	83.1562	1.0805	0.0261	117.9509
Total	1.2581	1.5088	4.8774	0.0165	1.3808	0.0303	1.4111	0.3710	0.0293	0.4003	45.6013	2,352.228 4	2,397.829 7	3.2425	0.0360	2,489.606 1

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	9/1/2018	11/16/2018	5	55	
2	Grading	Grading	11/17/2018	12/14/2018	5	20	
3	Foundation Construction	Building Construction	12/15/2018	4/12/2019	5	85	
4	Building Construction	Building Construction	4/13/2019	12/18/2020	5	440	
5	Paving	Paving	7/25/2019	7/24/2019	5	0	
6	Demolition	Demolition	10/1/2019	10/28/2019	5	20	
7	Architectural Coating	Architectural Coating	11/28/2020	12/18/2020	5	15	

Acres of Grading (Site Preparation Phase): 0.9

Acres of Grading (Grading Phase): 0

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 279,000; Non-Residential Outdoor: 93,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Page 9 of 38

Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Sweepers/Scrubbers	1	2.00	64	0.46
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Rubber Tired Dozers	1	1.00	247	0.40
Grading	Sweepers/Scrubbers	1	2.00	64	0.46
Grading	Tractors/Loaders/Backhoes	2	6.00	97	0.37
Foundation Construction	Bore/Drill Rigs	1	4.00	221	0.50
Foundation Construction	Cranes	0	4.00	231	0.29
Foundation Construction	Forklifts	2	6.00	89	0.20
Foundation Construction	Other Construction Equipment	3	8.00	172	0.42
Foundation Construction	Sweepers/Scrubbers	1	2.00	64	0.46
Foundation Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Forklifts	2	6.00	89	0.20
Building Construction	Other Construction Equipment	3	8.00	172	0.42
Building Construction	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Pavers	0	7.00	130	0.42
Paving	Rollers	0	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	0	7.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	4	10.00	0.00	68.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	1,107.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Foundation	9	60.00	30.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	8	60.00	30.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	0	0.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	12.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment Water Exposed Area

3.2 Site Preparation - 2018

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	i i				4.8000e- 004	0.0000	4.8000e- 004	5.0000e- 005	0.0000	5.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0238	0.2867	0.1308	2.9000e- 004		0.0130	0.0130		0.0120	0.0120	0.0000	26.1114	26.1114	8.1300e- 003	0.0000	26.3146
Total	0.0238	0.2867	0.1308	2.9000e- 004	4.8000e- 004	0.0130	0.0135	5.0000e- 005	0.0120	0.0120	0.0000	26.1114	26.1114	8.1300e- 003	0.0000	26.3146

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.2 Site Preparation - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e- 004	5.2000e- 004	5.2800e- 003	2.0000e- 005	1.7300e- 003	1.0000e- 005	1.7400e- 003	4.6000e- 004	1.0000e- 005	4.7000e- 004	0.0000	1.5373	1.5373	4.0000e- 005	0.0000	1.5382
Total	7.2000e- 004	5.2000e- 004	5.2800e- 003	2.0000e- 005	1.7300e- 003	1.0000e- 005	1.7400e- 003	4.6000e- 004	1.0000e- 005	4.7000e- 004	0.0000	1.5373	1.5373	4.0000e- 005	0.0000	1.5382

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					2.1000e- 004	0.0000	2.1000e- 004	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.9800e- 003	0.1438	0.1743	2.9000e- 004		7.3000e- 003	7.3000e- 003		7.3000e- 003	7.3000e- 003	0.0000	26.1113	26.1113	8.1300e- 003	0.0000	26.3145
Total	6.9800e- 003	0.1438	0.1743	2.9000e- 004	2.1000e- 004	7.3000e- 003	7.5100e- 003	2.0000e- 005	7.3000e- 003	7.3200e- 003	0.0000	26.1113	26.1113	8.1300e- 003	0.0000	26.3145

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.2 Site Preparation - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	7.2000e- 004	5.2000e- 004	5.2800e- 003	2.0000e- 005	1.7300e- 003	1.0000e- 005	1.7400e- 003	4.6000e- 004	1.0000e- 005	4.7000e- 004	0.0000	1.5373	1.5373	4.0000e- 005	0.0000	1.5382
Total	7.2000e- 004	5.2000e- 004	5.2800e- 003	2.0000e- 005	1.7300e- 003	1.0000e- 005	1.7400e- 003	4.6000e- 004	1.0000e- 005	4.7000e- 004	0.0000	1.5373	1.5373	4.0000e- 005	0.0000	1.5382

3.3 Grading - 2018

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					8.0300e- 003	0.0000	8.0300e- 003	4.2100e- 003	0.0000	4.2100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0114	0.1010	0.0828	1.3000e- 004		6.7800e- 003	6.7800e- 003	 	6.4500e- 003	6.4500e- 003	0.0000	11.1882	11.1882	2.2300e- 003	0.0000	11.2438
Total	0.0114	0.1010	0.0828	1.3000e- 004	8.0300e- 003	6.7800e- 003	0.0148	4.2100e- 003	6.4500e- 003	0.0107	0.0000	11.1882	11.1882	2.2300e- 003	0.0000	11.2438

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.3 Grading - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	5.8900e- 003	0.2043	0.0739	4.7000e- 004	9.2600e- 003	8.4000e- 004	0.0101	2.5400e- 003	8.0000e- 004	3.3500e- 003	0.0000	47.5756	47.5756	5.6600e- 003	0.0000	47.7171
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e- 004	3.1000e- 004	3.1200e- 003	1.0000e- 005	1.0200e- 003	1.0000e- 005	1.0300e- 003	2.7000e- 004	1.0000e- 005	2.8000e- 004	0.0000	0.9084	0.9084	2.0000e- 005	0.0000	0.9090
Total	6.3100e- 003	0.2046	0.0770	4.8000e- 004	0.0103	8.5000e- 004	0.0111	2.8100e- 003	8.1000e- 004	3.6300e- 003	0.0000	48.4840	48.4840	5.6800e- 003	0.0000	48.6260

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					3.6100e- 003	0.0000	3.6100e- 003	1.9000e- 003	0.0000	1.9000e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.7500e- 003	0.0738	0.0828	1.3000e- 004	 	4.9300e- 003	4.9300e- 003	1 1 1	4.9300e- 003	4.9300e- 003	0.0000	11.1882	11.1882	2.2300e- 003	0.0000	11.2438
Total	6.7500e- 003	0.0738	0.0828	1.3000e- 004	3.6100e- 003	4.9300e- 003	8.5400e- 003	1.9000e- 003	4.9300e- 003	6.8300e- 003	0.0000	11.1882	11.1882	2.2300e- 003	0.0000	11.2438

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.3 Grading - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	5.8900e- 003	0.2043	0.0739	4.7000e- 004	9.2600e- 003	8.4000e- 004	0.0101	2.5400e- 003	8.0000e- 004	3.3500e- 003	0.0000	47.5756	47.5756	5.6600e- 003	0.0000	47.7171
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.2000e- 004	3.1000e- 004	3.1200e- 003	1.0000e- 005	1.0200e- 003	1.0000e- 005	1.0300e- 003	2.7000e- 004	1.0000e- 005	2.8000e- 004	0.0000	0.9084	0.9084	2.0000e- 005	0.0000	0.9090
Total	6.3100e- 003	0.2046	0.0770	4.8000e- 004	0.0103	8.5000e- 004	0.0111	2.8100e- 003	8.1000e- 004	3.6300e- 003	0.0000	48.4840	48.4840	5.6800e- 003	0.0000	48.6260

3.4 Foundation Construction - 2018

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0148	0.1571	0.1128	1.8000e- 004		8.9800e- 003	8.9800e- 003		8.2600e- 003	8.2600e- 003	0.0000	16.2537	16.2537	5.0600e- 003	0.0000	16.3802
Total	0.0148	0.1571	0.1128	1.8000e- 004		8.9800e- 003	8.9800e- 003		8.2600e- 003	8.2600e- 003	0.0000	16.2537	16.2537	5.0600e- 003	0.0000	16.3802

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.4 Foundation Construction - 2018 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	8.8000e- 004	0.0224	8.5500e- 003	5.0000e- 005	1.0800e- 003	1.7000e- 004	1.2500e- 003	3.1000e- 004	1.6000e- 004	4.8000e- 004	0.0000	4.4601	4.4601	4.0000e- 004	0.0000	4.4700
1 Worker	1.0800e- 003	7.8000e- 004	7.9200e- 003	3.0000e- 005	2.6000e- 003	2.0000e- 005	2.6100e- 003	6.9000e- 004	2.0000e- 005	7.1000e- 004	0.0000	2.3060	2.3060	5.0000e- 005	0.0000	2.3074
Total	1.9600e- 003	0.0232	0.0165	8.0000e- 005	3.6800e- 003	1.9000e- 004	3.8600e- 003	1.0000e- 003	1.8000e- 004	1.1900e- 003	0.0000	6.7661	6.7661	4.5000e- 004	0.0000	6.7774

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/yr		
1	4.4000e- 003	0.0893	0.1297	1.8000e- 004		4.8000e- 003	4.8000e- 003		4.8000e- 003	4.8000e- 003	0.0000	16.2537	16.2537	5.0600e- 003	0.0000	16.3802
Total	4.4000e- 003	0.0893	0.1297	1.8000e- 004		4.8000e- 003	4.8000e- 003		4.8000e- 003	4.8000e- 003	0.0000	16.2537	16.2537	5.0600e- 003	0.0000	16.3802

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.4 Foundation Construction - 2018 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	8.8000e- 004	0.0224	8.5500e- 003	5.0000e- 005	1.0800e- 003	1.7000e- 004	1.2500e- 003	3.1000e- 004	1.6000e- 004	4.8000e- 004	0.0000	4.4601	4.4601	4.0000e- 004	0.0000	4.4700
Worker	1.0800e- 003	7.8000e- 004	7.9200e- 003	3.0000e- 005	2.6000e- 003	2.0000e- 005	2.6100e- 003	6.9000e- 004	2.0000e- 005	7.1000e- 004	0.0000	2.3060	2.3060	5.0000e- 005	0.0000	2.3074
Total	1.9600e- 003	0.0232	0.0165	8.0000e- 005	3.6800e- 003	1.9000e- 004	3.8600e- 003	1.0000e- 003	1.8000e- 004	1.1900e- 003	0.0000	6.7661	6.7661	4.5000e- 004	0.0000	6.7774

3.4 Foundation Construction - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0922	0.9704	0.7539	1.2000e- 003		0.0545	0.0545		0.0501	0.0501	0.0000	107.5795	107.5795	0.0340	0.0000	108.4305
Total	0.0922	0.9704	0.7539	1.2000e- 003		0.0545	0.0545		0.0501	0.0501	0.0000	107.5795	107.5795	0.0340	0.0000	108.4305

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.4 Foundation Construction - 2019 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.2700e- 003	0.1417	0.0544	3.0000e- 004	7.2300e- 003	9.8000e- 004	8.2100e- 003	2.0900e- 003	9.4000e- 004	3.0300e- 003	0.0000	29.6930	29.6930	2.6200e- 003	0.0000	29.7586
Worker	6.5700e- 003	4.6200e- 003	0.0476	1.7000e- 004	0.0175	1.1000e- 004	0.0176	4.6500e- 003	1.0000e- 004	4.7500e- 003	0.0000	15.0301	15.0301	3.2000e- 004	0.0000	15.0382
Total	0.0118	0.1464	0.1021	4.7000e- 004	0.0247	1.0900e- 003	0.0258	6.7400e- 003	1.0400e- 003	7.7800e- 003	0.0000	44.7232	44.7232	2.9400e- 003	0.0000	44.7968

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0296	0.6010	0.8726	1.2000e- 003		0.0323	0.0323		0.0323	0.0323	0.0000	107.5794	107.5794	0.0340	0.0000	108.4303
Total	0.0296	0.6010	0.8726	1.2000e- 003		0.0323	0.0323		0.0323	0.0323	0.0000	107.5794	107.5794	0.0340	0.0000	108.4303

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.4 Foundation Construction - 2019 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	5.2700e- 003	0.1417	0.0544	3.0000e- 004	7.2300e- 003	9.8000e- 004	8.2100e- 003	2.0900e- 003	9.4000e- 004	3.0300e- 003	0.0000	29.6930	29.6930	2.6200e- 003	0.0000	29.7586
Worker	6.5700e- 003	4.6200e- 003	0.0476	1.7000e- 004	0.0175	1.1000e- 004	0.0176	4.6500e- 003	1.0000e- 004	4.7500e- 003	0.0000	15.0301	15.0301	3.2000e- 004	0.0000	15.0382
Total	0.0118	0.1464	0.1021	4.7000e- 004	0.0247	1.0900e- 003	0.0258	6.7400e- 003	1.0400e- 003	7.7800e- 003	0.0000	44.7232	44.7232	2.9400e- 003	0.0000	44.7968

3.5 Building Construction - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2368	2.5026	1.8690	2.8000e- 003		0.1400	0.1400		0.1288	0.1288	0.0000	251.4197	251.4197	0.0796	0.0000	253.4084
Total	0.2368	2.5026	1.8690	2.8000e- 003		0.1400	0.1400		0.1288	0.1288	0.0000	251.4197	251.4197	0.0796	0.0000	253.4084

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.5 Building Construction - 2019 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0133	0.3582	0.1375	7.6000e- 004	0.0183	2.4700e- 003	0.0208	5.2900e- 003	2.3700e- 003	7.6500e- 003	0.0000	75.0351	75.0351	6.6300e- 003	0.0000	75.2008
Worker	0.0166	0.0117	0.1204	4.2000e- 004	0.0442	2.8000e- 004	0.0445	0.0118	2.6000e- 004	0.0120	0.0000	37.9815	37.9815	8.1000e- 004	0.0000	38.0018
Total	0.0299	0.3698	0.2579	1.1800e- 003	0.0624	2.7500e- 003	0.0652	0.0170	2.6300e- 003	0.0197	0.0000	113.0166	113.0166	7.4400e- 003	0.0000	113.2026

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0690	1.4023	2.0668	2.8000e- 003		0.0761	0.0761		0.0761	0.0761	0.0000	251.4194	251.4194	0.0796	0.0000	253.4081
Total	0.0690	1.4023	2.0668	2.8000e- 003		0.0761	0.0761		0.0761	0.0761	0.0000	251.4194	251.4194	0.0796	0.0000	253.4081

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.5 Building Construction - 2019 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0133	0.3582	0.1375	7.6000e- 004	0.0183	2.4700e- 003	0.0208	5.2900e- 003	2.3700e- 003	7.6500e- 003	0.0000	75.0351	75.0351	6.6300e- 003	0.0000	75.2008
Worker	0.0166	0.0117	0.1204	4.2000e- 004	0.0442	2.8000e- 004	0.0445	0.0118	2.6000e- 004	0.0120	0.0000	37.9815	37.9815	8.1000e- 004	0.0000	38.0018
Total	0.0299	0.3698	0.2579	1.1800e- 003	0.0624	2.7500e- 003	0.0652	0.0170	2.6300e- 003	0.0197	0.0000	113.0166	113.0166	7.4400e- 003	0.0000	113.2026

3.5 Building Construction - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.2965	3.1081	2.4988	3.7900e- 003		0.1710	0.1710		0.1573	0.1573	0.0000	332.7308	332.7308	0.1076	0.0000	335.4211
Total	0.2965	3.1081	2.4988	3.7900e- 003		0.1710	0.1710		0.1573	0.1573	0.0000	332.7308	332.7308	0.1076	0.0000	335.4211

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.5 Building Construction - 2020 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0147	0.4401	0.1752	1.0100e- 003	0.0247	2.1900e- 003	0.0269	7.1500e- 003	2.1000e- 003	9.2500e- 003	0.0000	100.5652	100.5652	8.7400e- 003	0.0000	100.7836
Worker	0.0207	0.0140	0.1477	5.5000e- 004	0.0598	3.8000e- 004	0.0601	0.0159	3.5000e- 004	0.0163	0.0000	49.7547	49.7547	9.7000e- 004	0.0000	49.7789
Total	0.0354	0.4541	0.3229	1.5600e- 003	0.0845	2.5700e- 003	0.0871	0.0231	2.4500e- 003	0.0255	0.0000	150.3198	150.3198	9.7100e- 003	0.0000	150.5625

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0934	1.8972	2.7963	3.7900e- 003		0.1029	0.1029		0.1029	0.1029	0.0000	332.7304	332.7304	0.1076	0.0000	335.4207
Total	0.0934	1.8972	2.7963	3.7900e- 003		0.1029	0.1029		0.1029	0.1029	0.0000	332.7304	332.7304	0.1076	0.0000	335.4207

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.5 Building Construction - 2020 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0147	0.4401	0.1752	1.0100e- 003	0.0247	2.1900e- 003	0.0269	7.1500e- 003	2.1000e- 003	9.2500e- 003	0.0000	100.5652	100.5652	8.7400e- 003	0.0000	100.7836
Worker	0.0207	0.0140	0.1477	5.5000e- 004	0.0598	3.8000e- 004	0.0601	0.0159	3.5000e- 004	0.0163	0.0000	49.7547	49.7547	9.7000e- 004	0.0000	49.7789
Total	0.0354	0.4541	0.3229	1.5600e- 003	0.0845	2.5700e- 003	0.0871	0.0231	2.4500e- 003	0.0255	0.0000	150.3198	150.3198	9.7100e- 003	0.0000	150.5625

3.6 Paving - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.6 Paving - 2019
Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/уг		
Off-Road	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Paving	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

3.7 **Demolition - 2019**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
Fugitive Dust					7.3500e- 003	0.0000	7.3500e- 003	1.1100e- 003	0.0000	1.1100e- 003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	9.5300e- 003	0.0860	0.0769	1.2000e- 004		5.3700e- 003	5.3700e- 003	 	5.1200e- 003	5.1200e- 003	0.0000	10.5202	10.5202	2.0100e- 003	0.0000	10.5704
Total	9.5300e- 003	0.0860	0.0769	1.2000e- 004	7.3500e- 003	5.3700e- 003	0.0127	1.1100e- 003	5.1200e- 003	6.2300e- 003	0.0000	10.5202	10.5202	2.0100e- 003	0.0000	10.5704

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.7 Demolition - 2019

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	3.4000e- 004	0.0119	4.5700e- 003	3.0000e- 005	5.7000e- 004	5.0000e- 005	6.2000e- 004	1.6000e- 004	5.0000e- 005	2.0000e- 004	0.0000	2.8805	2.8805	3.5000e- 004	0.0000	2.8893
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e- 004	2.1000e- 004	2.1500e- 003	1.0000e- 005	7.9000e- 004	1.0000e- 005	7.9000e- 004	2.1000e- 004	0.0000	2.1000e- 004	0.0000	0.6770	0.6770	1.0000e- 005	0.0000	0.6774
Total	6.4000e- 004	0.0121	6.7200e- 003	4.0000e- 005	1.3600e- 003	6.0000e- 005	1.4100e- 003	3.7000e- 004	5.0000e- 005	4.1000e- 004	0.0000	3.5575	3.5575	3.6000e- 004	0.0000	3.5667

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust			1 1 1		3.3100e- 003	0.0000	3.3100e- 003	5.0000e- 004	0.0000	5.0000e- 004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.0200e- 003	0.0670	0.0778	1.2000e- 004		4.3100e- 003	4.3100e- 003		4.3100e- 003	4.3100e- 003	0.0000	10.5202	10.5202	2.0100e- 003	0.0000	10.5704
Total	6.0200e- 003	0.0670	0.0778	1.2000e- 004	3.3100e- 003	4.3100e- 003	7.6200e- 003	5.0000e- 004	4.3100e- 003	4.8100e- 003	0.0000	10.5202	10.5202	2.0100e- 003	0.0000	10.5704

CalEEMod Version: CalEEMod.2016.3.2 Page 26 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.7 Demolition - 2019

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	3.4000e- 004	0.0119	4.5700e- 003	3.0000e- 005	5.7000e- 004	5.0000e- 005	6.2000e- 004	1.6000e- 004	5.0000e- 005	2.0000e- 004	0.0000	2.8805	2.8805	3.5000e- 004	0.0000	2.8893
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e- 004	2.1000e- 004	2.1500e- 003	1.0000e- 005	7.9000e- 004	1.0000e- 005	7.9000e- 004	2.1000e- 004	0.0000	2.1000e- 004	0.0000	0.6770	0.6770	1.0000e- 005	0.0000	0.6774
Total	6.4000e- 004	0.0121	6.7200e- 003	4.0000e- 005	1.3600e- 003	6.0000e- 005	1.4100e- 003	3.7000e- 004	5.0000e- 005	4.1000e- 004	0.0000	3.5575	3.5575	3.6000e- 004	0.0000	3.5667

3.8 Architectural Coating - 2020

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Archit. Coating	0.9699					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8200e- 003	0.0126	0.0137	2.0000e- 005		8.3000e- 004	8.3000e- 004		8.3000e- 004	8.3000e- 004	0.0000	1.9149	1.9149	1.5000e- 004	0.0000	1.9187
Total	0.9717	0.0126	0.0137	2.0000e- 005		8.3000e- 004	8.3000e- 004		8.3000e- 004	8.3000e- 004	0.0000	1.9149	1.9149	1.5000e- 004	0.0000	1.9187

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.8 Architectural Coating - 2020 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e- 004	1.7000e- 004	1.7500e- 003	1.0000e- 005	7.1000e- 004	0.0000	7.1000e- 004	1.9000e- 004	0.0000	1.9000e- 004	0.0000	0.5900	0.5900	1.0000e- 005	0.0000	0.5903
Total	2.5000e- 004	1.7000e- 004	1.7500e- 003	1.0000e- 005	7.1000e- 004	0.0000	7.1000e- 004	1.9000e- 004	0.0000	1.9000e- 004	0.0000	0.5900	0.5900	1.0000e- 005	0.0000	0.5903

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	0.9699					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.8200e- 003	0.0126	0.0137	2.0000e- 005		8.3000e- 004	8.3000e- 004	 	8.3000e- 004	8.3000e- 004	0.0000	1.9149	1.9149	1.5000e- 004	0.0000	1.9186
Total	0.9717	0.0126	0.0137	2.0000e- 005		8.3000e- 004	8.3000e- 004		8.3000e- 004	8.3000e- 004	0.0000	1.9149	1.9149	1.5000e- 004	0.0000	1.9186

CalEEMod Version: CalEEMod.2016.3.2 Page 28 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

3.8 Architectural Coating - 2020 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.5000e- 004	1.7000e- 004	1.7500e- 003	1.0000e- 005	7.1000e- 004	0.0000	7.1000e- 004	1.9000e- 004	0.0000	1.9000e- 004	0.0000	0.5900	0.5900	1.0000e- 005	0.0000	0.5903
Total	2.5000e- 004	1.7000e- 004	1.7500e- 003	1.0000e- 005	7.1000e- 004	0.0000	7.1000e- 004	1.9000e- 004	0.0000	1.9000e- 004	0.0000	0.5900	0.5900	1.0000e- 005	0.0000	0.5903

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.4151	1.3326	4.7276	0.0155	1.3808	0.0169	1.3977	0.3710	0.0159	0.3869	0.0000	1,412.406 7	1,412.406 7	0.0527	0.0000	1,413.723 4
Unmitigated	0.4151	1.3326	4.7276	0.0155	1.3808	0.0169	1.3977	0.3710	0.0159	0.3869	0.0000	1,412.406 7	1,412.406 7	0.0527	0.0000	1,413.723 4

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Office Building	2,051.58	457.56	195.30	3,724,860	3,724,860
Total	2,051.58	457.56	195.30	3,724,860	3,724,860

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Office Building	9.50	7.30	7.30	33.00	48.00	19.00	77	19	4

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
General Office Building	0.490452	0.049742	0.253638	0.136789	0.017926	0.006526	0.021436	0.006323	0.003943	0.003278	0.008771	0.000435	0.000741

5.0 Energy Detail

Historical Energy Use: N

CalEEMod Version: CalEEMod.2016.3.2 Page 30 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	675.2870	675.2870	0.0305	6.3200e- 003	677.9329
Electricity Unmitigated	n		,			0.0000	0.0000		0.0000	0.0000	0.0000	675.2870	675.2870	0.0305	6.3200e- 003	677.9329
NaturalGas Mitigated	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033
NaturalGas Unmitigated	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

ROG NOx CO SO2 PM10 PM2.5 Bio- CO2 NBio- CO2 Total CO2 CH4 N2O CO2e NaturalGa Fugitive Exhaust Fugitive Exhaust PM2.5 s Use PM10 PM10 Total PM2.5 Total kBTU/yr MT/yr Land Use tons/yr 3.59538e General Office 0.0194 0.1762 0.1481 1.0600e-0.0134 0.0134 0.0134 0.0134 0.0000 191.8632 191.8632 3.6800e-3.5200e-193.0033 Building +006 003 003 003 0.0194 0.1762 0.1481 1.0600e-0.0134 0.0134 0.0134 0.0134 0.0000 191.8632 191.8632 3.6800e-3.5200e-193.0033 Total 003 003

CalEEMod Version: CalEEMod.2016.3.2 Page 31 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

5.2 Energy by Land Use - NaturalGas Mitigated

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
General Office Building	3.59538e +006	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033
Total		0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033

5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e			
Land Use	kWh/yr	MT/yr						
General Office Building	2.32128e +006	675.2870	0.0305	6.3200e- 003	677.9329			
Total		675.2870	0.0305	6.3200e- 003	677.9329			

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

5.3 Energy by Land Use - Electricity Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e		
Land Use	kWh/yr	MT/yr					
General Office Building	2.32128e +006	675.2870	0.0305	6.3200e- 003	677.9329		
Total		675.2870	0.0305	6.3200e- 003	677.9329		

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr							MT/yr								
Mitigated	0.8236	2.0000e- 005	1.7200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.3200e- 003	3.3200e- 003	1.0000e- 005	0.0000	3.5500e- 003
Unmitigated	0.8236	2.0000e- 005	1.7200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.3200e- 003	3.3200e- 003	1.0000e- 005	0.0000	3.5500e- 003

CalEEMod Version: CalEEMod.2016.3.2 Page 33 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

6.2 Area by SubCategory Unmitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr								MT/yr						
Architectural Coating	0.0970					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7264					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e- 004	2.0000e- 005	1.7200e- 003	0.0000		1.0000e- 005	1.0000e- 005	1 1 1 1	1.0000e- 005	1.0000e- 005	0.0000	3.3200e- 003	3.3200e- 003	1.0000e- 005	0.0000	3.5500e- 003
Total	0.8236	2.0000e- 005	1.7200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.3200e- 003	3.3200e- 003	1.0000e- 005	0.0000	3.5500e- 003

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr								MT/yr						
Architectural Coating	0.0970					0.0000	0.0000	! !	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7264					0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.6000e- 004	2.0000e- 005	1.7200e- 003	0.0000		1.0000e- 005	1.0000e- 005	Y	1.0000e- 005	1.0000e- 005	0.0000	3.3200e- 003	3.3200e- 003	1.0000e- 005	0.0000	3.5500e- 003
Total	0.8236	2.0000e- 005	1.7200e- 003	0.0000		1.0000e- 005	1.0000e- 005		1.0000e- 005	1.0000e- 005	0.0000	3.3200e- 003	3.3200e- 003	1.0000e- 005	0.0000	3.5500e- 003

7.0 Water Detail

CalEEMod Version: CalEEMod.2016.3.2 Page 34 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e				
Category		MT/yr						
gatou	83.1562	1.0805	0.0261	117.9509				
Ommigatou	83.1562	1.0805	0.0261	117.9509				

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		МТ	-/yr	
General Office Building	33.0585 / 20.2616	83.1562	1.0805	0.0261	117.9509
Total		83.1562	1.0805	0.0261	117.9509

CalEEMod Version: CalEEMod.2016.3.2 Page 35 of 38 Date: 5/21/2018 8:16 AM

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e			
Land Use	Mgal	MT/yr						
General Office Building	33.0585 / 20.2616	83.1562	1.0805	0.0261	117.9509			
Total		83.1562	1.0805	0.0261	117.9509			

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e				
	MT/yr							
wiiigatod	35.1134	2.0751	0.0000	86.9919				
ogatoa	35.1134	2.0751	0.0000	86.9919				

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e		
Land Use	tons	MT/yr					
General Office Building	172.98	35.1134	2.0751	0.0000	86.9919		
Total		35.1134	2.0751	0.0000	86.9919		

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e		
Land Use	tons	MT/yr					
General Office Building	172.98	35.1134	2.0751	0.0000	86.9919		
Total		35.1134	2.0751	0.0000	86.9919		

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

COB3 - COB 3 (Construction; Revised May 2018) - San Mateo County, Annual

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

COB3 - Operational Emissions (2021; Revised May 2018) San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

(lb/MWhr)

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	186.00	1000sqft	0.86	186,000.00	0
Enclosed Parking with Elevator	490.00	1000sqft	1.64	490,000.00	0
Parking Lot	57.50	1000sqft	1.32	57,500.00	0

(lb/MWhr)

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	70
Climate Zone	5			Operational Year	2021
Utility Company	Pacific Gas & Electric Co	mpany			
CO2 Intensity	367	CH4 Intensity	0.029	N2O Intensity	0.006

(lb/MWhr)

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.2 Page 2 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

Project Characteristics - PTG - Model run to capture criteria air pollutant emissions and GHG emissions resulting from operation of the COB3, parking structure, and promenade. CO2 intensity factor adjusted using PG&E GHG intensity 2013;RPS 2020-i.e., 33% renewable

Land Use - PTG - Parking Structure would be 7-stories; each level 70k sqft. COB3 would be 6-stories tall (4 primary floors); each level ~41.9k sqft. Parking lot land use for promenade and plaza.

Vehicle Trips - PTG - Length adjusted based on change in TAZ VMT provided by MTC from existing to project TAZ (2020). Trip gen updated based on incremental trip increase presented in Hexagon's TIA; modeled for all project trips. All trips primary.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Mobile Land Use Mitigation -

Energy Mitigation - PTG - Mitigation requiring PV must supply 30% of electricity used by the COB3 and the parking structure.

Water Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	4.27	0.86
tblLandUse	LotAcreage	11.25	1.64
tblProjectCharacteristics	CO2IntensityFactor	641.35	367
tblVehicleTrips	CC_TL	7.30	1.40
tblVehicleTrips	CNW_TL	7.30	1.40
tblVehicleTrips	CW_TL	9.50	1.40
tblVehicleTrips	DV_TP	34.00	0.00
tblVehicleTrips	PB_TP	16.00	0.00
tblVehicleTrips	PR_TP	50.00	100.00
tblVehicleTrips	WD_TR	68.93	16.00

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 3 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr									MT/yr						
2017	0.0395	0.4065	0.2225	3.8000e- 004	1.1200e- 003	0.0209	0.0220	3.0000e- 004	0.0194	0.0197	0.0000	34.8469	34.8469	9.2700e- 003	0.0000	35.0788
2018	0.5292	5.0296	3.7808	9.8500e- 003	0.4252	0.2093	0.6345	0.1345	0.1966	0.3311	0.0000	916.4032	916.4032	0.1167	0.0000	919.3194
2019	1.0888	0.0240	0.0341	8.0000e- 005	4.1900e- 003	1.5500e- 003	5.7300e- 003	1.1100e- 003	1.5200e- 003	2.6300e- 003	0.0000	6.7359	6.7359	5.3000e- 004	0.0000	6.7491
Maximum	1.0888	5.0296	3.7808	9.8500e- 003	0.4252	0.2093	0.6345	0.1345	0.1966	0.3311	0.0000	916.4032	916.4032	0.1167	0.0000	919.3194

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr									MT/yr						
2017	0.0395	0.4065	0.2225	3.8000e- 004	1.1200e- 003	0.0209	0.0220	3.0000e- 004	0.0194	0.0197	0.0000	34.8469	34.8469	9.2700e- 003	0.0000	35.0787
2018	0.5292	5.0296	3.7808	9.8500e- 003	0.4252	0.2093	0.6345	0.1345	0.1966	0.3311	0.0000	916.4028	916.4028	0.1167	0.0000	919.3190
2019	1.0888	0.0240	0.0341	8.0000e- 005	4.1900e- 003	1.5500e- 003	5.7300e- 003	1.1100e- 003	1.5200e- 003	2.6300e- 003	0.0000	6.7359	6.7359	5.3000e- 004	0.0000	6.7491
Maximum	1.0888	5.0296	3.7808	9.8500e- 003	0.4252	0.2093	0.6345	0.1345	0.1966	0.3311	0.0000	916.4028	916.4028	0.1167	0.0000	919.3190

Page 4 of 35

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

Date: 5/17/2018 11:54 AM

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-5-2017	3-4-2018	1.4407	1.4407
2	3-5-2018	6-4-2018	1.4604	1.4604
3	6-5-2018	9-4-2018	1.4549	1.4549
4	9-5-2018	12-4-2018	1.4524	1.4524
5	12-5-2018	3-4-2019	1.2356	1.2356
		Highest	1.4604	1.4604

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr								MT/yr							
Area	0.8709	6.0000e- 005	6.7700e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140
Energy	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	1,059.630 5	1,059.630 5	0.0723	0.0177	1,066.712 6
Mobile	0.3625	0.8032	2.5472	5.0100e- 003	0.4016	5.4100e- 003	0.4070	0.1079	5.0300e- 003	0.1130	0.0000	457.5489	457.5489	0.0228	0.0000	458.1185
Waste	1 1 1 1					0.0000	0.0000		0.0000	0.0000	35.1134	0.0000	35.1134	2.0751	0.0000	86.9919
Water		1 1 1 1	1 			0.0000	0.0000		0.0000	0.0000	11.7228	46.4789	58.2016	1.2077	0.0292	97.0930
Total	1.2527	0.9795	2.7020	6.0700e- 003	0.4016	0.0188	0.4204	0.1079	0.0184	0.1264	46.8361	1,563.671 4	1,610.507 5	3.3779	0.0469	1,708.930 0

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr					МТ	7/yr				
Area	0.8709	6.0000e- 005	6.7700e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140
Energy	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	799.3003	799.3003	0.0517	0.0135	804.5998
Mobile	0.3625	0.8032	2.5472	5.0100e- 003	0.4016	5.4100e- 003	0.4070	0.1079	5.0300e- 003	0.1130	0.0000	457.5489	457.5489	0.0228	0.0000	458.1185
Waste	;	, ! ! !				0.0000	0.0000		0.0000	0.0000	35.1134	0.0000	35.1134	2.0751	0.0000	86.9919
Water	,	,				0.0000	0.0000		0.0000	0.0000	11.7228	46.4789	58.2016	1.2077	0.0292	97.0930
Total	1.2527	0.9795	2.7020	6.0700e- 003	0.4016	0.0188	0.4204	0.1079	0.0184	0.1264	46.8361	1,303.341 2	1,350.177 3	3.3573	0.0426	1,446.817 2

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.65	16.16	0.61	9.06	15.34

3.0 Construction Detail

Construction Phase

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/5/2017	1/1/2018	5	20	
2	Site Preparation	Site Preparation	1/2/2018	1/8/2018	5	5	
3	Grading	Grading	1/9/2018	1/18/2018	5	8	
4	Building Construction	Building Construction	1/19/2018	12/6/2018	5	230	
5	Paving	Paving	12/7/2018	1/1/2019	5	18	
6	Architectural Coating	Architectural Coating	1/2/2019	1/25/2019	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 279,000; Non-Residential Outdoor: 93,000; Striped Parking Area: 32,850 (Architectural Coating – sqft)

OffRoad Equipment

Page 7 of 35

Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	289.00	120.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	58.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 **Demolition - 2017**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0390	0.4061	0.2186	3.7000e- 004		0.0208	0.0208		0.0194	0.0194	0.0000	33.8205	33.8205	9.2500e- 003	0.0000	34.0517
Total	0.0390	0.4061	0.2186	3.7000e- 004		0.0208	0.0208		0.0194	0.0194	0.0000	33.8205	33.8205	9.2500e- 003	0.0000	34.0517

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.2 Demolition - 2017

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e- 004	3.9000e- 004	3.9100e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1300e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	1.0265	1.0265	3.0000e- 005	0.0000	1.0271
Total	5.2000e- 004	3.9000e- 004	3.9100e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1300e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	1.0265	1.0265	3.0000e- 005	0.0000	1.0271

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0390	0.4061	0.2186	3.7000e- 004		0.0208	0.0208		0.0194	0.0194	0.0000	33.8204	33.8204	9.2500e- 003	0.0000	34.0516
Total	0.0390	0.4061	0.2186	3.7000e- 004		0.0208	0.0208		0.0194	0.0194	0.0000	33.8204	33.8204	9.2500e- 003	0.0000	34.0516

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.2 Demolition - 2017

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e- 004	3.9000e- 004	3.9100e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1300e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	1.0265	1.0265	3.0000e- 005	0.0000	1.0271
Total	5.2000e- 004	3.9000e- 004	3.9100e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1300e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	1.0265	1.0265	3.0000e- 005	0.0000	1.0271

3.2 **Demolition - 2018**

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
On reduce	1.8600e- 003	0.0192	0.0112	2.0000e- 005		9.7000e- 004	9.7000e- 004		9.0000e- 004	9.0000e- 004	0.0000	1.7562	1.7562	4.8000e- 004	0.0000	1.7683
Total	1.8600e- 003	0.0192	0.0112	2.0000e- 005		9.7000e- 004	9.7000e- 004		9.0000e- 004	9.0000e- 004	0.0000	1.7562	1.7562	4.8000e- 004	0.0000	1.7683

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.2 Demolition - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e- 005	2.0000e- 005	1.8000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0524	0.0524	0.0000	0.0000	0.0524
Total	2.0000e- 005	2.0000e- 005	1.8000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0524	0.0524	0.0000	0.0000	0.0524

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	1.8600e- 003	0.0192	0.0112	2.0000e- 005		9.7000e- 004	9.7000e- 004		9.0000e- 004	9.0000e- 004	0.0000	1.7562	1.7562	4.8000e- 004	0.0000	1.7683
Total	1.8600e- 003	0.0192	0.0112	2.0000e- 005		9.7000e- 004	9.7000e- 004		9.0000e- 004	9.0000e- 004	0.0000	1.7562	1.7562	4.8000e- 004	0.0000	1.7683

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.2 Demolition - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e- 005	2.0000e- 005	1.8000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0524	0.0524	0.0000	0.0000	0.0524
Total	2.0000e- 005	2.0000e- 005	1.8000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0524	0.0524	0.0000	0.0000	0.0524

3.3 Site Preparation - 2018

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0114	0.1205	0.0562	1.0000e- 004		6.4400e- 003	6.4400e- 003		5.9300e- 003	5.9300e- 003	0.0000	8.6900	8.6900	2.7100e- 003	0.0000	8.7576
Total	0.0114	0.1205	0.0562	1.0000e- 004	0.0452	6.4400e- 003	0.0516	0.0248	5.9300e- 003	0.0308	0.0000	8.6900	8.6900	2.7100e- 003	0.0000	8.7576

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.3 Site Preparation - 2018
Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e- 004	1.1000e- 004	1.0800e- 003	0.0000	3.5000e- 004	0.0000	3.6000e- 004	9.0000e- 005	0.0000	1.0000e- 004	0.0000	0.3145	0.3145	1.0000e- 005	0.0000	0.3146
Total	1.5000e- 004	1.1000e- 004	1.0800e- 003	0.0000	3.5000e- 004	0.0000	3.6000e- 004	9.0000e- 005	0.0000	1.0000e- 004	0.0000	0.3145	0.3145	1.0000e- 005	0.0000	0.3146

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
Fugitive Dust					0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0114	0.1205	0.0562	1.0000e- 004		6.4400e- 003	6.4400e- 003		5.9300e- 003	5.9300e- 003	0.0000	8.6900	8.6900	2.7100e- 003	0.0000	8.7576
Total	0.0114	0.1205	0.0562	1.0000e- 004	0.0452	6.4400e- 003	0.0516	0.0248	5.9300e- 003	0.0308	0.0000	8.6900	8.6900	2.7100e- 003	0.0000	8.7576

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.3 Site Preparation - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e- 004	1.1000e- 004	1.0800e- 003	0.0000	3.5000e- 004	0.0000	3.6000e- 004	9.0000e- 005	0.0000	1.0000e- 004	0.0000	0.3145	0.3145	1.0000e- 005	0.0000	0.3146
Total	1.5000e- 004	1.1000e- 004	1.0800e- 003	0.0000	3.5000e- 004	0.0000	3.6000e- 004	9.0000e- 005	0.0000	1.0000e- 004	0.0000	0.3145	0.3145	1.0000e- 005	0.0000	0.3146

3.4 Grading - 2018

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	ii ii				0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
	0.0111	0.1227	0.0663	1.2000e- 004		6.2100e- 003	6.2100e- 003		5.7100e- 003	5.7100e- 003	0.0000	10.8428	10.8428	3.3800e- 003	0.0000	10.9271
Total	0.0111	0.1227	0.0663	1.2000e- 004	0.0262	6.2100e- 003	0.0324	0.0135	5.7100e- 003	0.0192	0.0000	10.8428	10.8428	3.3800e- 003	0.0000	10.9271

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.4 Grading - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e- 004	1.4000e- 004	1.4400e- 003	0.0000	4.7000e- 004	0.0000	4.8000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.4193	0.4193	1.0000e- 005	0.0000	0.4195
Total	2.0000e- 004	1.4000e- 004	1.4400e- 003	0.0000	4.7000e- 004	0.0000	4.8000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.4193	0.4193	1.0000e- 005	0.0000	0.4195

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
Fugitive Dust	 				0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.1227	0.0663	1.2000e- 004		6.2100e- 003	6.2100e- 003		5.7100e- 003	5.7100e- 003	0.0000	10.8427	10.8427	3.3800e- 003	0.0000	10.9271
Total	0.0111	0.1227	0.0663	1.2000e- 004	0.0262	6.2100e- 003	0.0324	0.0135	5.7100e- 003	0.0192	0.0000	10.8427	10.8427	3.3800e- 003	0.0000	10.9271

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e- 004	1.4000e- 004	1.4400e- 003	0.0000	4.7000e- 004	0.0000	4.8000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.4193	0.4193	1.0000e- 005	0.0000	0.4195
Total	2.0000e- 004	1.4000e- 004	1.4400e- 003	0.0000	4.7000e- 004	0.0000	4.8000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.4193	0.4193	1.0000e- 005	0.0000	0.4195

3.5 Building Construction - 2018

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.3081	2.6899	2.0218	3.1000e- 003		0.1725	0.1725		0.1621	0.1621	0.0000	273.4323	273.4323	0.0670	0.0000	275.1071
Total	0.3081	2.6899	2.0218	3.1000e- 003		0.1725	0.1725		0.1621	0.1621	0.0000	273.4323	273.4323	0.0670	0.0000	275.1071

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.5 Building Construction - 2018 Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0736	1.8745	0.7151	3.7700e- 003	0.0899	0.0144	0.1043	0.0260	0.0138	0.0398	0.0000	373.0268	373.0268	0.0332	0.0000	373.8570
Worker	0.1085	0.0788	0.7978	2.5700e- 003	0.2616	1.6900e- 003	0.2633	0.0696	1.5500e- 003	0.0712	0.0000	232.2417	232.2417	5.4700e- 003	0.0000	232.3784
Total	0.1821	1.9534	1.5130	6.3400e- 003	0.3516	0.0161	0.3677	0.0956	0.0153	0.1110	0.0000	605.2685	605.2685	0.0387	0.0000	606.2353

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.3081	2.6899	2.0218	3.1000e- 003		0.1725	0.1725		0.1621	0.1621	0.0000	273.4320	273.4320	0.0670	0.0000	275.1068
Total	0.3081	2.6899	2.0218	3.1000e- 003		0.1725	0.1725		0.1621	0.1621	0.0000	273.4320	273.4320	0.0670	0.0000	275.1068

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.5 Building Construction - 2018 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0736	1.8745	0.7151	3.7700e- 003	0.0899	0.0144	0.1043	0.0260	0.0138	0.0398	0.0000	373.0268	373.0268	0.0332	0.0000	373.8570
Worker	0.1085	0.0788	0.7978	2.5700e- 003	0.2616	1.6900e- 003	0.2633	0.0696	1.5500e- 003	0.0712	0.0000	232.2417	232.2417	5.4700e- 003	0.0000	232.3784
Total	0.1821	1.9534	1.5130	6.3400e- 003	0.3516	0.0161	0.3677	0.0956	0.0153	0.1110	0.0000	605.2685	605.2685	0.0387	0.0000	606.2353

3.6 Paving - 2018

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	√yr		
Off-Road	0.0121	0.1234	0.1057	1.6000e- 004		7.1100e- 003	7.1100e- 003		6.5600e- 003	6.5600e- 003	0.0000	14.4394	14.4394	4.3700e- 003	0.0000	14.5487
Paving	1.6300e- 003			i i		0.0000	0.0000	1 1 1 1	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0137	0.1234	0.1057	1.6000e- 004		7.1100e- 003	7.1100e- 003		6.5600e- 003	6.5600e- 003	0.0000	14.4394	14.4394	4.3700e- 003	0.0000	14.5487

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.6 Paving - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e- 004	4.0000e- 004	4.0800e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.6000e- 004	0.0000	1.1879	1.1879	3.0000e- 005	0.0000	1.1886
Total	5.5000e- 004	4.0000e- 004	4.0800e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.6000e- 004	0.0000	1.1879	1.1879	3.0000e- 005	0.0000	1.1886

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0121	0.1234	0.1057	1.6000e- 004		7.1100e- 003	7.1100e- 003		6.5600e- 003	6.5600e- 003	0.0000	14.4394	14.4394	4.3700e- 003	0.0000	14.5487
Paving	1.6300e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0137	0.1234	0.1057	1.6000e- 004		7.1100e- 003	7.1100e- 003		6.5600e- 003	6.5600e- 003	0.0000	14.4394	14.4394	4.3700e- 003	0.0000	14.5487

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.6 Paving - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e- 004	4.0000e- 004	4.0800e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.6000e- 004	0.0000	1.1879	1.1879	3.0000e- 005	0.0000	1.1886
Total	5.5000e- 004	4.0000e- 004	4.0800e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.6000e- 004	0.0000	1.1879	1.1879	3.0000e- 005	0.0000	1.1886

3.6 Paving - 2019

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	-/yr		
	6.3000e- 004	6.3800e- 003	6.1600e- 003	1.0000e- 005		3.6000e- 004	3.6000e- 004		3.3000e- 004	3.3000e- 004	0.0000	0.8361	0.8361	2.6000e- 004	0.0000	0.8426
	1.0000e- 004					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.3000e- 004	6.3800e- 003	6.1600e- 003	1.0000e- 005		3.6000e- 004	3.6000e- 004		3.3000e- 004	3.3000e- 004	0.0000	0.8361	0.8361	2.6000e- 004	0.0000	0.8426

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.6 Paving - 2019
Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e- 005	2.0000e- 005	2.1000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0677	0.0677	0.0000	0.0000	0.0677
Total	3.0000e- 005	2.0000e- 005	2.1000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0677	0.0677	0.0000	0.0000	0.0677

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	6.3000e- 004	6.3800e- 003	6.1600e- 003	1.0000e- 005		3.6000e- 004	3.6000e- 004		3.3000e- 004	3.3000e- 004	0.0000	0.8361	0.8361	2.6000e- 004	0.0000	0.8426
1	1.0000e- 004		1		 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.3000e- 004	6.3800e- 003	6.1600e- 003	1.0000e- 005		3.6000e- 004	3.6000e- 004		3.3000e- 004	3.3000e- 004	0.0000	0.8361	0.8361	2.6000e- 004	0.0000	0.8426

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.6 Paving - 2019

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e- 005	2.0000e- 005	2.1000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0677	0.0677	0.0000	0.0000	0.0677
Total	3.0000e- 005	2.0000e- 005	2.1000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0677	0.0677	0.0000	0.0000	0.0677

3.7 Architectural Coating - 2019

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
Archit. Coating	1.0841					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	2.4000e- 003	0.0165	0.0166	3.0000e- 005		1.1600e- 003	1.1600e- 003		1.1600e- 003	1.1600e- 003	0.0000	2.2979	2.2979	1.9000e- 004	0.0000	2.3028
Total	1.0865	0.0165	0.0166	3.0000e- 005		1.1600e- 003	1.1600e- 003		1.1600e- 003	1.1600e- 003	0.0000	2.2979	2.2979	1.9000e- 004	0.0000	2.3028

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.7 Architectural Coating - 2019 Unmitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5400e- 003	1.0900e- 003	0.0112	4.0000e- 005	4.1100e- 003	3.0000e- 005	4.1400e- 003	1.0900e- 003	2.0000e- 005	1.1200e- 003	0.0000	3.5341	3.5341	8.0000e- 005	0.0000	3.5360
Total	1.5400e- 003	1.0900e- 003	0.0112	4.0000e- 005	4.1100e- 003	3.0000e- 005	4.1400e- 003	1.0900e- 003	2.0000e- 005	1.1200e- 003	0.0000	3.5341	3.5341	8.0000e- 005	0.0000	3.5360

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
Archit. Coating	1.0841					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	2.4000e- 003	0.0165	0.0166	3.0000e- 005		1.1600e- 003	1.1600e- 003		1.1600e- 003	1.1600e- 003	0.0000	2.2979	2.2979	1.9000e- 004	0.0000	2.3028
Total	1.0865	0.0165	0.0166	3.0000e- 005		1.1600e- 003	1.1600e- 003		1.1600e- 003	1.1600e- 003	0.0000	2.2979	2.2979	1.9000e- 004	0.0000	2.3028

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

3.7 Architectural Coating - 2019 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5400e- 003	1.0900e- 003	0.0112	4.0000e- 005	4.1100e- 003	3.0000e- 005	4.1400e- 003	1.0900e- 003	2.0000e- 005	1.1200e- 003	0.0000	3.5341	3.5341	8.0000e- 005	0.0000	3.5360
Total	1.5400e- 003	1.0900e- 003	0.0112	4.0000e- 005	4.1100e- 003	3.0000e- 005	4.1400e- 003	1.0900e- 003	2.0000e- 005	1.1200e- 003	0.0000	3.5341	3.5341	8.0000e- 005	0.0000	3.5360

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.3625	0.8032	2.5472	5.0100e- 003	0.4016	5.4100e- 003	0.4070	0.1079	5.0300e- 003	0.1130	0.0000	457.5489	457.5489	0.0228	0.0000	458.1185
Unmitigated	0.3625	0.8032	2.5472	5.0100e- 003	0.4016	5.4100e- 003	0.4070	0.1079	5.0300e- 003	0.1130	0.0000	457.5489	457.5489	0.0228	0.0000	458.1185

4.2 Trip Summary Information

	Ave	rage Daily Trip Ra	ate	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government Office Building	2,976.00	0.00	0.00	1,083,264	1,083,264
Parking Lot	0.00	0.00	0.00		
Total	2,976.00	0.00	0.00	1,083,264	1,083,264

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Government Office Building	1.40	1.40	1.40	33.00	62.00	5.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Date: 5/17/2018 11:54 AM

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Enclosed Parking with Elevator	0.482816	0.049967	0.258264	0.138365	0.017696	0.006700	0.022365	0.006431	0.004044	0.003214	0.008927	0.000452	0.000759
Government Office Building	0.482816	0.049967	0.258264	0.138365	0.017696	0.006700	0.022365	0.006431	0.004044	0.003214	0.008927	0.000452	0.000759
Parking Lot	0.482816	0.049967	0.258264	0.138365	0.017696	0.006700	0.022365	0.006431	0.004044	0.003214	0.008927	0.000452	0.000759

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	607.4371	607.4371	0.0480	9.9300e- 003	611.5965
Electricity Unmitigated				1		0.0000	0.0000		0.0000	0.0000	0.0000	867.7673	867.7673	0.0686	0.0142	873.7093
NaturalGas Mitigated	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033
NaturalGas Unmitigated	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/yr		
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	3.59538e +006	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	,	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr					ton	s/yr							MT	/уг		
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	3.59538e +006	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134	, 	0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	,	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033

5.3 Energy by Land Use - Electricity Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Enclosed Parking with Elevator	2.8714e +006	477.9974	0.0378	7.8100e- 003	481.2704
Government Office Building	2.32128e +006	386.4198	0.0305	6.3200e- 003	389.0657
Parking Lot	20125	3.3502	2.6000e- 004	5.0000e- 005	3.3731
Total		867.7673	0.0686	0.0142	873.7093

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Enclosed Parking with Elevator	2.00998e +006	334.5982	0.0264	5.4700e- 003	336.8893
Government Office Building	1.6249e +006	270.4938	0.0214	4.4200e- 003	272.3460
Parking Lot	14087.5	2.3451	1.9000e- 004	4.0000e- 005	2.3612
Total		607.4371	0.0480	9.9300e- 003	611.5965

6.0 Area Detail

CalEEMod Version: CalEEMod.2016.3.2 Page 29 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Mitigated	0.8709	6.0000e- 005	6.7700e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140
Unmitigated	0.8709	6.0000e- 005	6.7700e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140

6.2 Area by SubCategory Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	/yr		
Architectural Coating	0.1084					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7618					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.3000e- 004	6.0000e- 005	6.7700e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140
Total	0.8709	6.0000e- 005	6.7700e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140

CalEEMod Version: CalEEMod.2016.3.2 Page 30 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory					ton	s/yr							MT	⁷ /yr		
Architectural Coating	0.1084					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7618		1 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.3000e- 004	6.0000e- 005	6.7700e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140
Total	0.8709	6.0000e- 005	6.7700e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140

7.0 Water Detail

7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2016.3.2 Page 31 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

	Total CO2	CH4	N2O	CO2e
Category		МТ	/yr	
I	58.2016	1.2077	0.0292	97.0930
Jgatou	58.2016	1.2077	0.0292	97.0930

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	-/yr	
Enclosed Parking with Elevator	0/0	0.0000	0.0000	0.0000	0.0000
Government Office Building	36.9507 / 22.6472	58.2016	1.2077	0.0292	97.0930
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		58.2016	1.2077	0.0292	97.0930

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal		MT	-/yr	
Enclosed Parking with Elevator	0/0	0.0000	0.0000	0.0000	0.0000
Government Office Building	36.9507 / 22.6472	58.2016	1.2077	0.0292	97.0930
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		58.2016	1.2077	0.0292	97.0930

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e		
	MT/yr					
"""	35.1134	2.0751	0.0000	86.9919		
	35.1134	2.0751	0.0000	86.9919		

8.2 Waste by Land Use <u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	√yr	
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	172.98	35.1134	2.0751	0.0000	86.9919
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		35.1134	2.0751	0.0000	86.9919

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		MT	-/yr	
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	172.98	35.1134	2.0751	0.0000	86.9919
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		35.1134	2.0751	0.0000	86.9919

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type
----------------	--------	----------------	-----------------	---------------	-----------

User Defined Equipment

Equipment Type	Number

CalEEMod Version: CalEEMod.2016.3.2 Page 35 of 35 Date: 5/17/2018 11:54 AM

COB3 - Operational Emissions (2021; Revised May 2018) - San Mateo County, Annual

11.0 Vegetation

CalEEMod Version: CalEEMod.2016.3.2 Page 1 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

COB3 - Operational Emissions (2030; Revised May 2018) San Mateo County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government Office Building	186.00	1000sqft	0.86	186,000.00	0
Enclosed Parking with Elevator	490.00	1000sqft	1.64	490,000.00	0
Parking Lot	57.50	1000sqft	1.32	57,500.00	0

1.2 Other Project Characteristics

Urbanization	Urban	Wind Speed (m/s)	2.2	Precipitation Freq (Days)	70
Climate Zone	5			Operational Year	2030
Utility Company	Pacific Gas & Electric	Company			
CO2 Intensity (lb/MWhr)	274	CH4 Intensity (lb/MWhr)	0.029	N2O Intensity (lb/MWhr)	0.006

1.3 User Entered Comments & Non-Default Data

CalEEMod Version: CalEEMod.2016.3.2 Page 2 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

Project Characteristics - PTG - Model run to capture criteria air pollutant emissions and GHG emissions resulting from operation of the COB3, parking structure, and promenade. CO2 intensity factor adjusted using PG&E GHG intensity 2013;RPS 2030-i.e., 50% renewable

Land Use - PTG - Parking Structure would be 7-stories; each level 70k sqft. COB3 would be 6-stories tall (4 primary floors); each level ~41.9k sqft. Parking lot land use for promenade and plaza.

Vehicle Trips - PTG - Length adjusted based on change in TAZ VMT provided by MTC from existing to project TAZ (2030). Trip gen updated based on incremental trip increase presented in Hexagon's TIA; modeled for all project trips. All trips primary.

Vehicle Emission Factors -

Vehicle Emission Factors -

Vehicle Emission Factors -

Energy Use -

Mobile Land Use Mitigation -

Energy Mitigation - PTG - Mitigation requiring PV must supply 30% of electricity used by the COB3 and the parking structure.

Water Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	4.27	0.86
tblLandUse	LotAcreage	11.25	1.64
tblProjectCharacteristics	CO2IntensityFactor	641.35	274
tblVehicleTrips	CC_TL	7.30	1.00
tblVehicleTrips	CNW_TL	7.30	1.00
tblVehicleTrips	CW_TL	9.50	1.00
tblVehicleTrips	DV_TP	34.00	0.00
tblVehicleTrips	PB_TP	16.00	0.00
tblVehicleTrips	PR_TP	50.00	100.00
tblVehicleTrips	WD_TR	68.93	16.00

2.0 Emissions Summary

CalEEMod Version: CalEEMod.2016.3.2 Page 3 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

2.1 Overall Construction <u>Unmitigated Construction</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	/yr		
2017	0.0395	0.4065	0.2225	3.8000e- 004	1.1200e- 003	0.0209	0.0220	3.0000e- 004	0.0194	0.0197	0.0000	34.8469	34.8469	9.2700e- 003	0.0000	35.0788
2018	0.5292	5.0296	3.7808	9.8500e- 003	0.4252	0.2093	0.6345	0.1345	0.1966	0.3311	0.0000	916.4032	916.4032	0.1167	0.0000	919.3194
2019	1.0888	0.0240	0.0341	8.0000e- 005	4.1900e- 003	1.5500e- 003	5.7300e- 003	1.1100e- 003	1.5200e- 003	2.6300e- 003	0.0000	6.7359	6.7359	5.3000e- 004	0.0000	6.7491
Maximum	1.0888	5.0296	3.7808	9.8500e- 003	0.4252	0.2093	0.6345	0.1345	0.1966	0.3311	0.0000	916.4032	916.4032	0.1167	0.0000	919.3194

Mitigated Construction

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year					ton	s/yr							МТ	√yr		
2017	0.0395	0.4065	0.2225	3.8000e- 004	1.1200e- 003	0.0209	0.0220	3.0000e- 004	0.0194	0.0197	0.0000	34.8469	34.8469	9.2700e- 003	0.0000	35.0787
2018	0.5292	5.0296	3.7808	9.8500e- 003	0.4252	0.2093	0.6345	0.1345	0.1966	0.3311	0.0000	916.4028	916.4028	0.1167	0.0000	919.3190
2019	1.0888	0.0240	0.0341	8.0000e- 005	4.1900e- 003	1.5500e- 003	5.7300e- 003	1.1100e- 003	1.5200e- 003	2.6300e- 003	0.0000	6.7359	6.7359	5.3000e- 004	0.0000	6.7491
Maximum	1.0888	5.0296	3.7808	9.8500e- 003	0.4252	0.2093	0.6345	0.1345	0.1966	0.3311	0.0000	916.4028	916.4028	0.1167	0.0000	919.3190

Page 4 of 35

Date: 5/17/2018 11:45 AM

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	12-5-2017	3-4-2018	1.4407	1.4407
2	3-5-2018	6-4-2018	1.4604	1.4604
3	6-5-2018	9-4-2018	1.4549	1.4549
4	9-5-2018	12-4-2018	1.4524	1.4524
5	12-5-2018	3-4-2019	1.2356	1.2356
		Highest	1.4604	1.4604

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e	
Category					ton	s/yr					MT/yr						
Area	0.8708	6.0000e- 005	6.7100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140	
Energy	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	839.7330	839.7330	0.0723	0.0177	846.8151	
Mobile	0.2345	0.5735	1.4495	3.0500e- 003	0.2870	2.9900e- 003	0.2900	0.0771	2.7700e- 003	0.0799	0.0000	280.4722	280.4722	0.0132	0.0000	280.8018	
Waste				 		0.0000	0.0000		0.0000	0.0000	35.1134	0.0000	35.1134	2.0751	0.0000	86.9919	
Water		1 1 1 1	1 			0.0000	0.0000		0.0000	0.0000	11.7228	34.7009	46.4236	1.2077	0.0292	85.3150	
Total	1.1247	0.7498	1.6043	4.1100e- 003	0.2870	0.0164	0.3034	0.0771	0.0162	0.0933	46.8361	1,154.919 2	1,201.755 3	3.3683	0.0469	1,299.937 8	

CalEEMod Version: CalEEMod.2016.3.2 Page 5 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Area	0.8708	6.0000e- 005	6.7100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140
Energy	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	645.3721	645.3721	0.0517	0.0135	650.6716
Mobile	0.2345	0.5735	1.4495	3.0500e- 003	0.2870	2.9900e- 003	0.2900	0.0771	2.7700e- 003	0.0799	0.0000	280.4722	280.4722	0.0132	0.0000	280.8018
Waste	,					0.0000	0.0000		0.0000	0.0000	35.1134	0.0000	35.1134	2.0751	0.0000	86.9919
Water	,					0.0000	0.0000		0.0000	0.0000	11.7228	34.7009	46.4236	1.2077	0.0292	85.3150
Total	1.1247	0.7498	1.6043	4.1100e- 003	0.2870	0.0164	0.3034	0.0771	0.0162	0.0933	46.8361	960.5582	1,007.394 4	3.3477	0.0426	1,103.794 2

	ROG	NOx	со	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	16.83	16.17	0.61	9.06	15.09

3.0 Construction Detail

Construction Phase

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	12/5/2017	1/1/2018	5	20	
2	Site Preparation	Site Preparation	1/2/2018	1/8/2018	5	5	
3	Grading	Grading	1/9/2018	1/18/2018	5	8	
4	Building Construction	Building Construction	1/19/2018	12/6/2018	5	230	
5	Paving	Paving	12/7/2018	1/1/2019	5	18	
6	Architectural Coating	Architectural Coating	1/2/2019	1/25/2019	5	18	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 4

Acres of Paving: 2.96

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 279,000; Non-Residential Outdoor: 93,000; Striped Parking Area: 32,850 (Architectural Coating – sqft)

OffRoad Equipment

Page 7 of 35

Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Excavators	3	8.00	158	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	1	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Cement and Mortar Mixers	2	6.00	9	0.56
Paving	Pavers	1	8.00	130	0.42
Paving	Paving Equipment	2	6.00	132	0.36
Paving	Rollers	2	6.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	6	15.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	289.00	120.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	8	20.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	58.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 **Demolition - 2017**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.0390	0.4061	0.2186	3.7000e- 004		0.0208	0.0208	 	0.0194	0.0194	0.0000	33.8205	33.8205	9.2500e- 003	0.0000	34.0517
Total	0.0390	0.4061	0.2186	3.7000e- 004		0.0208	0.0208		0.0194	0.0194	0.0000	33.8205	33.8205	9.2500e- 003	0.0000	34.0517

CalEEMod Version: CalEEMod.2016.3.2 Page 9 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.2 Demolition - 2017

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e- 004	3.9000e- 004	3.9100e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1300e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	1.0265	1.0265	3.0000e- 005	0.0000	1.0271
Total	5.2000e- 004	3.9000e- 004	3.9100e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1300e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	1.0265	1.0265	3.0000e- 005	0.0000	1.0271

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0390	0.4061	0.2186	3.7000e- 004		0.0208	0.0208		0.0194	0.0194	0.0000	33.8204	33.8204	9.2500e- 003	0.0000	34.0516
Total	0.0390	0.4061	0.2186	3.7000e- 004		0.0208	0.0208		0.0194	0.0194	0.0000	33.8204	33.8204	9.2500e- 003	0.0000	34.0516

CalEEMod Version: CalEEMod.2016.3.2 Page 10 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.2 Demolition - 2017

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.2000e- 004	3.9000e- 004	3.9100e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1300e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	1.0265	1.0265	3.0000e- 005	0.0000	1.0271
Total	5.2000e- 004	3.9000e- 004	3.9100e- 003	1.0000e- 005	1.1200e- 003	1.0000e- 005	1.1300e- 003	3.0000e- 004	1.0000e- 005	3.1000e- 004	0.0000	1.0265	1.0265	3.0000e- 005	0.0000	1.0271

3.2 **Demolition - 2018**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
- Oil Road	1.8600e- 003	0.0192	0.0112	2.0000e- 005		9.7000e- 004	9.7000e- 004		9.0000e- 004	9.0000e- 004	0.0000	1.7562	1.7562	4.8000e- 004	0.0000	1.7683
Total	1.8600e- 003	0.0192	0.0112	2.0000e- 005		9.7000e- 004	9.7000e- 004		9.0000e- 004	9.0000e- 004	0.0000	1.7562	1.7562	4.8000e- 004	0.0000	1.7683

CalEEMod Version: CalEEMod.2016.3.2 Page 11 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.2 Demolition - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e- 005	2.0000e- 005	1.8000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0524	0.0524	0.0000	0.0000	0.0524
Total	2.0000e- 005	2.0000e- 005	1.8000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0524	0.0524	0.0000	0.0000	0.0524

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	1.8600e- 003	0.0192	0.0112	2.0000e- 005		9.7000e- 004	9.7000e- 004		9.0000e- 004	9.0000e- 004	0.0000	1.7562	1.7562	4.8000e- 004	0.0000	1.7683
Total	1.8600e- 003	0.0192	0.0112	2.0000e- 005		9.7000e- 004	9.7000e- 004		9.0000e- 004	9.0000e- 004	0.0000	1.7562	1.7562	4.8000e- 004	0.0000	1.7683

CalEEMod Version: CalEEMod.2016.3.2 Page 12 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.2 Demolition - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e- 005	2.0000e- 005	1.8000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0524	0.0524	0.0000	0.0000	0.0524
Total	2.0000e- 005	2.0000e- 005	1.8000e- 004	0.0000	6.0000e- 005	0.0000	6.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0524	0.0524	0.0000	0.0000	0.0524

3.3 Site Preparation - 2018

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Fugitive Dust	11 11 11				0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.1205	0.0562	1.0000e- 004		6.4400e- 003	6.4400e- 003		5.9300e- 003	5.9300e- 003	0.0000	8.6900	8.6900	2.7100e- 003	0.0000	8.7576
Total	0.0114	0.1205	0.0562	1.0000e- 004	0.0452	6.4400e- 003	0.0516	0.0248	5.9300e- 003	0.0308	0.0000	8.6900	8.6900	2.7100e- 003	0.0000	8.7576

CalEEMod Version: CalEEMod.2016.3.2 Page 13 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.3 Site Preparation - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e- 004	1.1000e- 004	1.0800e- 003	0.0000	3.5000e- 004	0.0000	3.6000e- 004	9.0000e- 005	0.0000	1.0000e- 004	0.0000	0.3145	0.3145	1.0000e- 005	0.0000	0.3146
Total	1.5000e- 004	1.1000e- 004	1.0800e- 003	0.0000	3.5000e- 004	0.0000	3.6000e- 004	9.0000e- 005	0.0000	1.0000e- 004	0.0000	0.3145	0.3145	1.0000e- 005	0.0000	0.3146

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
Fugitive Dust	 				0.0452	0.0000	0.0452	0.0248	0.0000	0.0248	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0114	0.1205	0.0562	1.0000e- 004		6.4400e- 003	6.4400e- 003		5.9300e- 003	5.9300e- 003	0.0000	8.6900	8.6900	2.7100e- 003	0.0000	8.7576
Total	0.0114	0.1205	0.0562	1.0000e- 004	0.0452	6.4400e- 003	0.0516	0.0248	5.9300e- 003	0.0308	0.0000	8.6900	8.6900	2.7100e- 003	0.0000	8.7576

CalEEMod Version: CalEEMod.2016.3.2 Page 14 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.3 Site Preparation - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5000e- 004	1.1000e- 004	1.0800e- 003	0.0000	3.5000e- 004	0.0000	3.6000e- 004	9.0000e- 005	0.0000	1.0000e- 004	0.0000	0.3145	0.3145	1.0000e- 005	0.0000	0.3146
Total	1.5000e- 004	1.1000e- 004	1.0800e- 003	0.0000	3.5000e- 004	0.0000	3.6000e- 004	9.0000e- 005	0.0000	1.0000e- 004	0.0000	0.3145	0.3145	1.0000e- 005	0.0000	0.3146

3.4 Grading - 2018

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												MT	⁻ /yr		
Fugitive Dust					0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.1227	0.0663	1.2000e- 004		6.2100e- 003	6.2100e- 003		5.7100e- 003	5.7100e- 003	0.0000	10.8428	10.8428	3.3800e- 003	0.0000	10.9271
Total	0.0111	0.1227	0.0663	1.2000e- 004	0.0262	6.2100e- 003	0.0324	0.0135	5.7100e- 003	0.0192	0.0000	10.8428	10.8428	3.3800e- 003	0.0000	10.9271

CalEEMod Version: CalEEMod.2016.3.2 Page 15 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.4 Grading - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e- 004	1.4000e- 004	1.4400e- 003	0.0000	4.7000e- 004	0.0000	4.8000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.4193	0.4193	1.0000e- 005	0.0000	0.4195
Total	2.0000e- 004	1.4000e- 004	1.4400e- 003	0.0000	4.7000e- 004	0.0000	4.8000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.4193	0.4193	1.0000e- 005	0.0000	0.4195

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton				MT	/yr						
Fugitive Dust	 				0.0262	0.0000	0.0262	0.0135	0.0000	0.0135	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0111	0.1227	0.0663	1.2000e- 004		6.2100e- 003	6.2100e- 003		5.7100e- 003	5.7100e- 003	0.0000	10.8427	10.8427	3.3800e- 003	0.0000	10.9271
Total	0.0111	0.1227	0.0663	1.2000e- 004	0.0262	6.2100e- 003	0.0324	0.0135	5.7100e- 003	0.0192	0.0000	10.8427	10.8427	3.3800e- 003	0.0000	10.9271

CalEEMod Version: CalEEMod.2016.3.2 Page 16 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.4 Grading - 2018

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							МТ	/уг		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.0000e- 004	1.4000e- 004	1.4400e- 003	0.0000	4.7000e- 004	0.0000	4.8000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.4193	0.4193	1.0000e- 005	0.0000	0.4195
Total	2.0000e- 004	1.4000e- 004	1.4400e- 003	0.0000	4.7000e- 004	0.0000	4.8000e- 004	1.3000e- 004	0.0000	1.3000e- 004	0.0000	0.4193	0.4193	1.0000e- 005	0.0000	0.4195

3.5 Building Construction - 2018

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.3081	2.6899	2.0218	3.1000e- 003		0.1725	0.1725	 	0.1621	0.1621	0.0000	273.4323	273.4323	0.0670	0.0000	275.1071
Total	0.3081	2.6899	2.0218	3.1000e- 003		0.1725	0.1725		0.1621	0.1621	0.0000	273.4323	273.4323	0.0670	0.0000	275.1071

CalEEMod Version: CalEEMod.2016.3.2 Page 17 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.5 Building Construction - 2018 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton				MT	/yr						
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0736	1.8745	0.7151	3.7700e- 003	0.0899	0.0144	0.1043	0.0260	0.0138	0.0398	0.0000	373.0268	373.0268	0.0332	0.0000	373.8570
Worker	0.1085	0.0788	0.7978	2.5700e- 003	0.2616	1.6900e- 003	0.2633	0.0696	1.5500e- 003	0.0712	0.0000	232.2417	232.2417	5.4700e- 003	0.0000	232.3784
Total	0.1821	1.9534	1.5130	6.3400e- 003	0.3516	0.0161	0.3677	0.0956	0.0153	0.1110	0.0000	605.2685	605.2685	0.0387	0.0000	606.2353

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	0.3081	2.6899	2.0218	3.1000e- 003		0.1725	0.1725	 	0.1621	0.1621	0.0000	273.4320	273.4320	0.0670	0.0000	275.1068
Total	0.3081	2.6899	2.0218	3.1000e- 003		0.1725	0.1725		0.1621	0.1621	0.0000	273.4320	273.4320	0.0670	0.0000	275.1068

CalEEMod Version: CalEEMod.2016.3.2 Page 18 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.5 Building Construction - 2018 Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0736	1.8745	0.7151	3.7700e- 003	0.0899	0.0144	0.1043	0.0260	0.0138	0.0398	0.0000	373.0268	373.0268	0.0332	0.0000	373.8570
Worker	0.1085	0.0788	0.7978	2.5700e- 003	0.2616	1.6900e- 003	0.2633	0.0696	1.5500e- 003	0.0712	0.0000	232.2417	232.2417	5.4700e- 003	0.0000	232.3784
Total	0.1821	1.9534	1.5130	6.3400e- 003	0.3516	0.0161	0.3677	0.0956	0.0153	0.1110	0.0000	605.2685	605.2685	0.0387	0.0000	606.2353

3.6 Paving - 2018 Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton			MT	/yr							
Off-Road	0.0121	0.1234	0.1057	1.6000e- 004		7.1100e- 003	7.1100e- 003		6.5600e- 003	6.5600e- 003	0.0000	14.4394	14.4394	4.3700e- 003	0.0000	14.5487
Paving	1.6300e- 003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0137	0.1234	0.1057	1.6000e- 004		7.1100e- 003	7.1100e- 003		6.5600e- 003	6.5600e- 003	0.0000	14.4394	14.4394	4.3700e- 003	0.0000	14.5487

CalEEMod Version: CalEEMod.2016.3.2 Page 19 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.6 Paving - 2018

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e- 004	4.0000e- 004	4.0800e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.6000e- 004	0.0000	1.1879	1.1879	3.0000e- 005	0.0000	1.1886
Total	5.5000e- 004	4.0000e- 004	4.0800e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.6000e- 004	0.0000	1.1879	1.1879	3.0000e- 005	0.0000	1.1886

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Off-Road	0.0121	0.1234	0.1057	1.6000e- 004		7.1100e- 003	7.1100e- 003	 	6.5600e- 003	6.5600e- 003	0.0000	14.4394	14.4394	4.3700e- 003	0.0000	14.5487
Paving	1.6300e- 003					0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	0.0137	0.1234	0.1057	1.6000e- 004		7.1100e- 003	7.1100e- 003		6.5600e- 003	6.5600e- 003	0.0000	14.4394	14.4394	4.3700e- 003	0.0000	14.5487

CalEEMod Version: CalEEMod.2016.3.2 Page 20 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.6 Paving - 2018

<u>Mitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.5000e- 004	4.0000e- 004	4.0800e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.6000e- 004	0.0000	1.1879	1.1879	3.0000e- 005	0.0000	1.1886
Total	5.5000e- 004	4.0000e- 004	4.0800e- 003	1.0000e- 005	1.3400e- 003	1.0000e- 005	1.3500e- 003	3.6000e- 004	1.0000e- 005	3.6000e- 004	0.0000	1.1879	1.1879	3.0000e- 005	0.0000	1.1886

3.6 Paving - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
	6.3000e- 004	6.3800e- 003	6.1600e- 003	1.0000e- 005		3.6000e- 004	3.6000e- 004		3.3000e- 004	3.3000e- 004	0.0000	0.8361	0.8361	2.6000e- 004	0.0000	0.8426
I aving	1.0000e- 004		 			0.0000	0.0000	 	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.3000e- 004	6.3800e- 003	6.1600e- 003	1.0000e- 005		3.6000e- 004	3.6000e- 004		3.3000e- 004	3.3000e- 004	0.0000	0.8361	0.8361	2.6000e- 004	0.0000	0.8426

CalEEMod Version: CalEEMod.2016.3.2 Page 21 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.6 Paving - 2019

<u>Unmitigated Construction Off-Site</u>

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e- 005	2.0000e- 005	2.1000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0677	0.0677	0.0000	0.0000	0.0677
Total	3.0000e- 005	2.0000e- 005	2.1000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0677	0.0677	0.0000	0.0000	0.0677

Mitigated Construction On-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
	6.3000e- 004	6.3800e- 003	6.1600e- 003	1.0000e- 005		3.6000e- 004	3.6000e- 004		3.3000e- 004	3.3000e- 004	0.0000	0.8361	0.8361	2.6000e- 004	0.0000	0.8426
1	1.0000e- 004		1		 	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	7.3000e- 004	6.3800e- 003	6.1600e- 003	1.0000e- 005		3.6000e- 004	3.6000e- 004		3.3000e- 004	3.3000e- 004	0.0000	0.8361	0.8361	2.6000e- 004	0.0000	0.8426

CalEEMod Version: CalEEMod.2016.3.2 Page 22 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.6 Paving - 2019

Mitigated Construction Off-Site

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.0000e- 005	2.0000e- 005	2.1000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0677	0.0677	0.0000	0.0000	0.0677
Total	3.0000e- 005	2.0000e- 005	2.1000e- 004	0.0000	8.0000e- 005	0.0000	8.0000e- 005	2.0000e- 005	0.0000	2.0000e- 005	0.0000	0.0677	0.0677	0.0000	0.0000	0.0677

3.7 Architectural Coating - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	⁻ /yr		
Archit. Coating	1.0841					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
1	2.4000e- 003	0.0165	0.0166	3.0000e- 005		1.1600e- 003	1.1600e- 003		1.1600e- 003	1.1600e- 003	0.0000	2.2979	2.2979	1.9000e- 004	0.0000	2.3028
Total	1.0865	0.0165	0.0166	3.0000e- 005		1.1600e- 003	1.1600e- 003		1.1600e- 003	1.1600e- 003	0.0000	2.2979	2.2979	1.9000e- 004	0.0000	2.3028

CalEEMod Version: CalEEMod.2016.3.2 Page 23 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.7 Architectural Coating - 2019 <u>Unmitigated Construction Off-Site</u>

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5400e- 003	1.0900e- 003	0.0112	4.0000e- 005	4.1100e- 003	3.0000e- 005	4.1400e- 003	1.0900e- 003	2.0000e- 005	1.1200e- 003	0.0000	3.5341	3.5341	8.0000e- 005	0.0000	3.5360
Total	1.5400e- 003	1.0900e- 003	0.0112	4.0000e- 005	4.1100e- 003	3.0000e- 005	4.1400e- 003	1.0900e- 003	2.0000e- 005	1.1200e- 003	0.0000	3.5341	3.5341	8.0000e- 005	0.0000	3.5360

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Archit. Coating	1.0841					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.4000e- 003	0.0165	0.0166	3.0000e- 005		1.1600e- 003	1.1600e- 003		1.1600e- 003	1.1600e- 003	0.0000	2.2979	2.2979	1.9000e- 004	0.0000	2.3028
Total	1.0865	0.0165	0.0166	3.0000e- 005		1.1600e- 003	1.1600e- 003		1.1600e- 003	1.1600e- 003	0.0000	2.2979	2.2979	1.9000e- 004	0.0000	2.3028

CalEEMod Version: CalEEMod.2016.3.2 Page 24 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

3.7 Architectural Coating - 2019 Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.5400e- 003	1.0900e- 003	0.0112	4.0000e- 005	4.1100e- 003	3.0000e- 005	4.1400e- 003	1.0900e- 003	2.0000e- 005	1.1200e- 003	0.0000	3.5341	3.5341	8.0000e- 005	0.0000	3.5360
Total	1.5400e- 003	1.0900e- 003	0.0112	4.0000e- 005	4.1100e- 003	3.0000e- 005	4.1400e- 003	1.0900e- 003	2.0000e- 005	1.1200e- 003	0.0000	3.5341	3.5341	8.0000e- 005	0.0000	3.5360

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

CalEEMod Version: CalEEMod.2016.3.2 Page 25 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	/yr		
Mitigated	0.2345	0.5735	1.4495	3.0500e- 003	0.2870	2.9900e- 003	0.2900	0.0771	2.7700e- 003	0.0799	0.0000	280.4722	280.4722	0.0132	0.0000	280.8018
Unmitigated	0.2345	0.5735	1.4495	3.0500e- 003	0.2870	2.9900e- 003	0.2900	0.0771	2.7700e- 003	0.0799	0.0000	280.4722	280.4722	0.0132	0.0000	280.8018

4.2 Trip Summary Information

	Avei	rage Daily Trip Ra	ite	Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Enclosed Parking with Elevator	0.00	0.00	0.00		
Government Office Building	2,976.00	0.00	0.00	773,760	773,760
Parking Lot	0.00	0.00	0.00		
Total	2,976.00	0.00	0.00	773,760	773,760

4.3 Trip Type Information

		Miles			Trip %			Trip Purpos	e %
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Enclosed Parking with Elevator	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0
Government Office Building	1.00	1.00	1.00	33.00	62.00	5.00	100	0	0
Parking Lot	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Page 26 of 35

Date: 5/17/2018 11:45 AM

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	МН
Enclosed Parking with Elevator	0.448867	0.051210	0.277116	0.145918	0.016779	0.007633	0.027321	0.006813	0.004476	0.002855	0.009510	0.000605	0.000896
Government Office Building	0.448867	0.051210	0.277116	0.145918	0.016779	0.007633	0.027321	0.006813	0.004476	0.002855	0.009510	0.000605	0.000896
Parking Lot	0.448867	0.051210	0.277116	0.145918	0.016779	0.007633	0.027321	0.006813	0.004476	0.002855	0.009510	0.000605	0.000896

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Percent of Electricity Use Generated with Renewable Energy

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr												MT	/yr		
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	453.5089	453.5089	0.0480	9.9300e- 003	457.6683
Electricity Unmitigated	1				 	0.0000	0.0000		0.0000	0.0000	0.0000	647.8699	647.8699	0.0686	0.0142	653.8118
NaturalGas Mitigated	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033
NaturalGas Unmitigated	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033

CalEEMod Version: CalEEMod.2016.3.2 Page 27 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

5.2 Energy by Land Use - NaturalGas <u>Unmitigated</u>

	NaturalGa s Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr		tons/yr											MT	/yr		
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	3.59538e +006	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	,	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033

Mitigated

	NaturalGa s Use	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr		tons/yr											MT	/yr		
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government Office Building	3.59538e +006	0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134	,	0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	,	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		0.0194	0.1762	0.1481	1.0600e- 003		0.0134	0.0134		0.0134	0.0134	0.0000	191.8632	191.8632	3.6800e- 003	3.5200e- 003	193.0033

5.3 Energy by Land Use - Electricity <u>Unmitigated</u>

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Enclosed Parking with Elevator	2.8714e +006	356.8700	0.0378	7.8100e- 003	360.1430
Government Office Building	2.32128e +006	288.4987	0.0305	6.3200e- 003	291.1447
Parking Lot	20125	2.5012	2.6000e- 004	5.0000e- 005	2.5242
Total		647.8699	0.0686	0.0142	653.8118

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr		МТ	-/yr	
Enclosed Parking with Elevator	2.00998e +006	249.8090	0.0264	5.4700e- 003	252.1001
Government Office Building	1.6249e +006	201.9491	0.0214	4.4200e- 003	203.8013
Parking Lot	14087.5	1.7509	1.9000e- 004	4.0000e- 005	1.7669
Total		453.5089	0.0480	9.9300e- 003	457.6683

6.0 Area Detail

CalEEMod Version: CalEEMod.2016.3.2 Page 29 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category					ton	s/yr							MT	-/yr		
Mitigated	0.8708	6.0000e- 005	6.7100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140
Unmitigated	0.8708	6.0000e- 005	6.7100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140

6.2 Area by SubCategory Unmitigated

	ROG	NOx	СО	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr											MT	/yr		
Architectural Coating	0.1084					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7618					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.1000e- 004	6.0000e- 005	6.7100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140
Total	0.8708	6.0000e- 005	6.7100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140

CalEEMod Version: CalEEMod.2016.3.2 Page 30 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory		tons/yr											MT	⁷ /yr		
Architectural Coating	0.1084					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.7618		1 			0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.1000e- 004	6.0000e- 005	6.7100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140
Total	0.8708	6.0000e- 005	6.7100e- 003	0.0000		2.0000e- 005	2.0000e- 005		2.0000e- 005	2.0000e- 005	0.0000	0.0131	0.0131	3.0000e- 005	0.0000	0.0140

7.0 Water Detail

7.1 Mitigation Measures Water

CalEEMod Version: CalEEMod.2016.3.2 Page 31 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

	Total CO2	CH4	N2O	CO2e
Category		МТ	√yr	
		1.2077	0.0292	85.3150
Jgatou	46.4236	1.2077	0.0292	85.3150

7.2 Water by Land Use <u>Unmitigated</u>

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal				
Enclosed Parking with Elevator	0/0	0.0000	0.0000	0.0000	0.0000
Government Office Building	36.9507 / 22.6472	46.4236	1.2077	0.0292	85.3150
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000
Total		46.4236	1.2077	0.0292	85.3150

7.2 Water by Land Use

Mitigated

	Indoor/Out door Use	Total CO2	CH4	N2O	CO2e				
Land Use	Mgal	MT/yr							
Enclosed Parking with Elevator	0/0	0.0000	0.0000	0.0000	0.0000				
Government Office Building	36.9507 / 22.6472	46.4236	1.2077	0.0292	85.3150				
Parking Lot	0/0	0.0000	0.0000	0.0000	0.0000				
Total		46.4236	1.2077	0.0292	85.3150				

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e						
	MT/yr									
ga.ea	35.1134	2.0751	0.0000	86.9919						
	35.1134	2.0751	0.0000	86.9919						

8.2 Waste by Land Use

<u>Unmitigated</u>

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons		МТ	-/yr	
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000
Government Office Building	172.98	35.1134	2.0751	0.0000	86.9919
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		35.1134	2.0751	0.0000	86.9919

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e			
Land Use	tons	MT/yr						
Enclosed Parking with Elevator	0	0.0000	0.0000	0.0000	0.0000			
Government Office Building	172.98	35.1134	2.0751	0.0000	86.9919			
Parking Lot	0	0.0000	0.0000	0.0000	0.0000			
Total		35.1134	2.0751	0.0000	86.9919			

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type Number Heat Input/Day Heat Input/Year Boiler Rating Fuel Type
--

User Defined Equipment

Equipment Type	Number
=4	

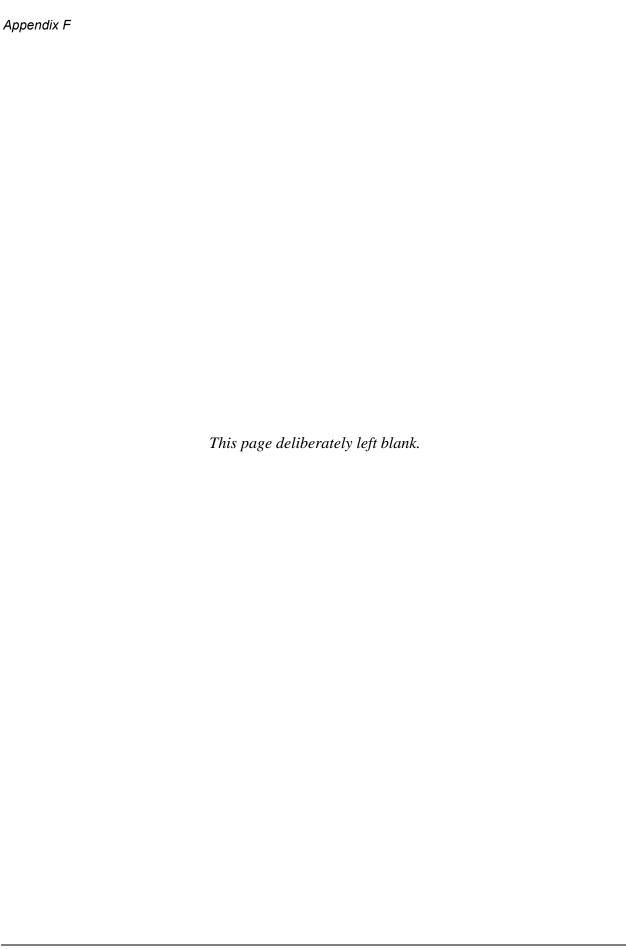
CalEEMod Version: CalEEMod.2016.3.2 Page 35 of 35 Date: 5/17/2018 11:45 AM

COB3 - Operational Emissions (2030; Revised May 2018) - San Mateo County, Annual

11.0 Vegetation

San Mateo County Government Center Campus Development Project

Appendix F: Revised Traffic Impact Assessment



May 24, 2018

Mr. Jim Mosier San Mateo County Project Development Unit 1402 Maple Street Redwood City, California

Subject: Addendum to the San Mateo County Government Center Campus

Improvement Project Traffic Impact Analysis

Dear Mr. Mosier:

The San Mateo County Government Center Campus Improvement Project Traffic Impact Analysis (TIA) report dated May 11, 2018 evaluated the potential traffic impacts related to the proposed construction of County Office Building #3 (COB3), a new parking structure, the relocation of the Lathrop House, the demolition of the Traffic Court and vacant Credit Union buildings, and the closure of two public streets to create a public plaza and promenade. As described in the TIA, COB3 was originally expected to have 121,000 to 156,000 square feet (s.f.) and be occupied by a total of 616 employees including 216 employees relocated from the Hall of Justice and County Office Building #1 within the County Government Center and 400 employees relocated from existing facilities outside the County Government Center.

Subsequently, the project plans have been revised such that COB3 is now planned to include 186,000 s.f. While the building size has increased to accommodate a variety of amenities, the number of employees expected to occupy COB3 is unchanged. The TIA estimated the project trips based on the number of new employees expected to work in the new COB3. Because the number of employees in COB3 is unchanged, the project trip estimates would not change. Therefore, the conclusions presented in the TIA would not be affected by the increase in square footage of the proposed new COB3.

Please do not hesitate to contact me if there are any questions.

Sincerely,

HEXAGON TRANSPORTATION CONSULTANTS, INC.

Michelle Hunt

Vice President and Principal Associate

nuchelle sount







San Mateo County Government Center Campus Improvement



Traffic Impact Analysis

Prepared for:

San Mateo County

May 11, 2018















Hexagon Transportation Consultants, Inc.

Hexagon Office: 4 North Second Street, Suite 400

San Jose, CA 95113

Hexagon Job Number: 17MH16

Phone: 408.971.6100



www.hextrans.com

Areawide Circulation Plans Corridor Studies Pavement Delineation Plans Traffic Handling Plans Impact Fees Interchange Analysis Parking Transportation Planning Traffic Calming Traffic Control Plans Traffic Simulation Traffic Impact Analysis Traffic Signal Design Travel Demand Forecasting

Table of Contents

	Summary	
1. Intro	duction	1
2. Exis	ting Conditions	9
3. Exis	ting Plus Project Conditions	20
4. Back	kground Conditions	31
5. Back	kground Plus Project Conditions	35
6. Cum	nulative Conditions	39
	er Transportation Issues	
	clusions	
Append	ices	
Appendix A	A Traffic Counts	
Appendix I	3 Volume Summary	
Appendix (C Level of Service Calculations	
List of 1	Tables	
Table ES	I Intersection Level of Service Summary	ii
Table 1	Signalized Intersection Level of Service Definitions Based on Control Delay	6
Table 2	Unsignalized Intersection Level of Service Definitions Based on Delay	6
Table 3	Existing Intersection Levels of Service	18
Table 4	Project Trip Generation Estimates	21
Table 5	Reassigned Parking Trip Generation Estimates	
Table 6	Existing Plus Project Intersection Levels of Service	27
Table 7	Freeway Ramp Capacity Summary	29
Table 8	Freeway Segment Capacity Summary	
Table 9	Background Level of Service Summary	
Table 10	Background Plus Project Level of Service Summary	
Table 11	Cumulative Level of Service Summary	
Table 12	Queuing Analysis Summary	
Table 13	Existing and Proposed TDM Measures and Estimated C/CAG Trip Credits	55
List of F	igures	
Figure 1	Site Location and Study Intersections	
9	Concept Plan Line	
Figure 3	Existing Bicycle Facilities	
Figure 4	Existing Transit Services	
Figure 5	Existing Lane Configurations	
Figure 6	Existing Traffic Volumes	
Figure 7	Project Trip Distribution	
Figure 8	Project Trip Assignment	
Figure 9	Existing Plus Project Traffic Volumes	
Figure 10	Background Traffic Volumes	
Figure 11	Background Plus Project Traffic Volumes	
Figure 12	Cumulative No Project Traffic Volumes	
Figure 13	Cumulative Traffic Volumes	
Figure 14	Conceptual Parking Plan	52



Executive Summary

This report presents the results of the traffic impact analysis conducted for the proposed San Mateo County Government Center Campus improvement project in Redwood City, California. The proposed campus improvement project includes the construction of County Office Building #3 (COB3) with 121,000 to 156,000 square feet (s.f.), a new parking structure with 850 to 1,200 stalls, the relocation of the Lathrop House, the demolition of the Traffic Court and vacant Credit Union buildings, and the closure of two public streets to create a public plaza and promenade. The proposed street closures include Hamilton Street between Bradford Street and Marshall Street, and County Center between Hamilton Street and Middlefield Road.

The proposed COB3 is expected to be occupied by a total of 616 employees including 216 employees relocated from the Hall of Justice and County Office Building #1 within the County Government Center, and 400 employees relocated from existing facilities outside the County Government Center. The vacated Hall of Justice space will be reoccupied by the Traffic Court and other departments in the building that are currently undersized.

This study was conducted for the purpose of identifying potential traffic impacts related to the proposed development. The potential impacts were evaluated in accordance with the standards set forth by Redwood City and C/CAG. The traffic analysis is based on AM and PM peak-hour levels of service for 15 signalized intersections, four unsignalized intersections, three freeway segments, and four freeway ramps.

Project Trip Generation

Trip generation for the proposed development was estimated based on trip rates published in the ITE *Trip Generation Manual, 9th Edition* and reviewed by County staff. Trips generated by the new County office building were estimated by applying the average rates for government office complex to the total number of employees expected to work in the new COB3 building. Trip reductions were applied to account for employees that will relocate to the COB3 building from other buildings on the County Government Center campus, and for the high level of transit ridership by County Government Center employees.

After applying the trip generation rates and the applicable reductions, the project is estimated to generate 2,976 net new daily trips, including 232 net AM peak hour trips and 300 PM peak hour trips. During the AM peak hour, the project would generate 208 net new inbound trips and 24 net new outbound trips. During the PM peak hour, the project would generate 116 net new inbound trips and 184 net new outbound trips. Although the majority of project trips during the peak commute hours would be by employees coming to and leaving work (inbound in the AM and outbound in the PM), the proposed office building would also generate a small number of trips in the off-peak direction due to



other trip purposes (e.g. visitor trips, deliveries, and employees traveling to an off-site meeting or job site).

The proposed project includes closing County Center between Middlefield Road and Hamilton Street, and Hamilton Street between County Center and Marshall Street in order to create a pedestrian promenade within the San Mateo County Government Center. The project would also result in the elimination of several off-street parking lots on the site of the proposed new office building and a small number of off-street parking spaces at the History Museum lot, where the Lathrop House is to be relocated. In addition, due to the existing parking shortage at the Government Center, the County currently leases a portion of the surface parking lot on Bradford Street east of Jefferson Avenue for use by County employees. Other County employees and visitors park in nearby on-street parking spaces and City parking lots and garages in Downtown Redwood City. The construction of the new parking structure is expected to provide ample parking to allow all County employees and visitors to park within the County Government Center. Thus, the project will shift the trips associated with 508 parking spaces¹ (226 County spaces eliminated by the project and 282 off-site public parking spaces used for excess unmet Government Center parking demand) to the proposed new parking structure. Traffic associated with the relocated parking spaces is estimated to include 265 AM peak hour trips and 224 PM peak hour trips.

Traffic Operations at Study Intersections

Traffic operations at the Redwood City and C/CAG CMP intersections were evaluated using TRAFFIX software to determine level of service. The level of service methodologies for signalized and unsignalized intersections are from the *2000 Highway Capacity Manual*. This methodology was disclosed to, and approved by, Redwood City and San Mateo County staff.

Significant Impacts

The intersection level of service analysis results are presented in Table ES-1. Based on Redwood City and C/CAG CMP level of service standards and impact criteria, the proposed project would generate a significant impact at one study intersection under existing plus project, background plus project, and cumulative conditions. This intersection is:

Main Street and Woodside Road Westbound Ramps (unsignalized) – PM peak hour

Project Mitigations

Main Street and Woodside Road Westbound Ramp

The Main Street and Woodside Road Westbound Ramps intersection operates at an unacceptable LOS F under existing conditions and would continue to operate at an unacceptable level under background no project and cumulative no project conditions during the PM peak hour. The stop-controlled westbound approach on the Woodside Road ramp encounters lengthy delays due to a lack of sufficient gaps on Main Street. Thus, even an extremely small increase in Main Street traffic as little as three trips would cause a significant impact. The project is expected to add 14 trips, causing the delay for the

¹ The project also would result in the elimination of existing surface parking spaces in the childcare center/jury lot, where the proposed new parking garage would be located. The new parking garage would replace the 212 jury parking spaces and 67 employee parking spaces in the same location, thus this change will not affect traffic patterns on the surrounding roadways.



Page | ii

Table ES 1

Intersection Level of Service Summary

		ExistingExisting Plus ProjectBa		Backgro	ound	Background Plus Project		Cumulative No Project		Cumulative									
ID	Intersection	Control ¹	Peak Hour	Count Date	Avg. Delay²	LOS	Avg. Delay ²	LOS	Incr. In Avg. Del.	Avg. Delay ²	LOS	Avg. Delay²	LOS	Incr. in Avg. Del.	Avg. Delay ²	LOS	Avg. Delay²	LOS	Incr. in Avg. Del.
1	Veterans Blvd and Whipple Ave	Signal	AM PM	04/25/17 04/25/17	36.0 55.5	D E	37.0 56.8	D E	1.0 1.3	38.6 64.3	D E	40.4 66.8	D E	1.8 2.5	46.6 75.5	D E	51.6 78.7	D E	5.0 3.2
2	Veterans Blvd and Brewster Ave	Signal	AM PM	05/24/16 05/24/16	25.4 30.7	C C	25.4 31.8	C C	0.0 1.1	26.9 31.0	C C	26.9 32.1	C C	0.0 1.1	26.8 30.9	C C	26.9 32.1	C C	0.1 1.2
3	Veterans Blvd and Middlefield Rd	Signal	AM PM	08/29/17 08/28/17	11.0 15.8	B B	11.4 18.3	B B	0.4 2.5	10.2 14.6	B B	10.6 17.1	В	0.4 2.5	10.2 14.4	B B	10.5 16.8	B B	0.3
4	Veterans Blvd and Jefferson Ave	Signal	AM PM	04/12/16 04/12/16	18.1 17.4	B B	18.0 17.3	ВВ	-0.1 -0.1	23.0 23.8	C C	22.9 23.7	C	-0.1 -0.1	22.8 23.4	C C	22.7 23.3	C	-0.1 -0.1
5	Veterans Blvd and Maple St	Signal	AM PM	05/10/16 05/10/16	25.8 31.8	C C	25.7 31.8	C	-0.1 0.0	28.1 33.5	C C	28.0 33.4	C	-0.1 -0.1	30.7 37.4	C D	30.7 37.5	C D	0.0
6	Veterans Blvd and Woodside Rd ³	Signal	AM PM	04/20/17 04/20/17	14.9 > 80	В F	17.6 > 80	В F	2.7 1.2	25.4 > 80	C F	25.2 >80	C F	-0.2 2.3	25.7 > 80	С F	25.8 > 80	С F	0.1 3.7
7	Industrial Way/Winslow St and Whipple Ave	Signal	AM PM	05/02/17 05/02/17	24.5 26.5	C C	24.5 26.7	C C	0.0	24.5 26.8	C C	24.5 26.9	C C	0.0	24.7 28.2	C C	24.7 28.4	C C	0.0
8	Winslow St and Brewster Ave	Signal	AM PM	08/29/17 08/29/17	34.2 35.9	C D	34.5 36.6	C D	0.3 0.7	34.5 37.7	C D	35.4 38.7	D D	0.9	35.0 39.2	C D	35.9 40.4	D D	0.9 1.2
9	Winslow St and Driveway	owsc	AM PM	08/29/17 08/29/17	10.7 12.0	B B	12.7 15.1	B C	2.0	11.0 12.9	B B	13.2 17.3	B C	2.2	11.3 13.4	B B	13.7 18.4	B C	2.4
10	Driveway and Middlefield Rd	owsc	AM PM	08/29/17 08/29/17	12.5 10.5	B B	14.1 11.8	ВВ	1.6 1.3	12.5 10.5	B B	14.1 11.8	ВВ	1.6 1.3	12.9 10.7	B B	14.6 12.1	ВВ	1.7 1.4
11	Arguello St and Whipple Ave	Signal	AM PM	08/29/17 08/29/17	21.1 22.5	C C	21.0 22.5	C	-0.1 0.0	20.7	C C	20.6	C	-0.1 0.0	21.0 23.0	C C	20.9	C	-0.1 0.0
12	Middlefield Rd and Jefferson Ave	Signal	AM PM	08/24/16 08/24/16	27.6 30.3	C	27.6 30.6	C	0.0 0.3	28.2 33.3	C C	28.2 33.7	C	0.0 0.4	28.5 34.8	C C	28.5 35.2	C D	0.0 0.4
13	Middlefield Rd and Main St	Signal	AM PM	03/22/16	30.7 31.9	C C	30.7 32.0	C	0.0	32.4 33.4	C C	32.5 33.5	C	0.1	33.2 34.1	C C	33.3 34.3	C	0.1
14	El Camino Real and Whipple Ave*	Signal	AM PM	05/24/16 05/24/16	32.8 38.0	C D	33.7 39.5	C D	0.9 1.5	33.2 40.1	C D	34.2 41.9	C D	1.0	34.2 44.5	C D	35.3 47.3	D D	1.1
15	El Camino Real and Jefferson Ave	Signal	AM PM	03/22/16	36.2 39.3	D D	36.2 39.3	D D	0.0	37.1 42.3	D D	37.1 42.4	D D	0.0	39.0 46.2	D D	39.0 46.3	D D	0.0
16	Main St and Woodside Rd WB Ramps	TWSC	AM PM	03/22/17	19.6 > 50	С F	20.2	C F	0.6 7.9	39.3 >50	E F	41.7 >50	E F	2.4 36.7	49.2 >50	E	>50	F	3.3 44.4
17	El Camino Real and Woodside Rd EB Ramps	owsc	AM PM	03/22/17 03/22/17	15.6 21.6	C C	15.8 22.1	C C	0.2 0.5	18.2 27.8	C D	18.6 28.5	C D	0.4 0.7	19.9 32.9	C D	20.4	C D	0.5 1.0
18	El Camino Real and Brewster Ave	Signal	AM PM	05/24/16 05/24/16	17.7 18.6	B B	18.1	ВВ	0.4	18.6 19.5	B B	19.0 19.7	В	0.4	19.3 20.0	B B	19.8 20.2	B C	0.5
19	Marshall St and Jefferson Ave	Signal	AM PM	11/02/17 11/02/17	22.8 22.2	C	22.8 22.3	C	0.0	23.0 23.3	C	23.0	C	0.0	23.7 23.6	C	23.7	C	0.0

Notes:

* Indicates San Mateo County CMP intersection. LOS standard for El Camino Real and Whipple Ave is LOS E.

¹ Control Type Definitions: OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control

Intersection level of service for OWSC and TWSC intersection is represented by the delay for the stop controlled approach. Intersection level of service for all other control types is represented by average delay for all movements.

Observations show the intersection operates at LOS F during the PM peak hour due to queue spillback from the downstream intersection at Woodside/Broadway.

Bold indicates a substandard level of service.

Outline indicates a significant project impact.



worst approach (westbound) at this intersection to increase by more than 5.0 seconds, which is the City's significance threshold. Additionally, based on the peak-hour signal warrant analysis for the intersection, signalization would be warranted under existing plus project, background plus project and cumulative plus project conditions. Thus, by meeting these two criteria, the addition of project traffic would result in a significant impact.

This intersection was identified in the Downtown Precise Plan Draft EIR, dated August 26, 2010, as operating at an unacceptable LOS F during both peak hours under the cumulative conditions. The DPP DEIR identifies signalization of this intersection to mitigate this impact (Mitigation 9-12). This mitigation has been added to the Redwood City Traffic Impact Fee (TIF) projects list. The County will coordinate with the City to pursue the implementation of this improvement. However, the improvement is within the Woodside Road (SR 84) right-of-way and will require Caltrans approval. If Caltrans does not approve, and the City cannot implement these improvements, then this impact would be significant and unavoidable.

Freeway Segment and Ramp Analysis

The level of service standards for freeways in San Mateo County vary by segment from LOS D to LOS F according to the CMP. The segment along US 101 between Whipple Avenue and the Santa Clara County/San Mateo County border has a LOS standard of F (in both directions), and the segment between Whipple Avenue and SR 92 has a LOS standard of E. The project's impact on the freeway segments analyzed would be less than significant as the added project trips would represent less than one percent of the freeways capacity.

The addition of project trips to the study freeway ramps would not cause any ramps to exceed capacity during the AM or PM peak-hour. This project's impact to the nearby freeway ramps would be less than significant.

Alternative Project Access Scenario

An alternative project access scenario was evaluated that includes a new driveway on Veterans Boulevard that would connect to the proposed new parking structure. The new and existing parking structures also would have direct access to Middlefield Road and Winslow Street via the existing site driveways. Due to the existing raised median on Veterans Boulevard, the new driveway would be restricted to right turns only in and out.

The analysis results show that a new driveway on Veterans Boulevard would cause little change to the intersection levels of service and vehicle delay. Thus, the alternative access scenario would result in the same impact at the intersection of Main Street and the Woodside Road Westbound Ramps and require the same mitigation measure as described above.

The new project driveway on Veterans Boulevard would have a positive impact on traffic operations by reducing the length of vehicle queues for selected intersection turn movements. Furthermore, the addition of a third project driveway would provide flexibility in the case of an emergency or a malfunction of the parking access controls.

Queuing Analysis

A queueing analysis was conducted for eight left-turn movements at seven study intersections. These movements were selected for analysis due to the project adding a relatively significant number of project related traffic during one or both peak hours. The analysis shows that four of the eight left-turn



queues would exceed the existing storage during one or more analysis conditions. These four movements include:

- Westbound left-turn from Whipple Avenue onto Veterans Boulevard
- Eastbound left-turn from Brewster Avenue onto Veterans Boulevard
- Eastbound left-turn from Middlefield Road onto Veterans Boulevard
- Westbound left-turn from Brewster Avenue onto Winslow Street

The analysis concluded that the 95th percentile queues for each of these movements would exceed the existing storage during at least one analysis scenario. 95th percentile queues that would exceed existing storage pockets by one vehicle are not expected to cause any operational issues. The extension of turn-pockets to meet 95th percentile queues that exceeded existing storage by more than one vehicle was found to be infeasible at all locations. However, the left-turn storage on the eastbound Middlefield Road approach to Veterans Boulevard could be increase by converting the right-turn lane to a shared left/right-turn lane. This modification would require coordination with the City of Redwood City to restripe Middlefield Road to move the bike lane adjacent to the curb, add a bike box at the front of the shared left/right-turn lane, and modify the signal. The improvement is not required to mitigate an impact on level of service but would facilitate outbound traffic flow exiting the Government Center onto Middlefield Road.

Site Access and On-Site Circulation

A brief qualitative review of the project's conceptual site plan was conducted to determine the adequacy of the proposed project to meet the on-site access and circulation needs. Employees and visitors of the new COB3 as well as reassigned existing patrons driving to the site would park in the new parking structure located on the north site of the project site. This parking garage would be accessed via the existing County Government Center driveways on Winslow Street and Middlefield Road.

Driveway Operations

Based on AM and PM observations at the two driveways the addition of project traffic is not expected to cause any major operational issues. The project driveway on Winslow Street is located approximately 200 feet south of the Winslow Street and Brewster Avenue intersection. This driveway is 26 feet wide with a single lane in each direction. This driveway experiences relatively low usage, likely due to a lack of visible signage for vehicles traveling on Winslow Street. It is recommended that the County provide additional signage along Winslow Street the clearly and understandably notifies drivers that public parking can be accessed from this driveway. The project driveway on Middlefield Road is located approximately 150 feet west of the Veterans Boulevard and Middlefield Road intersection. This driveway is 36 feet wide with three lanes (one inbound and two outbound). It is recommended that the driveway retain the existing striping for the two outbound travel lanes with one exclusive left-turn lane and one exclusive right-turn lane.

Sight Distance

The outbound driveways on Middlefield Road and Winslow Street should be free and clear of any obstructions to maximize sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on adjacent streets. Landscaping and parking should not conflict with a driver's ability to locate a gap in traffic and see oncoming pedestrians and bicyclists. Based on Caltrans sight distance standards, 150 feet of sight distance is required at both driveways. On-street parking is restricted adjacent to both driveways an adequate amount that 150-feet of sight distance is provided at both locations.



On-Site Circulation

The new parking garage would have one access point on the existing driveway aisle serving the existing parking structure and connecting the two driveways. This access point would be at approximately the same location as the access point to the existing juror parking lot and would be offset from the existing parking garage entrance by approximately 80 feet. At the new parking garage entrance, it is recommended that the east approach (outbound from the new garage) be under stop control while the north and south approaches would be uncontrolled.

Due to the conceptual nature of the project site plans provided, a full analysis of on-site circulation is not included in this TIA. A full on-site circulation analysis should be conducted once the designs for the parking structure and layout have been finalized.

Transit, Pedestrian and Bicycle Analysis

The project is well served by existing pedestrian, bicycle, and transit facilities. The project would result in an increase in the number of conflicts where vehicles cross the path of pedestrians and bicycles due to an increase in vehicle traffic at the project driveways. The County will coordinate with the City of Redwood City to improve the Class II bicycle facility and right-turn movement from southbound Veterans Boulevard to westbound Middlefield Road. In addition, it is recommended that the proposed COB3 include additional bicycle parking facilities within close proximity of building entrances.

The project is not expected to cause any impacts to the local transit services. Based on surveys conducted of existing County Government Center employees, it is expected that 11 percent of the new employees (44 employees) would commute to the campus using transit. This increase in 44 riders would not result in an impact on local transit services due to the relatively large availability of bus and train services within walking distance of the project site.

The project would improve the pedestrian environment in the project vicinity by creating a large pedestrian promenade as part of the closure of County Center and Hamilton Street. This pedestrian promenade would provide a safe pedestrian environment, connecting all office buildings in the Government Center. The County will consult with the City of Redwood City on potential improvements to crosswalks at the following three intersections: Middlefield Road and Marshall Street, Middlefield Road and Bradford Street, and Jefferson Avenue and Bradford Street. Elsewhere, the existing pedestrian network in Downtown Redwood City provides safe and comfortable access between the COB3 and transit services.



1. Introduction

This report presents the results of the traffic impact analysis conducted for the proposed San Mateo County Government Center Campus improvement project in Redwood City, California. The proposed campus improvement project includes the construction of County Office Building #3 (COB3) with 121,000 to 156,000 square feet (s.f.), a new parking structure with 850 to 1,200 stalls, the relocation of the Lathrop House, the demolition of the Traffic Court and vacant Credit Union buildings, and the closure of two public streets to create a public plaza and promenade. The proposed street closures include Hamilton Street between Bradford Street and Marshall Street, and County Center between Hamilton Street and Middlefield Road.

The proposed COB3 is expected to be occupied by a total of 616 employees including 216 employees relocated from the Hall of Justice and County Office Building #1 within the County Government Center, and 400 employees relocated from existing facilities outside the County Government Center. The vacated Hall of Justice space will be reoccupied by the Traffic Court and other departments in the Hall of Justice building that are currently undersized.

The project site and the surrounding study area are shown on Figure 1. The proposed concept plan line is shown on Figure 2.

Scope of Study

This study was conducted for the purposes of identifying the potential traffic impacts related to the proposed development. The potential impacts of the project were evaluated in accordance with the requirements of Redwood City and C/CAG. The C/CAG administers the San Mateo County Congestion Management Program (CMP).

The traffic study includes an analysis of AM and PM peak hour traffic conditions for 15 signalized intersections, 4 unsignalized intersections, 3 freeway segments, and 4 freeway ramps in the vicinity of the project site. The study also includes an analysis of transit, bicycle, and pedestrian access.

Study Intersections

- 1. Veterans Boulevard & Whipple Avenue
- 2. Veterans Boulevard & Brewster Avenue
- 3. Veterans Boulevard & Middlefield Road
- 4. Veterans Boulevard & Jefferson Avenue
- 5. Veterans Boulevard & Maple Street
- 6. Veterans Boulevard & Woodside Road
- 7. Industrial Way/Winslow Street & Whipple Avenue
- 8. Winslow Street & Brewster Avenue



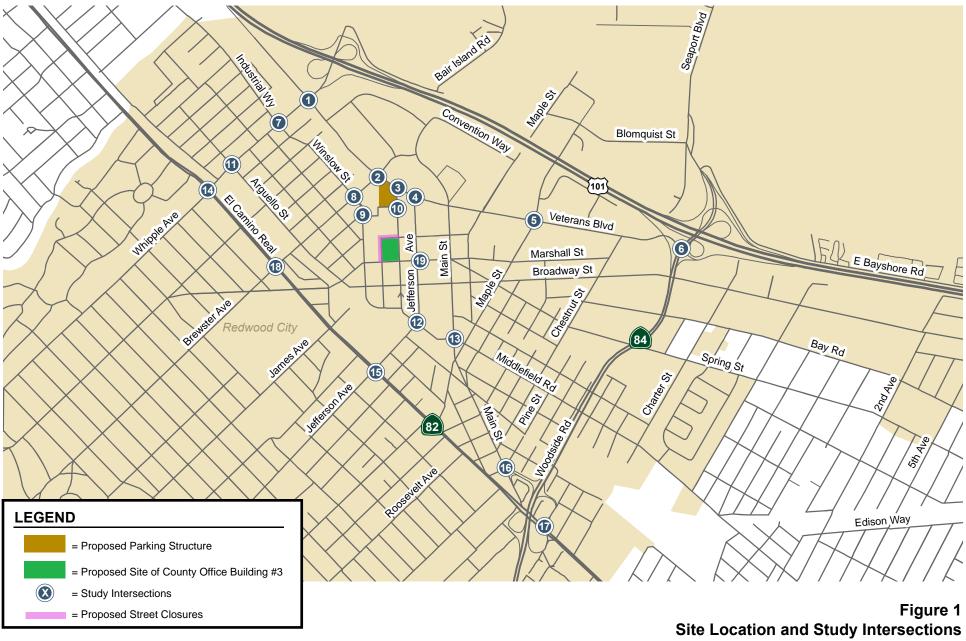








Figure 2 Concept Plan Line



- 9. Winslow Street & project driveway (unsignalized)
- 10. Project driveway & Middlefield Road (unsignalized)
- 11. Arguello Street & Whipple Avenue
- 12. Middlefield Road & Jefferson Avenue
- 13. Middlefield Road & Main Street
- 14. El Camino Real & Whipple Avenue (CMP)
- 15. El Camino Real & Jefferson Avenue
- 16. Main Street & Woodside Road Westbound Ramps (unsignalized)
- 17. El Camino Real & Woodside Road Eastbound Ramps (unsignalized)
- 18. El Camino Real & Brewster Avenue
- 19. Marshall Street & Jefferson Avenue

Study Freeway Segments

- 1. US 101 between Holly Street and Whipple Avenue
- 2. US 101 between Whipple Avenue and Seaport Boulevard/Woodside Road
- 3. US 101 between Seaport Boulevard/Woodside Road and Marsh Road

Study Freeway Ramps

- 1. US 101 Southbound On Ramp from Woodside Road
- 2. US 101 Northbound Off Ramp to Southbound Woodside Road
- 3. US 101 Northbound On Ramp from Eastbound Whipple Avenue
- 4. US 101 Southbound Off Ramp to Veterans Boulevard/Whipple Avenue

Traffic conditions at the study intersections were analyzed for both the weekday AM and PM peak hours of adjacent street traffic. The AM peak hour is expected to occur between 7:00 AM and 9:00 AM and the PM peak hour is expected to occur between 4:00 PM and 6:00 PM on a regular weekday. These are the peak commute hours during which most traffic congestion occurs on the roadways.

Traffic conditions were evaluated for the following scenarios:

- Scenario 1: Existing Conditions. Existing traffic volumes at study intersections were based on traffic counts conducted in 2016 and 2017. The 19 study intersections were evaluated with a level of service analysis using the TRAFFIX software in accordance with the 2000 Highway Capacity Manual methodology. Study freeway segments were analyzed in accordance with C/CAG CMP methods and study freeway ramps were analyzed using demand to capacity ratios.
- Scenario 2: Background Conditions. Background traffic volumes reflect traffic added by nearby approved projects that have not been completed or occupied. A list of approved projects as provided by the City was used to generate approved project trips. These approved trips were added to existing traffic volumes to generate background conditions traffic volumes. Background conditions includes any roadway improvements associated with the approved projects.
- Scenario 3: Project Conditions. Existing plus project traffic volumes were estimated by adding to existing traffic volumes the additional traffic generated by the project. Existing plus project conditions were evaluated relative to existing conditions. Background plus project traffic volumes with the project were estimated by adding to background traffic volumes the additional traffic generated by the project. Background plus project conditions were evaluated relative to background conditions in order to determine potential project impacts.



Scenario 4: Cumulative Conditions. The cumulative no project traffic volumes were estimated by adding to background traffic volumes the traffic generated by the proposed Harbor View Place project and a growth factor to account for other pending projects. This scenario assumes a cumulative growth horizon of 5 years. Project generated traffic was added to the cumulative no project volumes to generate cumulative plus project conditions traffic volumes.

Methodology

This section presents the methods used to determine the traffic conditions for each scenario described above. It includes descriptions of the data requirements, the analysis methodologies, the applicable level of service standards, and the significant impact criteria.

Data Requirements

The data required for the analysis were obtained from new traffic counts, previous studies, field observations, and Redwood City and San Mateo County staff. The following data were obtained from these sources.

- Existing intersection peak-hour volumes
- Lane geometries
- Signal timing and phasing
- Trip generation or trip assignment for approved but not yet constructed projects

Intersection Level of Service Methodologies

Traffic conditions at the study intersections were evaluated using level of service (LOS). *Level of Service* is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays.

This study utilized the TRAFFIX software to determine intersection level of service. The TRAFFIX software is based on the 2000 Highway Capacity Manual (HCM) methodology for signalized and unsignalized intersections. This method evaluates intersection operations on the basis of average control delay time for all vehicles at the intersection. This average delay can then be correlated to a level of service. Table 1 presents the level of service definitions for signalized intersections. The level of service definition for unsignalized intersections is presented in Table 2. Note that for unsignalized intersections under two-way or side-street stop-control, the level of service is reported for the worst approach.

Freeway Ramps

A freeway ramp analysis was performed in order to verify that the freeway ramps would have sufficient capacity to serve the expected traffic volumes with and without the project. This analysis consisted of a volume-to-capacity ratio evaluation of the freeway ramps at the selected interchanges. The ramp capacities were obtained from the *Highway Capacity Manual 2000* and consider both the free-flow speed and the number of lanes on the ramp.



Table 1 Signalized Intersection Level of Service Definitions Based on Control Delay

Level of Service	Description	Average Control Delay Per Vehicle (sec.)
А	Signal progression is extremely favorable. Most vehicles arrive during the green phase and do not stop at all. Short cycle lengths may also contribute to the very low vehicle delay.	10.0 or less
В	Operations characterized by good signal progression and/or short cycle lengths. More vehicles stop than with LOS A, causing higher levels of average vehicle delay.	10.1 to 20.0
С	Higher delays may result from fair signal progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant, though some vehicles may still pass through the intersection without stopping.	20.1 to 35.0
D	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable signal progression, long cycle lengths, or high volume-to-capacity (V/C) ratios. Many vehicles stop and individual cycle failures are noticeable.	35.1 to 55.0
E	This is considered to be the limit of acceptable delay. These high delay values generally indicate poor signal progression, long cycle lengths, and high volume-to-capacity (V/C) ratios. Individual cycle failures occur frequently.	55.1 to 80.0
F	This level of delay is considered unacceptable by most drivers. This condition often occurs with oversaturation, that is, when arrival flow rates exceed the capacity of the intersection. Poor progression and long cycle lengths may also be major contributing causes of such delay levels.	greater than 80.0
Source: Tran	asportation Research Board, 2000 Highway Capacity Manual (Washington, D.C., 2000) p10-	-16.

Table 2
Unsignalized Intersection Level of Service Definitions Based on Delay

Level of Service	Description	Average Delay Per Vehicle (Sec.)
А	Little or no traffic delay	10.0 or less
В	Short traffic delays	10.1 to 15.0
С	Average traffic delays	15.1 to 25.0
D	Long traffic delays	25.1 to 35.0
E	Very long traffic delays	35.1 to 50.0
F	Extreme traffic delays	greater than 50.0
Source: Transportation Research Board, 2000 Highway Capacity Manual (Washington, D.C., 2000) p17-2.		



Freeway Segments

The study freeway segments were analyzed based on the City/County Association of Governments of San Mateo County (C/CAG) CMP guidelines. C/CAG has established LOS E as the minimum acceptable level of service for all segments of US 101 within San Mateo County, unless the segment was operating at LOS F in 1991 (the date when the CMP was first adopted), in which case the LOS standard is LOS F (Final San Mateo County Congestion Management Program, 2011). The segment of US 101 between Holly Street and Whipple Avenue is subject to the LOS E standard, while the other study freeway segments south of Whipple Avenue are subject to the LOS F standard.

Level of Service Standards and Significant Impact Critera

City of Redwood City

The City of Redwood City has established LOS D as the minimum vehicular LOS standard. According to common Redwood City practice, traffic impacts at a study intersection would be considered significant if the project would cause:

Signalized Intersection

- 1. Operations at a signalized intersection to deteriorate from an acceptable level (LOS D or better) to an unacceptable level (LOS E or F); or
- 2. Average delay at a signalized intersection operating at an unacceptable level (LOS E or F) to increase by 5 seconds or more.

Unsignalized Intersection

- Operations at an unsignalized intersection to deteriorate from an acceptable level (LOS D or better) to an unacceptable level (LOS E or F); or
- Delay at an unsignalized intersection operating at an unacceptable level (LOS E or F) to increase by 5 seconds or more; <u>and</u> traffic volumes at the intersection satisfy the Caltrans peakhour volume signal warrant for traffic signal installation.

A significant impact by the City of Redwood City standards is said to be satisfactorily mitigated when measures are implemented that eliminates the project impact.

CMP Intersection

The intersection of El Camino Real (SR 82) and Whipple Avenue is a CMP intersection. San Mateo County CMP intersections were analyzed at a base level in 1990 and 1991. Intersections performing at an LOS F at this time were set to have a standard of LOS F. Additional intersections were set at the LOS standard of one letter designation worse than their projected LOS for the year 2000. The intersection of El Camino Real and Whipple Avenue has a standard of LOS E or better.

Freeway Segments

A freeway segment is considered to operate at an acceptable level of service if the segment operates at or better than the level of service standard identified for that segment by the County congestion management agency. C/CAG's level of service standard for the segment of US 101 north of Whipple Avenue is LOS E. C/CAG has established LOS F as the standard for the segments of US 101 south of Whipple Avenue.



Relevant Plans and Policies

Redwood City Transportation Impact Mitigation Fee Program

The Redwood City Transportation Impact Mitigation Fee Study (TIF) has been prepared and adopted by the City to establish a source of funding for future transportation system capital improvements in the City. The transportation fee program has been formulated to fully fund a variety of transportation improvement projects located throughout the City. The list of transportation projects associated with the transportation fee is on file with the Redwood City Community Development Department and is subject to amendment periodically. Notable TIF projects within the vicinity of the proposed project include the addition of an eastbound right-turn lane at Veterans Boulevard/Whipple Avenue, and the signalization of the Main Street and Woodside Road Westbound Ramp intersection. In addition, the TIF includes area-wide improvements and projects to include alternative and transit modes such as neighborhood traffic management programs, a City-based shuttle system, a transportation demand management coordinator, and miscellaneous transit, pedestrian, and bicycle projects throughout the City.

US 101/SR 84 (Woodside Road) Interchange Improvement Project

The City of Redwood City, in cooperation with the California DOT and SMCTA is currently proposing to reconstruct the US 101 and Woodside Road interchange. The proposal includes modifying the on- and off-ramp configuration at the interchange to improve traffic flow, increase safety, and better accommodate pedestrian and bicycle access across US 101. The project is expected to be completed by 2023. Key components of the project include redesign of the existing southbound off-ramp termini from a five-legged intersection to a four-legged intersection, a direct Veterans Boulevard ramp connection to US 101 to reduce vehicular traffic on Woodside Road, perpendicular ramp termini to Woodside Road to allow for improved crossing for both pedestrians and bicyclists, and Class I multiuse paths on the south side of the interchange and along the UPRR corridor to provide safer pedestrian/bicycle access across US 101.

Report Organization

The remainder of this report is divided into eight chapters. Chapter 2 describes the existing roadway network, transit services and pedestrian facilities. Chapter 3 describes the methods used to estimate project traffic and its impact on the transportations system including intersections and freeways. Chapter 4 describes the background scenario conditions and approved projects in Redwood City. Chapter 5 describes the background plus project scenario conditions and related impacts on the transportation system. Chapter 6 describes the cumulative no project and cumulative scenario conditions including the determination of a growth factor and impacts related to the project. Chapter 7 evaluates an alternative project access scenario that includes a new driveway to and from the proposed new parking structure on Veterans Boulevard. Chapter 8 presents the projects impacts on other transportation issues including transit, bicycle, and pedestrian facilities, and vehicle queueing. Chapter 9 includes a summary of project impacts, any proposed mitigation measures, and recommended project improvements.



2. **Existing Conditions**

This chapter describes the existing conditions for transportation facilities in the vicinity of the site, including the roadway network, transit service, pedestrian and bicycle facilities.

Existing Roadway Network

Regional access to the project site is provided via US 101, I-280, El Camino Real, and Woodside Road.

US 101 is a north/south freeway that extends from San Francisco through San Mateo County. In the project vicinity, US 101 has eight mixed-flow lanes. US 101 provides site access via full interchanges at Whipple Avenue and Woodside Road.

I-280 is a north/south freeway that extends from San Francisco to San Jose. In the project vicinity, I-280 has eight mixed-flow lanes. I-280 provides access to Downtown Redwood City via full interchanges at Edgewood Road and Farm Hill Boulevard.

El Camino Real (SR 82) is a six-lane north-south arterial that extends from Santa Clara north into South San Francisco.

Woodside Road (SR 84) is a four-lane east-west arterial that extends from US 101, west to I-280 and through Woodside. Further west of I-280, Woodside Road becomes La Honda Road and extends all the way to Cabrillo Highway (SR 1).

Local access to the site is provided by Whipple Avenue, Brewster Avenue, Veterans Boulevard, Main Street, Broadway, Jefferson Avenue, Middlefield Road, Marshall Street, and Winslow Street.

Whipple Avenue is a two- to four-lane roadway that extends from US 101, west through Redwood City until its terminus at Upland Road west of Alameda de las Pulgas. Whipple Avenue is a four-lane road between Veterans Boulevard and El Camino Real, and provides access to US 101 northbound and southbound via a full interchange.

Brewster Avenue is a two- to three-lane roadway that extends from Main Street, east of Veterans Boulevard, to Upland Road, near Alameda de las Pulgas. In the vicinity of the project site, Brewster Avenue has three lanes, one each way with a center turn lane.

Veterans Boulevard is a two- to six-lane arterial that extends from its inception point at US 101 north of Whipple Avenue, southeasterly to its termination point at Woodside Road. In the vicinity of the project site, Veterans Boulevard has six lanes and is immediately east of the proposed new parking structure at the County Government Center.



Main Street is a two- to four-lane roadway that extends between Convention Way and El Camino Real. Main Street extends east-west between Veterans Boulevard to its intersection with Maple Street, where it turns more north-south until its intersection with El Camino Real near Woodside Road. In the project vicinity, Main Street is a three-lane road with one lane in each direction and one two-way-left-turn lane.

Broadway is a two- to four-lane roadway that extends from Hopkins Avenue, west of El Camino Real, to its termination point at Fifth Avenue. In the vicinity of the project site, Broadway has two lanes.

Jefferson Avenue is a two- to four-lane roadway that extends westward from Veterans Boulevard until its terminus at Cañada Road in Woodside. In the vicinity of the project site, Jefferson Avenue is a four-lane roadway.

Middlefield Road is a two- to four-lane arterial that extends from Mountain View to its termination point at Veterans Boulevard in Downtown Redwood City. In the vicinity of the project site, Middlefield Road has two lanes and is immediately south of the proposed new parking garage and COB3 at the County Government Center. Direct access to the new parking garage will be provided via a single full-access driveway on Middlefield Road.

Winslow Street is a two-lane roadway that extends from Middlefield Road to Whipple Avenue, where it continues as Industrial Way. In the vicinity of the project site, Winslow Street has three lanes, one in each direction and a center two-way-left-turn lane. Winslow Street will provide direct access to the proposed new parking garage via a single full-access driveway.

Marshall Street is a two- to three-lane roadway that extends from Broadway to Chestnut Street. In the vicinity of the project site, Marshall Street has three lanes, one in each direction with a center two-way-left-turn lane. Marshall Street serves is immediately west of the proposed new COB3.

Bicycle Facilities

Bicycle facilities include bike paths, bike lanes, and bike routes. Bike paths (Class I facilities) are pathways separate from roadways that are designated for use by bicycles. Often, these pathways also allow pedestrian access. Bike lanes (Class II facilities) are lanes on roadways designated for use by bicycles with special lane markings, pavement legends, and signage. Bike routes (Class III facilities) are existing rights-of-way that accommodate bicycles but are not separate from existing travel lanes. Class III routes are typically designated with only signs or sharrows (painted, on-road bike markings). The existing bicycle facilities in the project vicinity are shown on Figure 3.

The project is relatively well served by existing Class II and Class III bicycle facilities. Class III routes in the project vicinity include:

- Whipple Avenue
- Winslow Street/Middlefield Road between Broadway and Cassia Street
- Arguello Street between Brewster Avenue and Broadway
- Jefferson Avenue west of El Camino Real

Class II bicycle lanes in the project vicinity include:

- Veterans Boulevard between Whipple Avenue and Chestnut Street
- Industrial Way/Winslow Street between Harbor Boulevard in San Carlos and Broadway
- Arguello Street between Whipple Avenue and Brewster Avenue
- Brewster Avenue between Main and Warren Streets and between Arch and Fulton Streets
- Broadway between El Camino Real and Hopkins Avenue
- Marshall Street between Arguello Street and Walnut Street



- Middlefield Road between Veterans Boulevard and Bradford Street
- Main Street between Veterans Boulevard and Convention Way

The Bay Trail is located approximately half a mile east of the project site. The Bay Trail is a planned, 500-mile bicycle and pedestrian trail that will extend around the entire San Francisco Bay. Currently, about 350 miles of the trail have been completed. The Bay Trail can be accessed from the project site at the Whipple Avenue and East Bayshore Road intersection. Currently, this segment only provides access to areas north of the project site, including Redwood Shores. An additional Class I bicycle and pedestrian trail is located adjacent to Seaport Boulevard, approximately two thirds of a mile from the project site, providing access to the Pacific Shores business park.

Existing bicycle counts were conducted as part of the peak-hour turning movement counts at the study intersections during the AM and PM peak periods. The traffic count data are included in Appendix A.

Pedestrian Facilities

Pedestrian facilities in the project vicinity include sidewalks along all project frontages. In addition, crosswalks are present on most approaches at the surrounding intersections. Two exceptions are the Veterans/Middlefield intersection and the Veterans/Jefferson intersection, which are missing crosswalks on the north Veterans Boulevard approach. Pedestrian connections to the surrounding area are relatively good, including access to the Redwood City transit center and Caltrain station.

Transit Services

The project site is well served by many existing transit services including SamTrans (San Mateo County Transit District) and Caltrain. These services are described below and shown on Figure 4.

SamTrans Bus Service

SamTrans has 13 bus routes that operate within a ¼ mile of the project site, including ten serving the Redwood City Transit Center. SamTrans also provides paratransit service to those individuals who cannot independently use the regular bus service. Redi-Wheels, SamTrans' paratransit service, serves San Mateo County and select surrounding cities.

Route 270 serves the Redwood City Transit Center and circulates through downtown via Jefferson Avenue, Broadway, Bay Road, and Maple Street, while serving Kaiser Hospital and the east side of US 101. Route 270 operates between 6:30 AM and 7:00 PM weekdays on 60-minute headways. This route serves the Jefferson and Marshall bus stop located less than 1,000 feet from the proposed COB3 site.

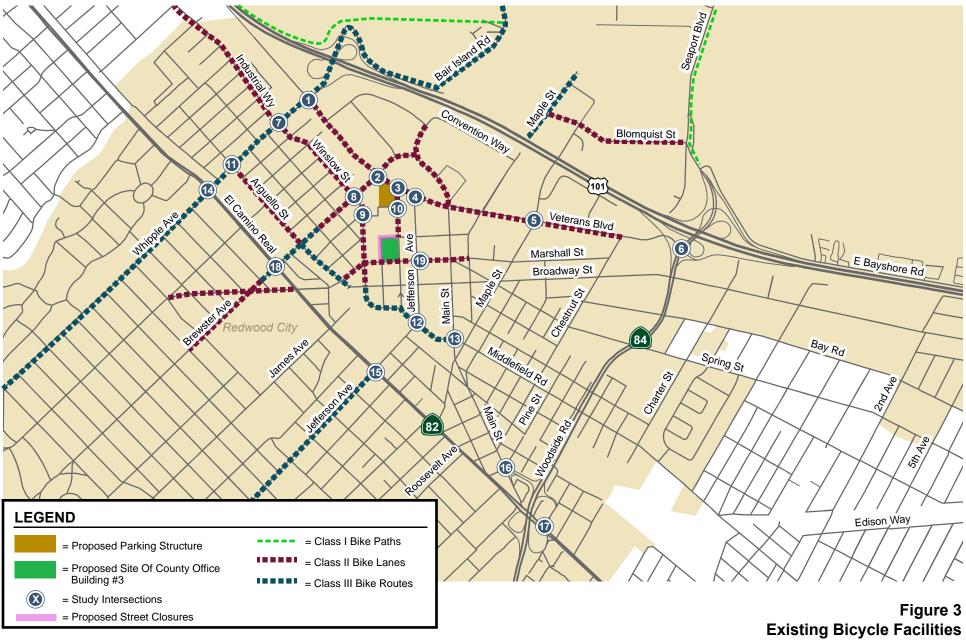
Route 273 serves the Redwood City Transit Center and Cordilleras Center via El Camino Real, Whipple Avenue, and Edgewood Road. Route 273 operates one loop during both the AM and PM peak hour, both starting and ending at the Cordilleras Center on weekdays only.

Route 274 connects the Redwood City Transit Center and Cañada College via Jefferson Avenue and Farm Hill Boulevard. Route 274 operates eastbound and westbound routes on 30-minute headways between 6:00 AM and 10:30 PM on weekdays only.

Route 275 connects the Redwood City Transit Center, the Woodside Manor Shopping Center, and Woodside High School via El Camino Real and Woodside Road. Route 275 operates eastbound and westbound routes on 30-minute headways between 6:00 AM to 7:15 PM on weekdays only.

Route 276 connects the Redwood City Transit Center and the Florence/17th bus stop in Atherton via Jefferson Avenue, Veterans Boulevard, Broadway, and Bay Road. Route 276 operates northbound and southbound routes on 60-minute headways between 6:00 AM and 6:30 PM on weekdays only.









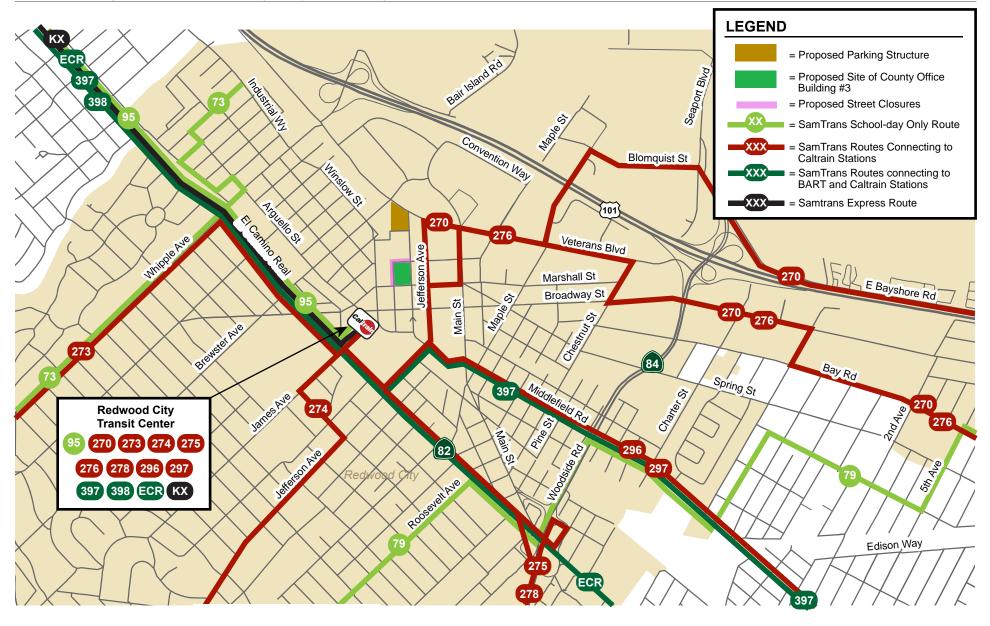


Figure 4 Existing Transit Services





Route 278 connects the Redwood City Transit Center, Woodside High School, Roosevelt Elementary School, and Cañada College via El Camino Real, Woodside Road, Alameda de las Pulgas, and Farm Hill Boulevard. Route 278 operates on weekends only between 7:30 AM and 7:30 PM on 60-minute headways. Route 278 offers limited stop bus routes in the westbound direction for AM runs, and in the eastbound direction for PM runs.

Route 296 connects the Redwood City Transit Center, Menlo Park Caltrain Station, and East Palo Alto via Middlefield Road, Willow Road, and Bay Road. Route 296 operates northbound and southbound services between 5:00 AM and 11:00 PM on 15- to30-minute headways on weekdays.

Route 297 connects the Redwood City Transit Center and the Palo Alto Transit Center via Middlefield Road, Willow Street, Bay Road, and University Avenue. Route 297 operates four northbound and four southbound runs on the weekdays.

Route 397 provides late night service between San Francisco and the Palo Alto Transit Center with three northbound runs and four southbound runs on weekdays and weekends. This route operates along El Camino Real in the project vicinity and stops at the Redwood City Transit Center.

Route 398 provides service between the San Bruno Caltrain/BART Station, San Francisco International Airport, and Redwood City Transit Center. On weekdays, Route 398 operates northbound service between 9:00 AM and 11:00 PM with 60-minute headways, and southbound service between 5:00 AM and 11:00 PM with 60-minute headways. Route 398 operates along El Camino Real in the project vicinity and stops at the Redwood City Transit Center.

Route KX provides express service between San Francisco, the San Francisco International Airport, and the Redwood City Transit Center. Route KX operates four northbound runs between 5:00 AM and 9:30 AM on 60-minute headways, and four southbound runs between 3:30 PM and 8:30 PM on 60-minute headways. Route KX operates on weekdays only.

Route ECR provides service between the Daly City BART Station and Palo Alto Transit Center. Route ECR operates northbound and southbound service between 4:00 AM and 2:00 AM on 15- to 30-minute headways during weekdays. Route ECR operates solely on El Camino Real and stops at the Redwood City Transit Center.

Caltrain Service

The Peninsula Corridor Joint Powers Board operates commuter rail service (Caltrain) between San Jose and San Francisco. During the peak commute period, Caltrain also provides extended service south of San Jose to Morgan Hill and Gilroy. Within Redwood City, the rail line runs parallel to and northeast of El Camino Real. The Redwood City Transit Center is located on Winslow Street approximately one quarter mile from the project site, south of Broadway. On a typical weekday, up to 80 trains serve the Redwood City Station, including the "Baby Bullet" service, an express train with limited mid-Peninsula Stops.

Existing Intersection Lane Configurations

The existing lane configurations at the study intersections were determined by observations in the field and are shown on Figure 5.

Existing Traffic Volumes

Existing traffic volumes were obtained from peak-hour counts collected between March 2016 and November 2017. The existing peak-hour intersection volumes are shown in Figure 6. Intersection turning movement counts are presented in Appendix A.



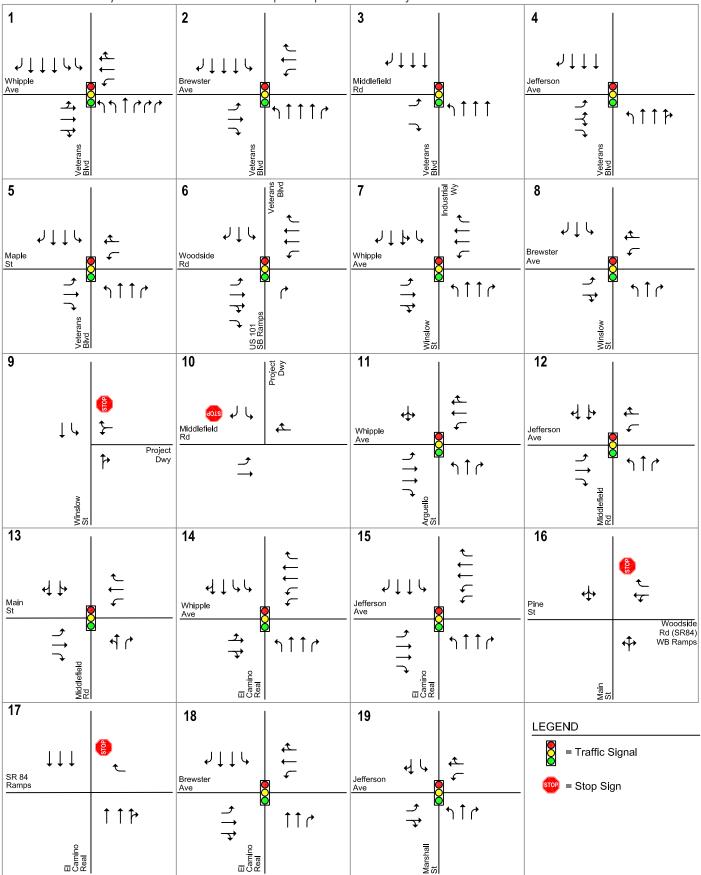
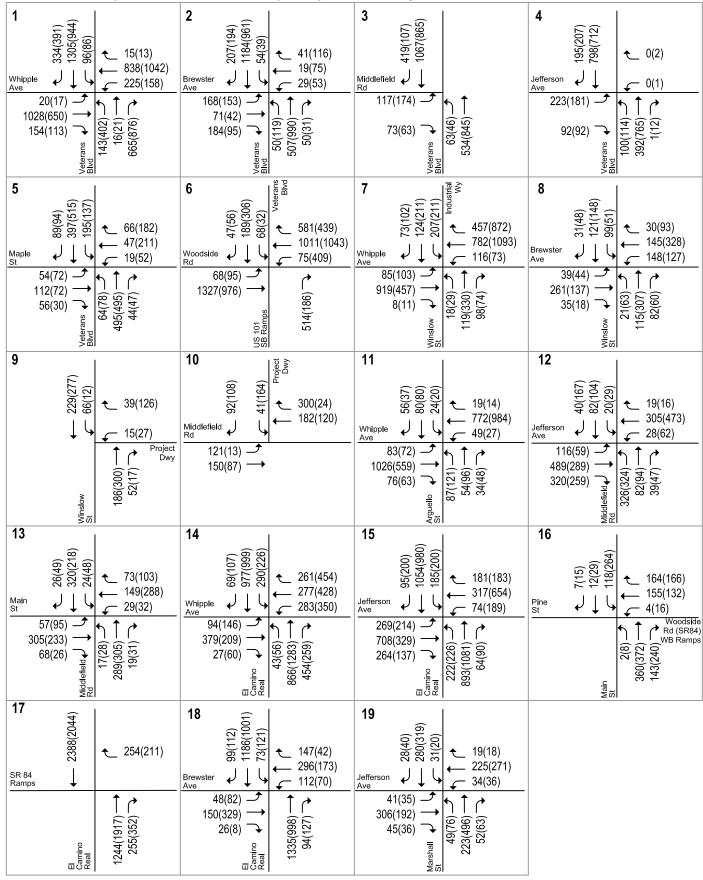


Figure 5 Existing Lane Configurations







LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 6
Existing Traffic Volumes





Existing Intersection Levels of Service

Intersection levels of service were evaluated against Redwood City and C/CAG standards. The results of the intersection level of service analysis under existing conditions are summarized in Table 3.

The results of the analysis show that the intersection of Veterans Boulevard and Whipple Avenue and the intersection of Veterans Boulevard and Woodside Road currently operate at an unacceptable level of service during the PM peak hour. All other signalized study intersections currently operate at an acceptable level of service during both peak hours. Three of the unsignalized study intersections currently operate at an acceptable level of service during both peak hours, while the intersection of Main Street and Woodside Road Westbound Ramps operates at an unacceptable LOS F during the PM peak hour.

The intersection levels of service calculation sheets are included in Appendix C.

Observed Existing Traffic Conditions

Traffic conditions in the field were observed in order to identify existing operational deficiencies and to confirm the accuracy of calculated intersection levels of service. The purpose of this effort was (1) to identify any existing traffic problems that may not be directly related to level of service, and (2) to identify any locations where the level of service analysis does not accurately reflect existing traffic conditions.

In general, most of the study intersections operate relatively well and reflect their calculated level of service during the AM peak hour. During the PM peak hour, there are relatively high volumes at all intersections in downtown Redwood City resulting in an overall increase in congestion. This increase in congestion is due to commuter traffic from the downtown office and residential buildings, as well as traffic associated with the numerous retail and entertainment uses in the downtown area that were not operating during the AM peak hour. Overall, the operations of all intersections in the downtown area reflect the level of service calculations. However, increased traffic volumes result in occasional vehicles not clearing an intersection in a single cycle. The traffic signals in the downtown area all have relatively short cycles, thus a few vehicles not clearing on a single cycle does not result in a great increase in delay.

Volumes along El Camino Real are relatively high during both peak periods. Due to Redwood City's location along the Bay Area Peninsula, there is no dramatic difference between northbound and southbound volumes during either peak hour. For this reason, queues in the northbound and southbound direction at the El Camino Real and Whipple Avenue are relatively long. Due to the long cycle length, however, queues are typically able to clear in one cycle. This lengthy green time does create queues in the eastbound and westbound directions along Whipple Avenue that experience relatively lengthy delays. In the westbound direction, AM and PM peak-hour queues regularly extend beyond the railroad tracks (which are located less than 100 feet from the intersection). The intersection is designed to clear the westbound movements prior to trains approaching to ensure no vehicles are on the railroad tracks. Following this clearance, the cycle resets, starting with northbound and southbound through movements. During the peak hours, Caltrain operates on short headways in both directions and it was observed on separate occasions that trains in different directions may pass through this location less than 30 seconds apart from one another. When this occurs, there is not enough time to clear the westbound movements, and the railroad crossing bars remain down, preventing westbound vehicles from approaching the intersection. In such events, westbound vehicles were observed queued for longer than two minutes and spilling back through the intersection of Arguello Street and Whipple Avenue.



Table 3
Existing Intersection Levels of Service

_/\(\)	sting intersection Levels of Service		Peak	Count	Avg.	
ID	Intersection	Control ¹	Hour	Date	Delay ²	LOS
1	Veterans Blvd and Whipple Ave	Signal	AM	04/25/17	36.0	D
	Value of District Day and Asset	0'	PM	04/25/17	55.5	E
2	Veterans Blvd and Brewster Ave	Signal	AM PM	05/24/16	25.4 30.7	C C
3	Veterans Blvd and Middlefield Rd	Signal	AM	05/24/16 08/29/17	11.0	В
"	Veteraris biva ana ivildalenera Na	Olgilai	PM	08/28/17	15.8	В
4	Veterans Blvd and Jefferson Ave	Signal	AM	04/12/16	18.1	В
		2.9.12	PM	04/12/16	17.4	В
5	Veterans Blvd and Maple St	Signal	AM	05/10/16	25.8	С
			PM	05/10/16	31.8	С
6	Veterans Blvd and Woodside Rd ³	Signal	AM	04/20/17	14.9	В
			PM	04/20/17	>80	F
7	Industrial Way/Winslow St and Whipple Ave	Signal	AM	05/02/17	24.5	С
			PM	05/02/17	26.5	С
8	Winslow St and Brewster Ave	Signal	AM	08/29/17	34.2	С
	Window Ot and Driveway	014/00	PM	08/29/17	35.9	D
9	Winslow St and Driveway	OWSC	AM PM	08/29/17 08/29/17	10.7 12.0	B B
10	Driveway and Middlefield Rd	OWSC	AM	08/29/17	12.5	В
10	briveway and imadicinal Na	OWOO	PM	08/29/17	10.5	В
11	Arguello St and Whipple Ave	Signal	AM	08/29/17	21.1	C
		S	PM	08/29/17	22.5	С
12	Middlefield Rd and Jefferson Ave	Signal	AM	08/24/16	27.6	С
			PM	08/24/16	30.3	С
13	Middlefield Rd and Main St	Signal	AM	03/22/16	30.7	С
	510 1 5 1 11111 1 1 1	0.1	PM	03/22/16	31.9	С
14	El Camino Real and Whipple Ave*	Signal	AM	05/24/16	32.8	С
15	El Camino Real and Jefferson Ave	Signal	PM AM	05/24/16 03/22/16	38.0 36.2	D D
13	El Callillo Real and Jellerson Ave	Signal	PM	03/22/16	39.3	D
16	Main St and Woodside Rd WB Ramps	TWSC	AM	03/22/17	19.6	С
.0	man of and Woodoldo Na Wo Nampo		PM	03/22/17	>50	F
17	El Camino Real and Woodside Rd EB Ramps	owsc	AM	03/22/17	15.6	C
	·		PM	03/22/17	21.6	С
18	El Camino Real and Brewster Ave	Signal	AM	05/24/16	17.7	В
			PM	05/24/16	18.6	В
19	Marshall St and Jefferson Ave	Signal	AM	11/02/17	22.8	С
			PM	11/02/17	22.2	С

Notes:

Bold indicates a substandard level of service.



^{*} Indicates San Mateo County CMP intersection. LOS standard for El Camino Real and Whipple Ave is LOS E.

¹ Control Type Definitions: OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control

² Intersection level of service for OWSC and TWSC intersection is represented by the delay for the stop controlled approach. Intersection level of service for all other control types is represented by average delay for all movements.

³ Observations show the intersection operates at LOS F during the PM peak hour due to queue spillback from the downstream intersection at Woodside/Broadway.

As described above, volumes along El Camino Real are relatively high during both peak hours. At the intersection of El Camino Real and Brewster Avenue, this results in lengthy delays for eastbound and westbound vehicles at Brewster Avenue due to long green times for northbound and southbound vehicles. Queues are particularly long following the arrival of Caltrain as a majority of vehicles exiting the Caltrain Parking lot on Perry Street were observed turning left from Perry Street onto Brewster Avenue towards El Camino Real.

Field observations showed that operational issues currently occur at the intersection of Main Street and Woodside Road Westbound Ramps during the PM peak hour, which are reflected in the intersection level of service analysis. During the PM peak hour, queues along the Woodside Road Westbound Ramps typically extend greater than 200 feet (approximately eight vehicles) for all movements, blocking vehicles from reaching the yield controlled right-turn lane. Northbound and southbound traffic is relatively constant at this intersection during the PM peak hour. There are few gaps of sufficient duration in both directions of traffic on Main Street to accommodate movements on the stop-controlled westbound approach. Many westbound vehicles were observed proceeding through the intersection after identifying a small gap in traffic and occasionally cutting off cross traffic.

During the AM and PM peak hours, volumes along Woodside Road are relatively high. During both peak hours, queues extending from the Broadway and Woodside Road intersection regularly extend through the Veterans Boulevard and Woodside Road intersection. In the westbound direction at Veterans Boulevard and Woodside Road, the US 101 Northbound Off-Ramp feeds into the westbound right-turn-only lane. It was observed that a majority of the vehicles exiting northbound US 101 desired to continue westbound through this intersection rather than making a right-turn onto Veterans Boulevard. Because of this, US 101 northbound off-ramp vehicles often stopped prior to the intersection in an effort to merge into the through lane. Due to the lengthy queues in the westbound direction, these vehicles were often required to wait until the traffic began to move in order to merge. These vehicles blocked other vehicles from entering the right-turn-only lane.



3. **Existing Plus Project Conditions**

This chapter describes traffic conditions with the project. It begins with a description of the transportation system under existing plus project conditions and the method by which project traffic is estimated. A summary of levels of service under existing plus project traffic conditions is presented in this chapter. Existing plus project conditions are represented by existing traffic conditions with the addition of traffic generated by the project. Existing plus project traffic conditions could potentially occur if the project were to be occupied prior to the other approved projects in the area.

Roadway Network

It is assumed in this analysis that the transportation network under existing plus project conditions would be the same as the existing transportation network, described in Chapter 2.

Project Trip Estimates

The magnitude of traffic produced by a new development and the locations where that traffic would appear are estimated using a three-step process: 1) trip generation, 2) trip distribution, and 3) trip assignment. In determining project trip generation, the magnitude of traffic entering and exiting the project site is estimated for the AM and PM peak hours. As part of the project trip distribution, an estimate is made of the directions to and from which the project trips would travel. In the project trip assignment, the project trips are assigned to specific streets and intersections. These procedures are described below.

Trip Generation

Daily and peak-hour trip generation estimates for the proposed project were based on trip rates published in the ITE *Trip Generation Manual*, 9th *Edition* and reviewed by County staff. Trips generated by the new County office building were estimated by applying the average rates for government office complex to the total number of employees expected to work in the new COB3 building. Trip reductions were applied to account for existing County employees that will relocate to the COB3 building from other buildings on the County Government Center campus, and for the high level of transit ridership by County Government Center employees.

Existing Employees Reduction

The new COB3 office building is expected to house 616 County employees. Based on discussions with County staff, 216 of these employees would be existing employees who would relocate to the COB3 building from other offices currently on the County Government Center campus. These relocated



employees would not result in an increase of vehicle trips to and from the County Government Center and were therefore subtracted from the project trip generation estimates. It is estimated that the project would result in a net increase of only 400 new employees working at the County Government Center campus.

Transit Reduction

The project is located within close proximity to the Redwood City Transit Center. Commute data provided by the County indicate that many County employees currently commute to the County Government Center campus via SamTrans or Caltrain, rather than by automobile. By comparison, the ITE trip rates generally reflect a suburban location with minimal transit usage. Therefore, a five percent peak-hour and four percent daily trip reduction was applied to the net new trips generated by the COB3 office to account for the high level of transit use at this location.

Net Project Trips

After applying the trip reductions for relocated employees and transit usage, the project is estimated to generate 2,976 net new daily trips, including a net 232 AM peak-hour trips and a net 300 PM peak-hour trips (see Table 4). During the AM peak hour, the project would generate 208 net new inbound trips and 24 net new outbound trips. During the PM peak hour, the project would generate 116 net new inbound trips and 184 net new outbound trips. Although the majority of project trips during the peak commute hours would be employees coming to and leaving work (inbound in the AM and outbound in the PM), the proposed office building would also generate a small number of trips in the off-peak direction. Off-peak direction trips may include visitor trips, deliveries, and employees leaving the Government Center during the AM or arriving during the PM peak hour when traveling to an off-site meeting or job site.

Table 4
Project Trip Generation Estimates

						AM Peak	, Цоли			M Doo	k Hous	
			Daily Trip		Pk-Hr	AIVI Pear	Trips			PM Peak Hour Trips		
Land Use	Si	ze	Rate	Trips	Rate	In	Out	Total	Rate	ln	Out	Total
Proposed Use												
County Office Building 3 ¹	616	empl.	7.75	4,774	0.61	335	41	376	0.79	151	336	487
Existing Government Center Employees	(0.4.0)			(4.07.4)		(4.4.0)	(40)	(400)		(00)	(4.40)	(4.74)
Relocated to COB3	(216)	empl.		(1,674)		(116)	(16)	(132)		(29)	(142)	(171)
Net New	400	empl.		3,100		219	25	244		122	194	316
Transit Reduction ²			(4%)	(124)	(5%)	(11)	(1)	(12)	(5%)	(6)	(10)	(16)
Net Project Trips				2,976		208	24	232		116	184	300

Notes:



¹ Based on ITE's Trip Generation Manual, 9th Edition (2012) average rates for Government Office Complex (LU 733).

² Transit reduction reflects the difference in mode split with higher transit use at the County Government Center than at typical suburban sites reflected in ITE data.

Street Closures and Parking Relocation

The proposed project includes the closure of County Center between Middlefield Road and Hamilton Street, and Hamilton Street between County Center and Marshall Street in order to create a pedestrian promenade within the San Mateo County Government Center. The project would also result in the elimination of several off-street parking lots on the site of the proposed new office building and a small number of off-street parking spaces at the History Museum lot, where the Lathrop House is to be relocated. Because County Center and Hamilton Street do not provide connections through the County Government Center, their use is limited to drivers parking on those blocks or parking in the lots accessed from those streets. In addition, the County currently leases a portion of the surface parking lot on Bradford Street east of Jefferson Avenue for use by County employees. It is anticipated that the proposed new parking structure would accommodate the County employees that currently use the Bradford lot. Thus, the County would terminate its lease of parking spaces in this off-site lot. In total, the project would result in the removal or relinquishment of 226 parking spaces on or near the site of the new County office building, including 31 on-street metered parking spaces that are open for public use, 14 loading spaces, and 181 spaces that are reserved for County employees. It is assumed that those drivers currently parking in these spaces would continue to drive to the County Government Center and instead park in the proposed new parking garage, which will include a sufficient number of spaces to replace the spaces eliminated by the project. Therefore, these trips were reassigned from their current parking locations to the proposed new parking structure.

As detailed in a separate stand-alone parking study, it is estimated that the existing Government Center parking demand exceeds the available on-site parking supply by 282 spaces. The excess parking demand results in County employees and visitors parking in nearby on-street parking spaces and City parking lots and garages in Downtown Redwood City. The construction of the new parking structure is expected to provide ample parking to allow all County employees and visitors to park within the County Government Center. Thus, the project will shift the trips associated with the excess parking demand from unknown off-site locations to the new parking structure. Overall, the new parking structure would result in the reassignment of vehicle trips associated with 508 parking spaces (226 County spaces eliminated by the project and 282 off-site public parking spaces currently used for excess unmet Government Center parking demand).

The number of peak-hour trips traveling to and from these existing parking spaces were calculated based on driveway counts conducted at the existing parking structure from 7:00-9:00 AM and 4:00-6:00 PM on a typical weekday in May 2015. The observed driveway counts were divided by the total number of employee spaces served by the driveway to calculate the trip rate per parking space. The existing parking garage serves approximately 0.52 and 0.44 vehicle trips per parking space during the AM and PM peak hours, respectively. Applying these rates to the 508 parking spaces relocated by the project yields 265 AM peak-hour trips and 224 PM peak-hour trips (see Table 5). These trips already travel to and from the County Government Center, and thus, are not new trips to most study intersections. The reassignment of these trips would only result in volume changes at the driveways serving the proposed new parking garage (intersections 9 and 10).



Table 5
Trip Estimates for Relocated Parking

		AM Peak Hour			r		PM Pe	ak Hour	,	
				Trips				Trips		
	Size	Rate ¹	In	Out	Total	Rate ¹	ln	Out	Total	
Existing Parking Areas ²										
Hamilton Street/County Center	104 Spaces	0.52	52	2	54	0.44	5	41	46	
Credit Union Lot	39 Spaces	0.52	19	1	20	0.44	2	15	17	
Lathrop House Lot	11 Spaces	0.52	6	0	6	0.44	1	4	5	
BOS/CMO/Courts Lot	24 Spaces	0.52	12	1	13	0.44	1	10	11	
History Museum Lot										
(new Lathrop House site)	18 Spaces	0.52	9	0	9	0.44	1	7	8	
Bradford Lot	30 Spaces	0.52	15	1	16	0.44	1	12	13	
Existing Unmet Parking Demand	Existing Unmet Parking Demand ³									
Unspecified public parking in										
Downtown Redwood City	282 Spaces	0.52	141	6	147	0.44	14	110	124	
Total Reassigned Trips	508 Spaces		254	11	265	_	25	199	224	

¹ Peak hour trip rate is based on drivew ay counts at the existing county parking structure conducted by Hexagon Transportation Consultants from 7-9 AM and 4-6 PM on Wednesday, May 20, 2015. Assume existing public spaces on the ground floor do not generate any trips during the peak commute hours. Therefore, public spaces were not included in the calculation. Observed drivew ay trips (488 AM and 411 PM) were divided by total employee spaces served by the drivew ay (125 in parking structure basement, 745 in parking structure floors 2-5, and 62 spaces in 555 County Center basement) to calculate observed trip rate (trips per employee space).

Trip Distribution

The trip distribution patterns for the proposed project were estimated based on the existing residence locations of County Government Center employees. The project trip distribution pattern is shown on Figure 7.

The estimated project generated traffic was added to the surrounding road network based on the distribution described above. The project trip assignment, including the reassignment of trips associated with the relocation of existing parking spaces, is shown on Figure 8.

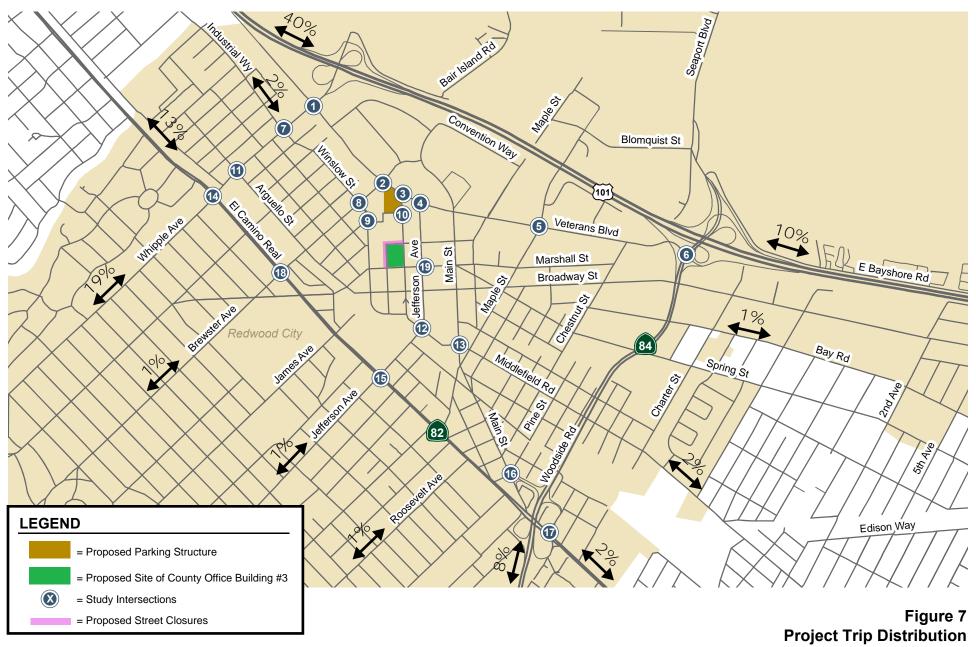
Intersection Traffic Volumes

Project impacts under existing plus project conditions were evaluated relative to existing conditions. Existing plus project volumes were estimated by adding the new trips generated by the proposed project as well as the reassigned parking trips to the existing traffic volumes. Figure 9 shows the intersection turning-movement volumes under existing plus project conditions. Peak-hour intersection volumes for the study intersections are tabulated in Appendix B.



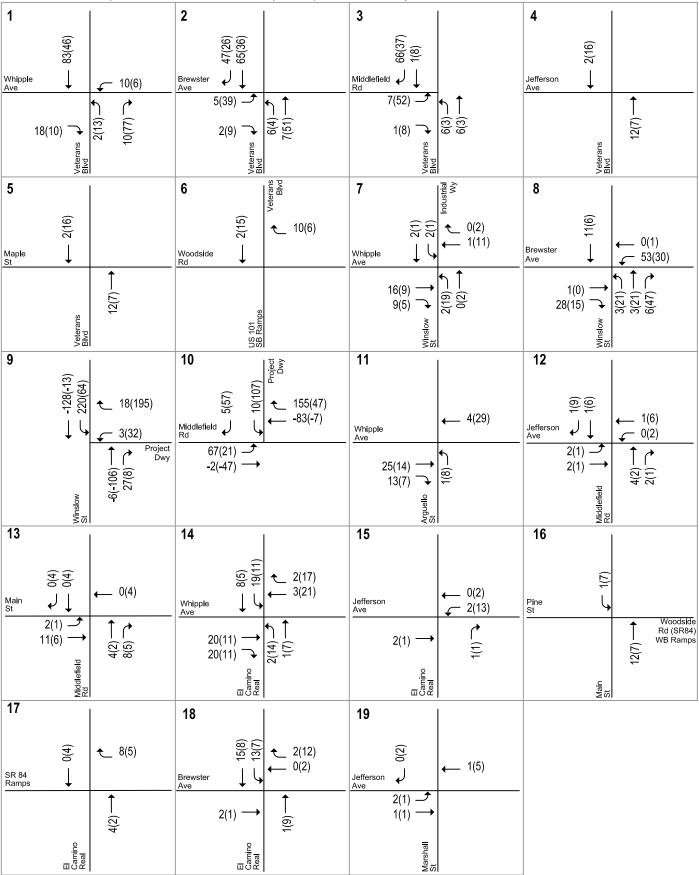
² Includes 31 public (metered) spaces and 14 loading spaces on Hamilton/County Center. All other parking is reserved for County employees.

³ Employee and visitor parking demand in excess of existing parking supply at the County Government Center that currently makes use of other public parking in Downtow n Redwood City.









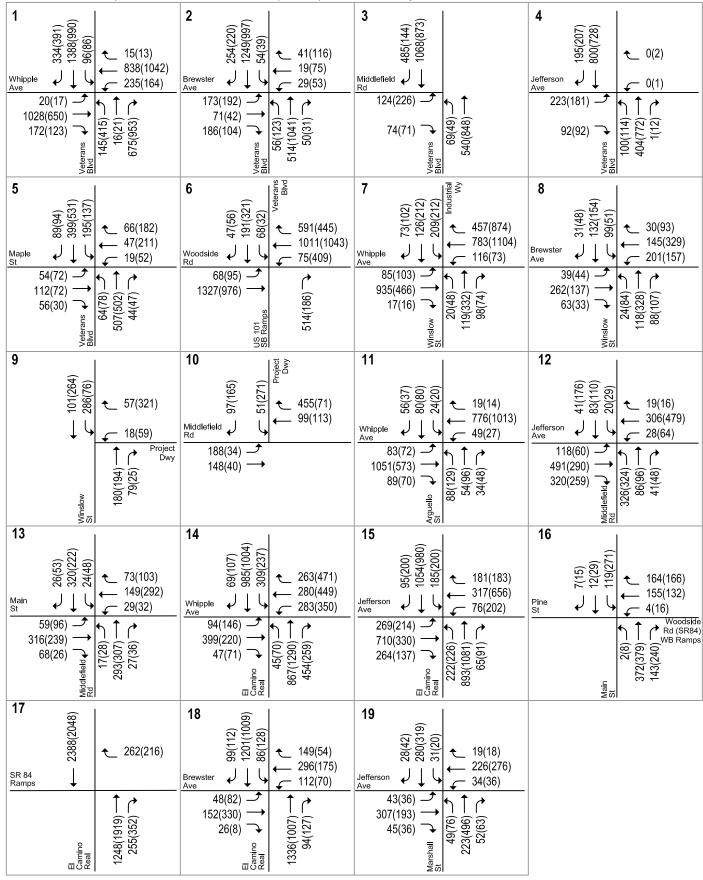
LEGEND

XX(XX) = AM(PM) Peak-Hour Trips

Figure 8 Project Trip Assignment







LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 9
Existing Plus Project Traffic Volumes





Intersection Levels of Service

The results of the level of service analysis under existing plus project conditions are summarized in Table 6. The results of the analysis show that the following intersections operate at an unacceptable level both without and with the project:

Veterans Boulevard and Whipple Avenue – PM peak hour Veterans Boulevard and Woodside Road – PM peak hour Main Street and Woodside Road Westbound Ramps – PM peak hour

All other study intersections are expected to operate at an acceptable level based on Redwood City and C/CAG standards.

Intersection Impacts

Veterans Boulevard and Whipple Avenue

The Veterans Boulevard and Whipple Avenue intersection currently operates at an unacceptable LOS E under existing conditions during the PM peak hour. The addition of project trips under existing plus project conditions would increase the average delay at this intersection by 1.3 seconds. This increase in delay is less than 5.0 seconds, therefore, this impact would be **less than significant**.

Veterans Boulevard and Woodside Road

Based on observations, the Veterans Boulevard and Woodside Road intersection currently operates at an unacceptable LOS F under existing conditions during the PM peak hour. The addition of project trips under existing plus project conditions would increase the average delay at this intersection by 1.2 seconds. This increase in delay is less than 5.0 seconds, therefore, this impact would be *less than significant*.

Main Street and Woodside Road Westbound Ramps

The Main Street and Woodside Road Westbound Ramps intersection operates at an unacceptable LOS F under existing conditions during the PM peak hour. The stop-controlled westbound approach on the Woodside Road ramp encounters lengthy delays due to a lack of sufficient gaps on Main Street. Thus, even an extremely small increase in Main Street traffic as little as three trips would cause a significant impact. The project is expected to add 14 trips, causing the delay for the worst approach (westbound) at this intersection to increase by more than 5.0 seconds, which is the City's significance threshold. Additionally, based on the peak-hour signal warrant analysis for the intersection, signalization would be warranted under existing plus project conditions. Thus, by meeting these two criteria, the addition of project traffic would result in a *significant impact*.

This intersection was identified in the Downtown Precise Plan Draft EIR, dated August 26, 2010, as operating at an unacceptable LOS F during both peak hours under the cumulative conditions. Signalization of this intersection was identified in the DPP DEIR to mitigate this impact (Mitigation 9-12). This mitigation has been added to the Redwood City Traffic Impact Fee (TIF) projects list. The County will coordinate with the City to pursue implementation of this improvement. However, the improvement is within the Woodside Road (SR 84) right-of-way and will require Caltrans approval. If Caltrans does not approve, and the City cannot implement these improvements, this impact would be significant and unavoidable.

The intersection level of service calculation sheets are included in Appendix C.



Table 6
Existing Plus Project Intersection Levels of Service

				Exist	ing	Existi	ng Plus	Project
			Peak	Avg.		Avg.		Incr. In
ID	Intersection	Control ¹	Hour	Delay ²	LOS	Delay ²	LOS	Avg. Del.
1	Veterans Blvd and Whipple Ave	Signal	AM	36.0	D	37.0	D	1.0
		_	PM	55.5	E	56.8	E	1.3
2	Veterans Blvd and Brewster Ave	Signal	AM	25.4	С	25.4	С	0.0
			PM	30.7	С	31.8	С	1.1
3	Veterans Blvd and Middlefield Rd	Signal	AM	11.0	В	11.4	В	0.4
		<u> </u>	PM	15.8	В	18.3	В	2.5
4	Veterans Blvd and Jefferson Ave	Signal	AM	18.1	В	18.0	В	-0.1
_		<u> </u>	PM	17.4	В	17.3	В	-0.1
5	Veterans Blvd and Maple St	Signal	AM	25.8	С	25.7	С	-0.1
0	Vatariana Dhalland Wasalaida Dd 3	0:	PM	31.8	С	31.8	С	0.0
6	Veterans Blvd and Woodside Rd ³	Signal	AM PM	14.9	В F	17.6	В F	2.7
7	Industrial Way/Winslow St and Whipple Ave	Signal	AM	> 80 24.5	C	> 80 24.5	C	1.2 0.0
′	ilidustrial way/willslow St and whilppie Ave	Signal	PM	24.5 26.5	C	26.7	C	0.0
8	Winslow St and Brewster Ave	Signal	AM	34.2	C	34.5	C	0.2
J	Willistow of and Diewster Ave	Olgilai	PM	35.9	D	36.6	D	0.7
9	Winslow St and Driveway	OWSC	AM	10.7	В	12.7	В	2.0
Ĭ	Transien et ana Emena,		PM	12.0	В	15.1	C	3.1
10	Driveway and Middlefield Rd	OWSC	AM	12.5	В	14.1	В	1.6
			PM	10.5	В	11.8	В	1.3
11	Arguello St and Whipple Ave	Signal	AM	21.1	С	21.0	С	-0.1
		•	PM	22.5	С	22.5	С	0.0
12	Middlefield Rd and Jefferson Ave	Signal	AM	27.6	С	27.6	С	0.0
			PM	30.3	С	30.6	С	0.3
13	Middlefield Rd and Main St	Signal	AM	30.7	С	30.7	С	0.0
			PM	31.9	С	32.0	С	0.1
14	El Camino Real and Whipple Ave*	Signal	AM	32.8	С	33.7	С	0.9
		<u>.</u>	PM	38.0	D	39.5	D	1.5
15	El Camino Real and Jefferson Ave	Signal	AM	36.2	D	36.2	D	0.0
40	M : Oc. J.W. J. : L. D.I.W.D.D.	T4/00	PM	39.3	D	39.3	D	0.0
16	Main St and Woodside Rd WB Ramps	TWSC	AM	19.6	C F	20.2	C	0.6
17	El Camina Baal and Waadaida Bd EB Barra	OWSC	PM	> 50	C	>50 15.8	F C	7.9
17	El Camino Real and Woodside Rd EB Ramps	OWSC	AM PM	15.6 21.6	C	22.1	C	0.2 0.5
18	El Camino Real and Brewster Ave	Signal	AM	17.7	В	18.1	В	0.3
10	Li Gamino Real and Diewster Ave	Olgilal	PM	18.6	В	18.8	В	0.4
19	Marshall St and Jefferson Ave	Signal	AM	22.8	C	22.8	С	0.2
		O.g. idi	PM	22.2	C	22.3	C	0.1
								

Notes:

Bold indicates a substandard level of service.

Outline indicates a significant project impact.



^{*} Indicates San Mateo County CMP intersection. LOS standard for El Camino Real and Whipple Ave is LOS E.

¹ Control Type Definitions: OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control

² Intersection level of service for OWSC and TWSC intersections is represented by the delay for the stop controlled approach. Intersection level of service for all other control types is represented by average delay for all movements.

³ Observations show the intersection operates at LOS F during the PM peak hour due to queue spillback from the downstream intersection at Woodside/Broadway.

Freeway Ramp and Segment Analysis

An analysis of the study freeway ramps and segments was conducted under existing plus project conditions. Freeway ramp volumes were gathered through the most recent Caltrans traffic census counts. Traffic volumes under existing plus project conditions were analyzed by adding project trips to the existing traffic volumes.

Freeway Ramp Analysis

Four freeway ramps were analyzed under existing plus project conditions. These includes on- and offramps at the US 101 interchanges with Woodside Road (SR 84) and Whipple Avenue.

For the purpose of this study, the project is said to create a significant adverse impact on a freeway ramp if its implementation:

- 1. Causes the volume-to-capacity (V/C) ratio of the freeway ramp to exceed 1.0; or
- 2. Increases the amount of traffic on a freeway ramp that is already exceeding its capacity by more than one percent (1%) of the ramp's capacity.

The ramp analysis under existing plus project conditions shows that the selected ramps would continue to have sufficient capacity to serve the projected traffic volumes under existing plus project conditions. Each of the study ramps is expected to have a volume-to-capacity (V/C) ratio well below 1.0 (see Table 7). Therefore, the project is considered to cause an insignificant impact on the freeway ramps that provide access to the project site.

Table 7
Freeway Ramp Capacity Summary

		Existing Conditions					Project Conditions			
Freeway Interchange and Ramp	Pk. Hr.	AADT	Dir	Cap. ¹	Vol. ²	V/C	Add. Vol.	% Cap.	V/C	
US 101 & Woodside Road										
SB On-Ramp from Woodside Rd	AM	20,000	SB	1,800	1,414	0.79	2	0.1%	0.79	
	PM	20,000	SB	1,800	1,324	0.74	15	0.8%	0.74	
NB Off-Ramp to SB Woodside Rd	AM	17,100	NB	2,000	1,145	0.57	10	0.5%	0.58	
	PM	17,100	NB	2,000	1,165	0.58	6	0.3%	0.59	
US 101 & Whipple Avenue										
NB On-Ramp from EB Whipple Ave	AM	11,100	NB	1,800	743	0.41	10	0.6%	0.42	
	PM	11,100	NB	1,800	756	0.42	74	4.1%	0.46	
SB Off-Ramp to Veterans Blvd/Whipple Ave	AM	20,100	SB	3,800	1,421	0.37	83	2.2%	0.40	
	РМ	20,100	SB	3,800	1,331	0.35	4	0.1%	0.35	

Notes

Freeway Segment Analysis

Two freeway segments were analyzed under existing plus project conditions. These two segments span US 101 between the Santa Clara County/San Mateo County border and SR 92 in San Mateo. The freeway segment between the Santa Clara County/San Mateo County border and SR Whipple Avenue



¹ Theoretical capacities of ramps per Exhibit 25-3 of HCM 2000: 2,000 vph for single-lane diagonal ramps, 1,800 vph for loop ramps, and 3,800 vph for dual-lane diagonal ramps. Capacity for metered on-ramps are calculated by mulitplying the max metering rate (900 vphpl) by the number of lanes.

Volumes derived from ADT Counts conducted by Caltrans in 2013. Peak Hour adjustments calculated using Caltrans K Factors

was found to be operating at LOS F during the PM peak hour in 1991, when the CMP was first adopted. Therefore, this segment is subject to the LOS F standard. The segment between Whipple Avenue and SR 92 is subject to the LOS E standard.

Per CMP technical guidelines, analysis of freeway segment level of service is required for all segments to which the project is expected to add one percent or more to the segment capacity. The traffic added by the project to these two freeway segments is summarized in Table 8. Since the project represents less than one percent of the freeway segment capacity, an analysis of freeway segments is not required, and the project is considered to have an insignificant impact on the study freeway segments.

Table 8
Freeway Segment Capacity Summary

			Existing (Conditions		Proje	ect Conditions		
	Peak		LO	LOS ² Baseline Standard		Added	%		
Segment	Hour	Cap. ¹	Baseline			Vol	Сар.	Impact	
Northbound US 101									
Whipple Ave to Santa Clara County Line	AM	8,700	F	F	87	31	0.36%	No	
	PM	8,700	F	F	87	18	0.21%	No	
SR 92 to Whipple Ave	AM	11,500	D	Ε	115	10	0.09%	No	
	PM	11,500	D	Е	115	74	0.64%	No	
Soutbound US 101									
Whipple Ave to Santa Clara County Line	AM	8,700	F	F	87	83	0.95%	No	
	PM	8,700	F	F	87	50	0.57%	No	
SR 92 to Whipple Ave	AM	11,500	D	Ε	115	2	0.02%	No	
	PM	11,500	D	E	115	18	0.16%	No	

Notes:



¹ Capacity assumes 2,300 veh/hr/mixed lane and 1,800 veh/hr/HOV lane

² Existing LOS from 2015 CMP Monitoring Report. LOS Baseline and Standard based on LOS from 1991 CMP Monitoring Report.

4.

Background Conditions

This chapter describes background traffic conditions without the project. Traffic volumes for background conditions include volumes from existing traffic counts plus traffic generated by other approved but not yet constructed developments in the vicinity of the site. This chapter describes the procedure used to determine background traffic volumes and the resulting traffic conditions. The background scenario predicts a realistic baseline traffic condition that would occur as approved development gets built and occupied.

Roadway Network

Background conditions include geometry changes at the Veterans Boulevard and Jefferson Avenue intersection due to the 849 Veterans Boulevard residential project. This project proposes adding a westbound all-way-turn lane (which would serve as the primary driveway), and a southbound left-turn lane at the intersection. This southbound left-turn lane would not require expanding the roadway width as the Veterans Boulevard road diet would provide enough roadway width to accommodate the new lane without expanding the roadway footprint.

No additional roadway improvements were assumed under background conditions.

Traffic Volumes

Background traffic volumes were forecast based on the project trip assignments provided for the relevant approved but not yet completed projects. The list of projects that are approved or under construction was provided by Redwood City staff. The following approved or under construction projects were included under background conditions because they would contribute background trips to study intersections.

- 849 Veterans Boulevard 90-unit multi-family residential building
- Stanford in Redwood City four administrative office buildings totaling 577,000 s.f.
- Kaiser Hospital Phase 2 197,800 s.f. medical office building
- 801 Brewster Avenue 250-unit multi-family residential building (DTPP)
- 550 Allerton Street 69,486 s.f. office building (DTPP)
- 612 Jefferson Avenue 20-unit multi-family residential building (DTPP)
- 601 Marshall Street 129,235 s.f. office development (DTPP)
- 603 Jefferson Avenue 68 condominium units with 4,500 s.f. of ground floor retail (DTPP)
- 815 Hamilton Street 60,322 s.f. office building with 7,141 s.f. of retail space (DTPP)
- 2075 Broadway 80,000 s.f. office building with 2 multifamily dwelling units (DTPP)



- 103 Wilson Street 175-unit multi-family housing development (DTPP)
- 1409 El Camino Real 350-unit multi-family residential development (DTPP)
- 1305 El Camino Real 137-unit multi-family residential development (DTPP)
- 1629 Main Street 24,700 s.f. office building

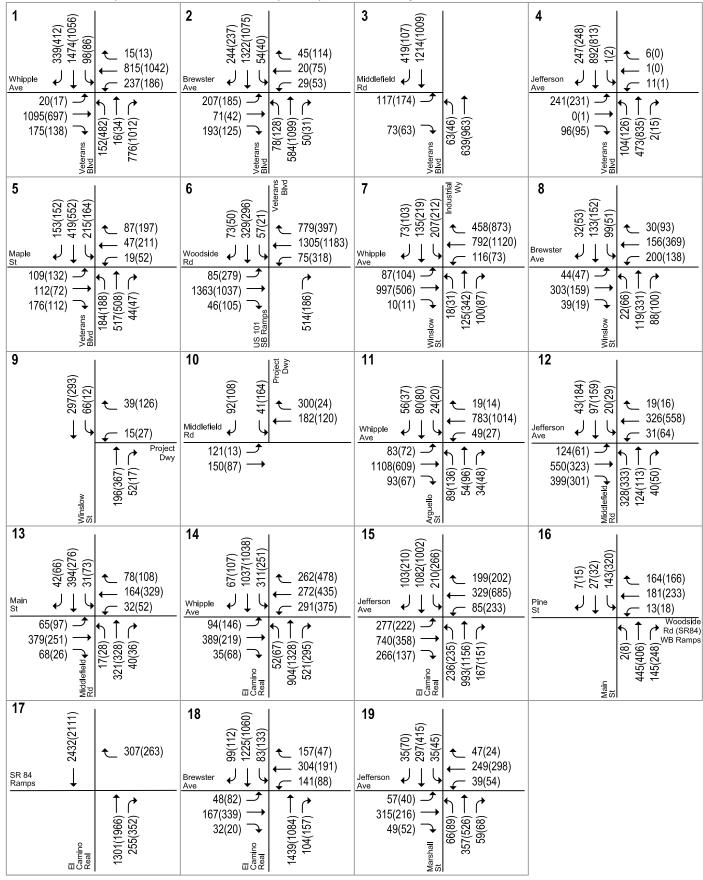
Background peak-hour traffic volumes were calculated by adding to existing volumes the estimated traffic from approved developments. The trip generation and assignment for the first three projects listed above were obtained from each project's traffic impact analysis (TIA) or environmental impact report (EIR). Project trips for approved developments within the Downtown Precise Plan and for the approved office development at 1629 Main Street were estimated using rates from ITEs *Trip Generation Manual* and assigned to the study network based on the trip distribution included within the Downtown Precise Plan DEIR. Background traffic volumes are shown on Figure 10. Peak-hour intersection volumes for the study intersections are tabulated in Appendix B.

Intersection Levels of Service

The results of the analysis under background conditions are shown in Table 9. The intersection of Veterans Boulevard and Whipple Avenue and the intersection of Veterans Boulevard and Woodside Road would continue to operate at an unacceptable level of service during the PM peak hour under background conditions. All other signalized study intersections would operate at an acceptable level of service during both peak hours. Three of the unsignalized study intersections would continue to operate at an acceptable level of service during both peak hours, while the intersection of Main Street and Woodside Road Westbound Ramps would operate at an unacceptable LOS E and LOS F during the AM and PM peak hours, respectively.

The level of service calculation sheets are included in Appendix C.





LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 10 Background Traffic Volumes





Table 9
Background Level of Service Summary

				Exis	ting	Backgı	round
ID	Intersection	Control	Peak Hour	Avg. Delay²	1.06	Avg. Delay ²	LOS
עו	Intersection	Control	nour	Delay	LOS	Delay	LUS
1	Veterans Blvd and Whipple Ave	Signal	AM	36.0	D	38.6	D
2	Veterans Blvd and Brewster Ave	Cianal	PM AM	55.5 25.4	E C	64.3 26.9	E C
2	Veteralis bivo and brewster Ave	Signal	PM	30.7	C	31.0	C
3	Veterans Blvd and Middlefield Rd	Signal	AM	11.0	В	10.2	В
			PM	15.8	В	14.6	В
4	Veterans Blvd and Jefferson Ave	Signal	AM	18.1	В	23.0	С
_	Veterana Divid and Mania Ct	Cianal	PM AM	17.4 25.8	B C	23.8	C C
5	Veterans Blvd and Maple St	Signal	PM	25.6 31.8	C	28.1 33.5	C
6	Veterans Blvd and Woodside Rd ³	Signal	AM	14.9	В	25.4	C
Ŭ	Votorano Biva ana vvoodolide Na	Oigilai	PM	>80	F	>80	F
7	Industrial Way/Winslow St and Whipple Ave	Signal	AM	24.5	С	24.5	С
			PM	26.5	С	26.8	С
8	Winslow St and Brewster Ave	Signal	AM	34.2	С	34.5	С
0	Winglow St and Drivoway	OWSC	PM AM	35.9 10.7	D B	37.7 11.0	D B
9	Winslow St and Driveway	OWSC	PM	10.7	В	12.9	В
10	Driveway and Middlefield Rd	OWSC	AM	12.5	В	12.5	В
			PM	10.5	В	10.5	В
11	Arguello St and Whipple Ave	Signal	AM	21.1	С	20.7	С
40		0: 1	PM	22.5	С	22.7	С
12	Middlefield Rd and Jefferson Ave	Signal	AM	27.6 30.3	C C	28.2 33.3	C C
13	Middlefield Rd and Main St	Signal	PM AM	30.3	С	32.4	C
10	Middle leta Na and Main St	Oigilai	PM	31.9	C	33.4	C
14	El Camino Real and Whipple Ave*	Signal	AM	32.8	С	33.2	С
			PM	38.0	D	40.1	D
15	El Camino Real and Jefferson Ave	Signal	AM	36.2	D	37.1	D
40	Main Chand Wandaida Dd WD Damas	TMCC	PM	39.3	D	42.3	D
16	Main St and Woodside Rd WB Ramps	TWSC	AM PM	19.6 >50	C F	39.3 >50	E F
17	El Camino Real and Woodside Rd EB Ramps	owsc	AM	15.6	С	18.2	C
	•		PM	21.6	С	27.8	D
18	El Camino Real and Brewster Ave	Signal	AM	17.7	В	18.6	В
40	Marchall Ot and laffarran A	0:-	PM	18.6	В	19.5	В
19	Marshall St and Jefferson Ave	Signal	AM PM	22.8 22.2	C C	23.0 23.3	C C
			PIVI	22.2	C	∠3.3	C

Notes:

Bold indicates a substandard level of service.



^{*} Indicates San Mateo County CMP intersection. LOS standard for El Camino Real and Whipple Ave is LOS E.

¹ Control Type Definitions: OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control

² Intersection level of service for OWSC and TWSC intersections is represented by the delay for the stop controlled approach. Intersection level of service for all other control types is represented by average delay for all movements.

³ Observations show the intersection operates at LOS F during the PM peak hour due to queue spillback from the downstream intersection at Woodside/Broadway.

5. Background Plus Project Conditions

This chapter describes the roadway traffic operations under background plus project conditions and any impacts caused by the project. Background plus project conditions represent the likely conditions in which the proposed project is developed after projects currently under construction and other approved projects in the area have been completed.

Roadway Network

The roadway network under background plus project conditions would be the same as described in Chapter 4 under background conditions.

Project Trip Estimates

The magnitude of project traffic associated with the project under background plus project conditions and the trip distribution and assignment on the roadway network would be the same as described in Chapter 3 under existing plus project conditions.

Intersection Traffic Volumes

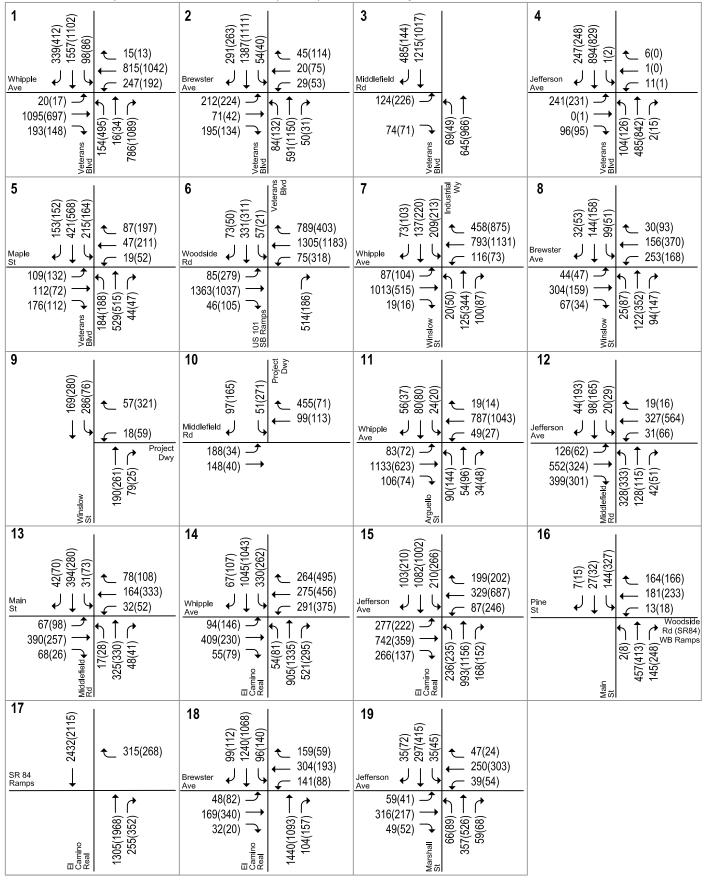
Background plus project traffic volumes were generated by adding new trips generated by the project to the background traffic volumes. The traffic volumes under background plus project conditions are shown on Figure 11. Peak-hour intersection volumes for the study intersections are tabulated in Appendix B.

Intersection Levels of Service

The results of the level of service analysis under background plus project conditions are summarized in Table 10. The results of the analysis show that the following study intersections would continue to operate at an unacceptable level of service under background conditions both without and with the project:

Veterans Boulevard and Whipple Avenue – PM peak hour Veterans Boulevard and Woodside Road – PM peak hour Main Street and Woodside Road Westbound Ramps – AM and PM peak hours





LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 11 Background Plus Project Traffic Volumes





Table 10
Background Plus Project Level of Service Summary

				Backgr	ound	Backgro	ound P	lus Project
			Peak	Avg.		Avg.		Incr. In
ID	Intersection	Control ¹	Hour	Delay ²	LOS	Delay ²	LOS	Avg. Del.
1	Veterans Blvd and Whipple Ave	Signal	AM	38.6	D	40.4	D	1.8
			PM	64.3	E	66.8	E	2.5
2	Veterans Blvd and Brewster Ave	Signal	AM	26.9	С	26.9	С	0.0
			PM	31.0	С	32.1	С	1.1
3	Veterans Blvd and Middlefield Rd	Signal	AM	10.2	В	10.6	В	0.4
			PM	14.6	В	17.1	В	2.5
4	Veterans Blvd and Jefferson Ave	Signal	AM	23.0	С	22.9	С	-0.1
			PM	23.8	С	23.7	С	-0.1
5	Veterans Blvd and Maple St	Signal	AM	28.1	С	28.0	С	-0.1
	2		PM	33.5	С	33.4	С	-0.1
6	Veterans Blvd and Woodside Rd ³	Signal	AM	25.4	С	25.2	С	-0.2
			PM	>80	F	>80	F	2.3
7	Industrial Way/Winslow St and Whipple Ave	Signal	AM	24.5	С	24.5	С	0.0
	W	0' '	PM	26.8	С	26.9	С	0.1
8	Winslow St and Brewster Ave	Signal	AM	34.5	С	35.4	D	0.9
_	Window Of and Drivers	014/00	PM	37.7	D	38.7	D	1.0
9	Winslow St and Driveway	owsc	AM	11.0	В	13.2	В	2.2
40	Debasses and Middle Cald Dd	014/00	PM	12.9	В	17.3	С	4.4
10	Driveway and Middlefield Rd	owsc	AM	12.5	B B	14.1	B B	1.6
44	Argualla Ct and Mhinnla Ara	Cianal	PM	10.5		11.8	С	1.3
11	Arguello St and Whipple Ave	Signal	AM PM	20.7 22.7	C C	20.6 22.7	C	-0.1 0.0
12	Middlefield Rd and Jefferson Ave	Signal	AM	28.2	С	28.2	С	0.0
12	ivilualellela Ka alia Jellelson Ave	Signal	PM	33.3	C	33.7	C	0.0
13	Middlefield Rd and Main St	Signal	AM	32.4	C	32.5	C	0.4
13	Middleffeld Nd and Main St	Olgilai	PM	33.4	C	33.5	C	0.1
14	El Camino Real and Whipple Ave*	Signal	AM	33.2	C	34.2	C	1.0
	El Gammo (Garana Winppio / Wo	Oigilai	PM	40.1	D	41.9	D	1.8
15	El Camino Real and Jefferson Ave	Signal	AM	37.1	D	37.1	D	0.0
		0 .ga.	PM	42.3	D	42.4	D	0.1
16	Main St and Woodside Rd WB Ramps	TWSC	AM	39.3	E	41.7	E	2.4
			PM	>50	F	>50	F	36.7
17	El Camino Real and Woodside Rd EB Ramps	owsc	AM	18.2	С	18.6	C	0.4
	1 -		РМ	27.8	D	28.5	D	0.7
18	El Camino Real and Brewster Ave	Signal	AM	18.6	В	19.0	В	0.4
			PM	19.5	В	19.7	В	0.2
19	Marshall St and Jefferson Ave	Signal	AM	23.0	С	23.0	С	0.0
		-	PM	23.3	С	23.3	С	0.0

Notes:

Bold indicates a substandard level of service.

Outline indicates a significant project impact.



^{*} Indicates San Mateo County CMP intersection. LOS standard for El Camino Real and Whipple Ave is LOS E.

¹ Control Type Definitions: OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control

² Intersection level of service for OWSC and TWSC intersections is represented by the delay for the stop controlled approach. Intersection level of service for all other control types is represented by average delay for all movements.

³ Observations show the intersection operates at LOS F during the PM peak hour due to queue spillback from the downstream intersection at Woodside/Broadway.

All other study intersections are expected to operate at an acceptable level based on Redwood City and C/CAG standards.

Intersection Impacts

Veterans Boulevard and Whipple Avenue

The Veterans Boulevard and Whipple Avenue intersection would operate at an unacceptable LOS E under background conditions during the PM peak hour. The addition of project trips under background plus project conditions would increase the average delay at this intersection by 2.5 seconds. This increase in delay is less than 5.0 seconds, therefore, this impact would be **less than significant**.

Veterans Boulevard and Woodside Road

The Veterans Boulevard and Woodside Road intersection would operate at an unacceptable LOS F under background conditions during the PM peak hour. The addition of project trips under background plus project conditions would increase the average delay at this intersection by 2.3 seconds. This increase in delay is less than 5.0 seconds, therefore, this impact would be **less than significant**.

Main Street and Woodside Road Westbound Ramps

The Main Street and Woodside Road Westbound Ramps intersection would operate at an unacceptable LOS E and LOS F under background conditions during the AM and PM peak hours, respectively. During the AM peak hour, the addition of project trips would cause the delay for the stop-controlled westbound approach on the Woodside Road ramp to increase by 2.4 seconds, which is considered less than significant.

During the PM peak hour, vehicles on the stop-controlled approach encounter lengthy delays due to a lack of sufficient gaps on Main Street. Thus, even an extremely small increase in Main Street traffic as little as three trips would cause a significant impact. The project is expected to add 14 trips, causing the delay for the worst approach (westbound) at this intersection to increase by more than 5.0 seconds, which is the City's significance threshold. Additionally, based on the peak-hour signal warrant analysis for the intersection, signalization would be warranted under background plus project conditions. Thus, by meeting these two criteria, the addition of project traffic would result in a *significant impact*.

This intersection was identified in the Downtown Precise Plan Draft EIR, dated August 26, 2010, as operating at an unacceptable LOS F during both peak hours under the cumulative conditions. Signalization of this intersection was identified in the DPP DEIR to mitigate this impact (Mitigation 9-12). This mitigation has been added to the Redwood City Traffic Impact Fee (TIF) projects list. The County will coordinate with the City to pursue implementation of this improvement. However, the improvement is within the Woodside Road (SR 84) right-of-way and will require Caltrans approval. If Caltrans does not approve, and the City cannot implement these improvements, this impact would be significant and unavoidable.



6. Cumulative Conditions

This chapter describes traffic operations under cumulative no project and cumulative plus project conditions. For this study, cumulative no project conditions reflect a horizon year of 2022 (5-year horizon). Cumulative no project traffic volumes reflect regional growth in the study area and traffic generated by projects currently under construction and other nearby approved and pending developments. Cumulative plus project conditions represent cumulative no project traffic volumes with the addition of project generated traffic.

Roadway Network

The intersection lane configurations under cumulative conditions were assumed to be the same as described under background conditions.

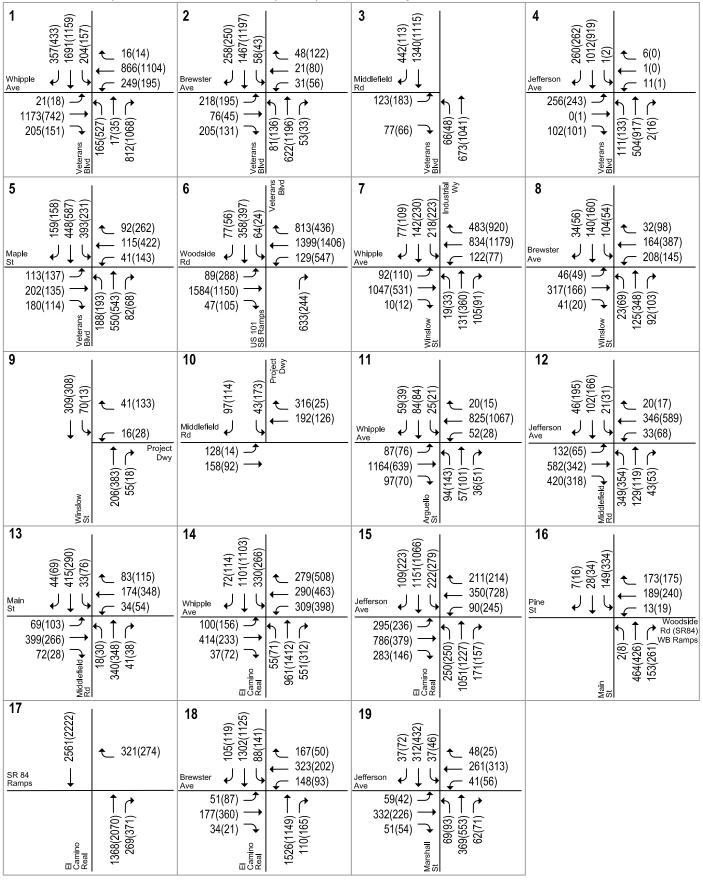
Intersection Traffic Volumes

The cumulative scenarios assume a horizon year of 2022. Cumulative no project traffic volumes were estimated by adding to background traffic volumes the trips generated by the proposed Harbor View Place project and a growth factor to account for other pending projects. The Harbor View Place Project would be located at 320-350 Blomquist Street, east of US 101, and would develop a high-tech office campus totaling 1,179,747 square feet². The cumulative no project traffic volumes are shown on Figure 12.

The growth factor used in the cumulative scenarios was derived from the Inner Harbor Specific Plan DEIR based on the difference between existing traffic volumes and cumulative without project traffic volumes. The growth factor of 1.06 percent per year was applied to the existing AM and PM peak hour volumes to reflect regional growth and traffic increases associated with most pending and future developments anticipated to occur in Redwood City. The proposed Harbor View Place project would add a significant number of trips to the study area, which are not accounted for by the growth factor.

² The trips associated with the proposed Harbor View Project were obtained from the Inner Harbor Specific Plan Draft EIR, dated October 2015, which evaluated 1,400,000 s.f. of commercial office use. The project sponsor's current application to the City proposes 1,179,747 s.f. of commercial office use.





LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 12
Cumulative No Project Traffic Volumes





Thus, the trips for this pending development were added in addition to the growth factor. This method was reviewed and approved by Redwood City and San Mateo County staff.

Cumulative plus project conditions traffic volumes were estimated by adding project generated trips to the cumulative no project traffic volumes. Cumulative traffic volumes are shown on Figure 13.

Intersection Levels of Service

The results of the level of service analysis under cumulative no project and cumulative conditions show that the following three intersections would operate at an unacceptable level of service under cumulative conditions both without and with the project:

Veterans Boulevard and Whipple Avenue – PM peak hour Veterans Boulevard and Woodside Road – PM peak hour Main Street and Woodside Road Westbound Ramps – AM and PM peak hours

All of the other study intersections are expected to operate at an acceptable level of service during both peak hours. The intersection level of service calculations are summarized in Table 11.

Intersection Impacts

Veterans Boulevard and Whipple Avenue

The Veterans Boulevard and Whipple Avenue intersection would operate at an unacceptable LOS E under cumulative no project conditions during the PM peak hour. The addition of project trips under cumulative plus project conditions would increase the average delay at this intersection by 3.2 seconds. This increase in delay is less than 5.0 seconds, therefore, this impact would be *less than significant*.

Veterans Boulevard and Woodside Road

The Veterans Boulevard and Woodside Road intersection would operate at an unacceptable LOS F under cumulative no project conditions during the PM peak hour. The addition of project trips under cumulative plus project conditions would increase the average delay at this intersection by 3.7 seconds. This increase in delay is less than 5.0 seconds, therefore, this impact would be *less than significant*.

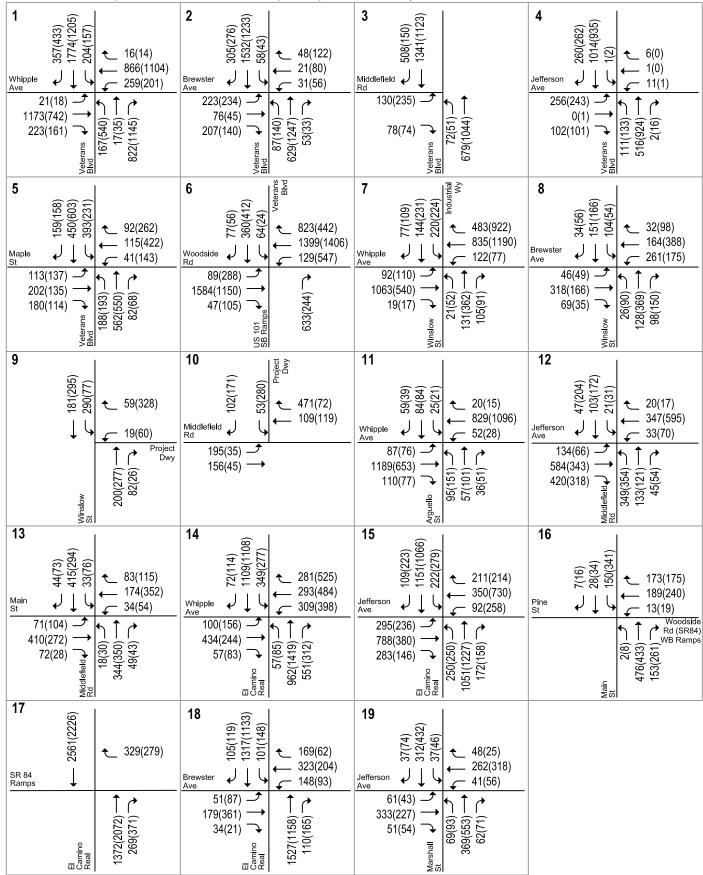
Main Street and Woodside Road Westbound Ramp

The Main Street and Woodside Road Westbound Ramps intersection would operate at an unacceptable LOS E and LOS F under cumulative no project conditions during the AM and PM peak hours, respectively. During the AM peak hour, the addition of project trips would cause the delay for the stop-controlled westbound approach on the Woodside Road ramp to increase by 3.3 seconds, which is considered less than significant.

During the PM peak hour, vehicles on the stop-controlled approach encounter lengthy delays due to a lack of sufficient gaps on Main Street. Thus, even an extremely small increase in Main Street traffic as little as three trips would cause a significant impact. The project is expected to add 14 trips under cumulative plus project conditions, causing the delay for the worst approach (westbound) at this intersection to increase by more than 5.0 seconds, which is the City's significance threshold. Additionally, based on the peak-hour signal warrant analysis for the intersection, signalization would be warranted under cumulative plus project conditions. Thus, by meeting these two criteria, the addition of project traffic would result in a *significant impact*.

This intersection was identified in the Downtown Precise Plan Draft EIR, dated August 26, 2010, as operating at an unacceptable LOS F during both peak hours under the cumulative conditions. The DPP DEIR identifies signalization of this intersection to mitigate this impact (Mitigation 9-12). This mitigation has been added to the Redwood City Traffic Impact Fee (TIF) projects list. The County will coordinate





LEGEND

XX(XX) = AM(PM) Peak-Hour Traffic Volumes

Figure 13 Cumulative Traffic Volumes





with the City to pursue implementation of this improvement. However, the improvement is within the Woodside Road (SR 84) right-of-way and will require Caltrans approval. If Caltrans does not approve, and the City cannot implement these improvements, then this impact would be significant and unavoidable.

Table 11
Cumulative Level of Service Summary

			Peak	Backgr Avg.	ound	Cumula Proj Avg.		(Cumula	itive Incr. In
ID	Intersection	Control ¹	Hour	Delay ²	LOS	Delay ²	LOS	Delay ²	LOS	Avg. Del
1	Veterans Blvd and Whipple Ave	Signal	AM PM	38.6 64.3	D E	46.6 75.5	D E	51.6 78.7	D E	5.0 3.2
2	Veterans Blvd and Brewster Ave	Signal	AM PM	26.9 31.0	C C	26.8 30.9	C	26.9 32.1	C C	0.1 1.2
3	Veterans Blvd and Middlefield Rd	Signal	AM PM	10.2 14.6	B B	10.2 14.4	B B	10.5 16.8	B B	0.3
4	Veterans Blvd and Jefferson Ave	Signal	AM PM	23.0 23.8	C C	22.8 23.4	C	22.7 23.3	C C	-0.1 -0.1
5	Veterans Blvd and Maple St	Signal	AM PM	28.1 33.5	C C	30.7 37.4	C D	30.7 37.5	C D	0.0
6	Veterans Blvd and Woodside Rd ³	Signal	AM PM	25.4 > 80	С F	25.7 > 80	C F	25.8 > 80	С F	0.1 3.7
7	Industrial Way/Winslow St and Whipple Ave	Signal	AM PM	24.5 26.8	C C	24.7 28.2	C C	24.7 28.4	C C	0.0 0.2
8	Winslow St and Brewster Ave	Signal	AM PM	34.5 37.7	C D	35.0 39.2	C D	35.9 40.4	D D	0.9 1.2
9	Winslow St and Driveway	OWSC	AM PM	11.0 12.9	B B	11.3 13.4	B B	13.7 18.4	B C	2.4 5.0
10	Driveway and Middlefield Rd	OWSC	AM PM	12.5 10.5	B B	12.9 10.7	B B	14.6 12.1	B B	1.7 1.4
11	Arguello St and Whipple Ave	Signal	AM PM	20.7 22.7	C C	21.0 23.0	C C	20.9 23.0	C C	-0.1 0.0
12	Middlefield Rd and Jefferson Ave	Signal	AM PM	28.2 33.3	C C	28.5 34.8	C C	28.5 35.2	C D	0.0 0.4
13	Middlefield Rd and Main St	Signal	AM PM	32.4 33.4	C C	33.2 34.1	C C	33.3 34.3	C C	0.1 0.2
14	El Camino Real and Whipple Ave*	Signal	AM PM	33.2 40.1	C D	34.2 44.5	C D	35.3 47.3	D D	1.1 2.8
15	El Camino Real and Jefferson Ave	Signal	AM PM	37.1 42.3	D D	39.0 46.2	D D	39.0 46.3	D D	0.0 0.1
16	Main St and Woodside Rd WB Ramps	TWSC	AM PM	39.3 >50	E	49.2 >50	E F	>50	F	3.3 44.4
17	El Camino Real and Woodside Rd EB Ramps	owsc	AM PM	18.2 27.8	C D	19.9 32.9	C D	20.4 33.9	C D	0.5 1.0
18	El Camino Real and Brewster Ave	Signal	AM PM	18.6 19.5	B B	19.3 20.0	B B	19.8 20.2	B C	0.5
19	Marshall St and Jefferson Ave	Signal	AM PM	23.0 23.3	C C	23.7 23.6	C C	23.7 23.7	C C	0.0 0.1

Notes:

Bold indicates a substandard level of service.

Outline indicates a significant project impact.



^{*} Indicates San Mateo County CMP intersection. LOS standard for El Camino Real and Whipple Ave is LOS E.

¹ Control Type Definitions: OWSC = One-Way Stop Control; TAWSC = Two-Way Stop Control

² Intersection level of service for OWSC and TWSC intersections is represented by the delay for the stop controlled approach. Intersection level of service for all other control types is represented by average delay for all movements.

³ Observations show the intersection operates at LOS F during the PM peak hour due to queue spillback from the downstream intersection at Woodside/Broadway.

7. **Analysis of Alternative Project Access Scenario**

This chapter presents an analysis of an alternative project access scenario that includes a new driveway on Veterans Boulevard that would connect to the proposed new parking structure. The new and existing parking structures also would have direct access to Middlefield Road and Winslow Street via the existing site driveways.

Project Trip Assignment

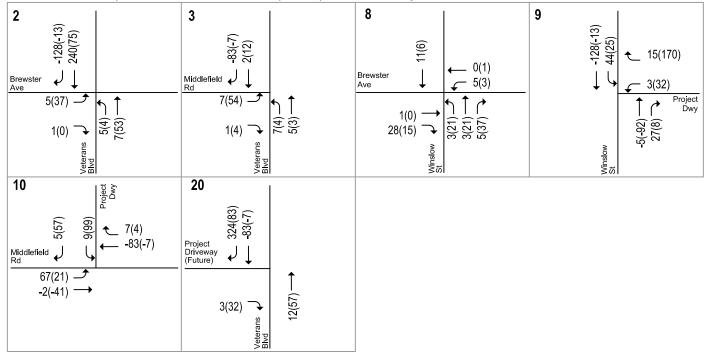
The assignment of project trips to and from the new parking structure was revised to reflect the proposed new driveway on Veterans Boulevard. Due to the existing raised median on Veterans Boulevard, the new driveway would be restricted to right turns only in and out. Existing vehicle trips associated with parking spaces that will be displaced by the project and trips associated with the existing unmet parking demand also were reassigned to reflect the additional access point for the new parking garage. The new driveway is expected to be heavily utilized by inbound traffic during the morning commute period since it is estimated that approximately 40 percent of the Government Center trips approach the study area via southbound US 101 and could easily turn right into the site from Veterans Boulevard. Outbound traffic on the new driveway is expected to be rather low due to the right-turn only restriction on the proposed new driveway and the prohibition of U-turns on southbound Veterans Boulevard at Middlefield Road. Because the new project driveway would only alter trip patterns in the immediate vicinity of the new parking structure, the project trip assignment would be unchanged at most of the study intersections. Figure 14 presents the project trip assignment under the Alternative Access Scenario for the five study intersections affected as well as the project trips at the proposed new driveway.

Intersection Levels of Service

The intersection level of service results at the five study intersections affected by the proposed new driveway are presented in Table 12. The analysis results for the alternative project access scenario show very little difference from the results presented in previous chapters. At the signalized study intersections adjacent to Government Center, the average delay under the alternative access scenario would be within one second of the value calculated for the project as originally proposed. The unsignalized project driveways on Middlefield Road and on Winslow Street would experience a slight reduction in the average delay (0.3 to 2.4 second less) due to the addition of a new project driveway on Veterans Boulevard. All of the intersections listed in Table 12 would continue to operate at an acceptable level of service. The level of service results at the other study intersections not listed in Table 12 would be the same with or without the new driveway on Veterans Boulevard. Thus, the project would have the same impact at the intersection of Main Street and the Woodside Road Westbound Ramps under the alternative project access scenario as reported in previous chapters.



San Mateo County Government Center Campus Improvement Project



LEGEND

XX(XX) = AM(PM) Peak-Hour Trips

Figure 14
Project Trip Assignment under
Alternative Access Scenario



Table 12 Intersection Levels of Service Under Alternative Project Access Scenario

				Existin	g Plu	s Project	Bacl	grour Proje	nd Plus ct		umula	ative
ID	Intersection	Control ¹	Peak Hour	Avg. Delay²	LOS	Incr. In Avg. Del.	Avg. Delay²	LOS	Incr. in Avg. Del.	Avg. Delay ²	LOS	Incr. in Avg. Del.
2	Veterans Blvd and Brewster Ave	Signal	AM PM	25.1 31.4	C C	-0.3 0.7	26.7 31.7	C C	-0.2 0.7	26.8 31.8	C C	0.0 0.9
3	Veterans Blvd and Middlefield Rd	Signal	AM PM	11.9 18.7	B B	0.9 2.9	11.1 17.5	B B	0.9 2.9	10.9 17.1	B B	0.7 2.7
8	Winslow St and Brewster Ave	Signal	AM PM	34.4 36.8	C D	0.2 0.9	35.0 38.9	C D	0.5 1.2	35.5 40.6	D D	0.5 1.4
9	Winslow St and Driveway	OWSC	AM PM	10.8 14.3	B B	0.1 2.3	11.1 16.2	B C	0.1 3.3	11.3 17.1	B C	0.0 3.7
10	Driveway and Middlefield Rd	owsc	AM PM	13.0 11.5	B B	0.5 1.0	13.0 11.5	B B	0.5 1.0	13.4 11.7	B B	0.5 1.0

Notes:

Bold indicates a substandard level of service.

Outline indicates a significant project impact.

The new project driveway on Veterans Boulevard would have a positive impact on traffic operations by reducing the length of vehicle queues for the following movements:

- left-turn from westbound Brewster Avenue to southbound Winslow Street
- left-turn from southbound Winslow Street into the project driveway
- left-turn from the existing parking structure driveway to northbound Middlefield Road

In addition, the addition of a third project driveway would provide flexibility in the case of an emergency or a malfunction of the parking access controls.



¹ Control Type Definitions: OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control

² Intersection level of service for OWSC and TWSC intersection is represented by the delay for the stop controlled approach. Intersection level of service for all other control types is represented by average delay for all movements.

8.

Other Transportation Issues

This chapter presents other transportation issues associated with the project. These include an analysis of:

- Vehicle queuing
- Site access and circulation
- Potential impacts to transit, bicycle, and pedestrian facilities
- VMT Analysis

Unlike the level of service impact methodology, which is adopted by the City Council, the analysis in this chapter are based on professional judgement in accordance with the standards and methods employed by the traffic engineering community.

Queuing Analysis

The operations analysis is based on vehicle queuing for high-demand movements at intersections (see Table 13). Vehicle queues were estimated using a Poisson probability distribution, which estimates the probability of "n" vehicles for a vehicle movement using the following formula:

$$P(x=n) = \frac{\lambda^n e^{-(\lambda)}}{n!}$$

Where:

P (x=n) = probability of "n" vehicles in queue per lane $n = number of vehicles in the queue per lane <math>\lambda = average number of vehicles in the queue per lane (vehicles per hour per lane/signal cycles per hour)$

The basis of the analysis is as follows: (1) the Poisson probability distribution is used to estimate the 95th percentile maximum number of queued vehicles per signal cycle for a particular movement; (2) the estimated maximum number of vehicles in the queue is translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length is compared to the existing or planned available storage capacity for the movement. Poisson probability calculation sheets are provided in Appendix D.



Table 13 Queuing Analysis Summary

Intersection	Veterar & Whi	ipple	& Bre	ns Blvd ewster ve	Blv Middl	rans d & efield	Winsl & Wh		Brews	ster Ave	& Winslo	ow St	El Ca Rea Whipp	al&	Rea Brev	mino al & wster ve
Movement	WB			LT	EB		NB			3 LT	NB			LT		LT
Peak Hour Period	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
Existing			440	40=		405		440	400	400	400	400				
Cycle/Delay ¹ (sec)	115	115	116	125	116	125 174	125	110 29	100 148	100	100	100	115	115	115 73	115 121
Volume (vphpl) Avg. Queue (veh/ln)	225 7.2	158 5.0	168 5.4	153 5.3	117 3.8	6.0	18 0.6	0.9	4.1	127 3.5	21 0.6	63 1.8	43 1.4	56 1.8	2.3	3.9
Avg. Queue ² (ft/ln)	180	126	135	133	94	151	16	22	103	88	15	44	34	45	58	97
95th% Queue (veh/ln)	12	9	9	9	7	10	2	3	8	7	2	44	4	45	5	10
95th% Queue (ft/ln)	300	225	225	225	175	250	50	75	200	175	50	100	100	100	125	250
Storage (ft/ In)	200	200	250	250	150	150	150	150	175	175	125	125	200	200	275	275
Adequate (Y/N) ³	N	N	Y	Y	N	N	Y	Y	N	Y	Y	Y	Y	Y	Y	Υ
Existing Plus Project																
Cycle/Delay ¹ (sec)	115	115	116	125	116	125	125	110	100	100	100	100	115	115	115	115
Volume (vphpl)	235	164	173	192	124	226	20	48	201	157	24	84	45	70	86	128
Avg. Queue (veh/ln)	7.5	5.2	5.6	6.7	4.0	7.8	0.7	1.5	5.6	4.4	0.7	2.3	1.4	2.2	2.7	4.1
Avg. Queue ² (ft/ln)	188	131	139	167	100	196	17	37	140	109	17	58	36	56	69	102
95th% Queue (veh/ln)	12	9	10	11	8	13	2	4	10	8	2	5	4	5	6	8
95th% Queue (ft/In)	300	225	250	275	200	325	50	100	250	200	50	125	100	125	150	200
Storage (ft/ In)	200	200	250	250	150	150	150	150	175	175	125	125	200	200	275	275
Adequate (Y/N) ³	N	N	Υ	N	N	N	Υ	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ
Background																
Cycle/Delay ¹ (sec)	115	115	116	125	116	125	125	110	100	100	100.0	100	115	115	115	115
Volume (vphpl)	237	186	207	185	117	174	18	31	200	138	22	66	52	67	83	133
Avg. Queue (veh/ln)	7.6	5.9	6.7	6.4	3.8	6.0	0.6	0.9	5.6	3.8	0.6	1.8	1.7	2.1	2.7	4.2
Avg. Queue ² (ft/ln)	189	149	167	161	94	151	16	24	139	96	15	46	42	54	66	106
95th% Queue (veh/ln)	12	10	11	11	7	10	2	3	10	7	2	4	4	5	6	8
95th% Queue (ft/In)	300	250	275	275	175	250	50	75	250	175	50	100	100	125	150	200
Storage (ft/ In)	200	200	250	250	150	150	150	150	175	175	125	125	200	200	275	275
Adequate (Y/N) ³	N	N	N	N	N	N	Υ	Υ	N	Υ	Υ	Υ	Υ	Υ	Υ	Υ
Background Plus Pro	ject															
Cycle/Delay ¹ (sec)	115	115	116	125	116	125	125	110	100	100	100.0	100	115	115	115	115
Volume (vphpl)	247	192	212	224	124	226	20	50	253	168	25	87	54	81	96	140
Avg. Queue (veh/ln)	7.9	6.1	6.8	7.8	4.0	7.8	0.7	1.5	7.0	4.7	0.7	2.4	1.7	2.6	3.1	4.5
Avg. Queue ² (ft/ln)	197	153	171	194	100	196	17	38	176	117	17	60	43	65	77	112
95th% Queue (veh/ln)	13	10	11	13	8	13	2	4	12	8	2	5	4	5	6	8
95th% Queue (ft/ln)	325 200	250 200	275 250	325 250	200 150	325 150	50 150	100 150	300 175	200 175	50 125	125 125	100 200	125 200	150 275	200
Storage (ft/ In) Adequate (Y/N) ³	200 N	200 N	250 N	250 N	N	N	150 Y	150 Y	175 N	175 N	125 Y	125 Y	200 Y	200 Y	2/5 Y	2/5 Y
		14	N	14	N	14	ī	1	14	14	ī	'	ī		ī	ı
Cumulative No Project			440	40=		405		440	400	400	400.0	400				
Cycle/Delay ¹ (sec)	115	115	116	125	116	125	125	110	100	100	100.0	100	115	115	115	115
Volume (vphpl) Avg. Queue (veh/ln)	249 8.0	195 6.2	218 7.0	195 6.8	123 4.0	183 6.4	21 0.7	33 1.0	208 5.8	145 4.0	23 0.6	69 1.9	55 1.8	71 2.3	88 2.8	141 4.5
Avg. Queue ² (ft/ln)	199	156	176	169	99	159	18	25	144	101	16	48	44	57	70	113
95th% Queue (veh/ln)	13	11	12	11	7	11	2	3	10	8	2	40	44	5	6	8
95th% Queue (ft/ln)	325	275	300	275	175	275	50	75	250	200	50	100	100	125	150	200
Storage (ft/ In)	200	200	250	250	150	150	150	150	175	175	125	125	200	200	275	275
Adequate (Y/N) ³	N	N	N	N	N	N	Υ	Υ	N	N	Υ	Υ	Y	Υ	Υ	Υ
Cumulative																
Cycle/Delay ¹ (sec)	115	115	116	125	116	125	125	110	100	100	100.0	100	115	115	115	115
Volume (vphpl)	259	201	223	234	130	235	23	52	261	175	26	90	57	85	101	148
Avg. Queue (veh/ln)	8.3	6.4	7.2	8.1	4.2	8.2	0.8	1.6	7.3	4.9	0.7	2.5	1.8	2.7	3.2	4.7
Avg. Queue ² (ft/ln)	207	161	180	203	105	204	20	40	181	122	18	63	46	68	81	118
95th% Queue (veh/ln)	13	11	12	13	8	13	2	4	12	9	2	5	4	6	6	9
95th% Queue (ft/ln)	325	275	300	325	200	325	50	100	300	225	50	125	100	150	150	225
Storage (ft/ In)	200	200	250	250	150	150	150	150	175	175	125	125	200	200	275	275
Adequate (Y/N)	N	N	N	N	N	N	Υ	Υ	N	N	Υ	Υ	Υ	Υ	Υ	Υ

Notes:

WB = westbound; EB = eastbound; SB = southbound; NB = northbound.

RT = right turn movement; LT = left turn movement; TH = through movement.

Vehicle queue calculations based on cycle length for signalized intersections and average delay for unsignalized intersections.

Assumes 25 feet per vehicle queued

3 A 95th percentile queue length exceeding the available storage by one vehicle (25 feet) is not expected to cause any significant operational issues.



A queueing analysis was conducted for eight left-turn movements at seven study intersections. These movements were selected for analysis because the project would add a substantial number of trips during one or both peak hours (see Table 13). The analysis shows that five of the eight left-turn queues would exceed the existing storage during one or more analysis scenarios. These five turn movements are described below.

Veterans Boulevard and Whipple Avenue

The westbound left-turn lane from Whipple Avenue onto Veterans Boulevard can accommodate a queue of up to eight vehicles (or 200 feet) without interfering with westbound through movements. Under the existing conditions, the 95th percentile queue length is 300 feet during the AM peak hour. This queue length would increase to 325 feet during the PM peak hour under cumulative no project conditions. The project would add 10 vehicles to the left-turn movement during the AM peak hour and would increase the 95th percentile queue length by up to 25 feet (one vehicle). During the PM peak hour, the 95th percentile queue is 225 feet under existing conditions. The project would increase the 95th percentile queue length by 25 feet (one vehicle) under existing plus project conditions.

The existing median separating eastbound and westbound vehicles along Whipple Avenue is wide enough that the westbound left-turn lane could be extended by cutting into the median. This section of the roadway, however, is under Caltrans jurisdiction as part of the US 101/Whipple Ave interchange, and any improvements would require Caltrans approval. Although the 95th percentile queue is expected to extend into the adjacent through lane at times, Whipple Avenue has two through lanes, so this momentary overflow would not cause any serious traffic issues along the roadway.

Veterans Boulevard and Brewster Avenue

There is space for a queue of up to 250 feet (10 vehicles) within the eastbound left-turn lane and two-way-left-turn lane on Brewster Avenue at Veterans Boulevard. Under existing conditions, the estimated 95th percentile queue length would be 250 feet during the AM peak hour, and 275 feet during the PM peak hour. The project would add five vehicles during the AM peak hour, and 39 vehicles during the PM peak hour to this left-turn movement. The addition of these project trips during both peak hours would increase the 95th percentile queue by up to one vehicle during the AM peak hour and two vehicles during the PM peak hour. Under cumulative conditions, the queue would reach up to 325 feet during the PM peak hour. The overflow of this turn pocket would result in left-turning vehicles blocking through and right-turn traffic. This left-turn pocket could not be extended because it is end-to-end with the westbound left-turn pocket at the Winslow Street and Brewster Avenue intersection.

Veterans Boulevard and Middlefield Avenue

There is space for a queue of 150 feet (six vehicles) in the eastbound left-turn lane from Middlefield Road onto Veterans Boulevard without blocking the project driveway on Middlefield Road. The queuing space provided at this intersection is inadequate to meet the demands of the 95th percentile queues under all scenarios during both peak hours. The queues would be longest during the PM peak hour, when the 95th percentile queue is calculated to be 250 feet under existing and background conditions. The project would add 52 vehicles to this turning movement during the PM peak hour, which would increase the 95th percentile queue by 75 feet (three vehicles) to 325 feet. Because the queue would frequently extend past the project driveway, it would impede outbound traffic exiting the Government Center parking structures during the PM peak hour. The County may coordinate with the City of Redwood City to consider converting the right-turn lane on eastbound Middlefield Road at Veterans Boulevard to a shared left/right-turn lane. This modification would require restriping Middlefield Road to move the bike lane adjacent to the curb, adding a bike box at the front of the shared left/right-turn lane, and modifying the signal. The improvement is not needed to mitigate an impact on level of service but would improve outbound traffic flow from the Government Center parking structures onto Middlefield Road.



Winslow Street and Brewster Avenue

A queueing analysis was conducted for the westbound and northbound left-turn movements at the Winslow Street/Industrial Way and Brewster Avenue intersection. These turn pockets provide 175 feet and 125 feet queue storage space, respectively.

The existing westbound left-turn storage would be exceeded by the 95th percentile queue during the AM peak hour under all scenarios, and during the PM peak hour under all scenarios except existing and background conditions. During the AM peak hour the existing storage is exceeded by 25 feet (one vehicle) under existing conditions, and by 50 feet (two vehicles) under background and cumulative no project conditions. The project would add 53 vehicles to this left-turn movement during the AM peak hour and would increase the 95th percentile queue by 50 feet (two vehicles) under all plus project conditions. This queue of 300 feet calculated under the background plus project and cumulative plus project scenarios represents the longest queue for all scenarios during both peak hours. This turn pocket cannot be extended because it is end-to-end with the eastbound left-turn pocket at the Veterans Boulevard and Brewster Avenue intersection. Both the 95th percentile queues for each of these two left-turn movements are expected to exceed the available storage distance during opposite peak periods, and therefore would not impact one another.

The existing northbound left-turn storage is expected to be adequate under all scenarios during both peak hours.

Site Access and On-Site Circulation

A brief qualitative review of the project's conceptual site plan was conducted to determine the adequacy of the proposed project to meet the on-site access and circulation needs. Employees and visitors of the new COB3 as well as those users of existing parking facilities planned to be removed would park in the proposed new parking structure located on the north side of the County Government Center. This parking garage would be accessed via the existing County Government Center driveways on Winslow Street and Middlefield Road. These two driveways were included in the level of service analysis as study intersections 9 and 10, respectively. These driveways would provide access to the parking structure via an internal driveway.

Project Driveways

Based on AM and PM observations at the two driveways conducted by Hexagon staff, the addition of project traffic is not expected to cause any major operational issues. A brief overview of traffic operations at the project driveways are described below.

Winslow Street Driveway

The project driveway on Winslow Street is located approximately 200 feet south of the Winslow Street and Brewster Avenue intersection. This driveway is 26 feet wide with a single lane in each direction. Due to the driveways proximity to the Winslow Street and Brewster Avenue intersection, queues may extend from this downstream intersection past the project driveways at times. These queues would be temporary as they would be expected to clear the Winslow Street approach during each cycle.

The project driveway on Winslow Street does not serve many vehicles traveling to the existing parking facilities in this area because the signage at this driveway prioritizes the words "Jury Permit and Reserved Parking Only". Although "Public Parking" is also listed at the bottom of the sign, drivers may assume the driveway does not provide access to the garage. Hexagon recommends the County provide additional signage along Winslow Street that clearly and understandably notifies drivers that public parking can be accessed from this driveway.



Based on the intersection level of service analysis, the existing driveway would be adequate to serve the projected increase in traffic.

Middlefield Road Driveway

The project driveway on Middlefield Road is located approximately 150 feet west of the Veterans Boulevard and Middlefield Road intersection. This driveway is 36 feet wide with three lanes (one inbound and two outbound). It is recommended that the driveway retain the existing striping for the two outbound travel lanes with one exclusive left-turn lane and one exclusive right-turn lane. Due to the projects proximity to the Veterans Boulevard and Middlefield Road intersection, queues may frequently extend from this intersection past the project driveway during the PM peak hour and impede outbound traffic exiting the existing and proposed new parking structure. However, the queue blockages would only be temporary as queues are expected to clear the Middlefield Road approach during each cycle.

A majority of the vehicles entering the site using this driveway were observed coming from Veterans Boulevard. Vehicles arriving at this driveway from eastbound Middlefield Road are able to use the two-way-left-turn lane to turn into the site. A driveway exists across the street from the project site approximately 50 feet west of the project driveway. This opposite driveway serves the parking area for the newly developed residential building. The manner in which these two driveways are offset creates issues when a vehicle turning left into the County Government Center and a vehicle turning into the residential development arrive at near the same time. Due to their close proximity, vehicles queued to make left-turns into either development block oncoming vehicles from fully entering into the two-way-left-turn lane to properly queue. When this happens, left-turn vehicles may infringe upon the through lane while waiting to make their turn by temporarily blocking through traffic. There are no feasible measures to mitigate this issues beyond restricting access to one or both of the driveways, which is not recommended.

Sight Distance

The outbound driveways on Middlefield Road and Winslow Street should be free and clear of any obstructions to maximize sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on adjacent streets. Landscaping and parking should not conflict with a driver's ability to locate a gap in traffic and see oncoming pedestrians and bicyclists.

Sight distance generally should be provided in accordance with Caltrans standards. The minimum acceptable sight distance is often considered the Caltrans stopping sight distance. Sight distance requirements vary depending on the roadway speeds.

The existing speed limit on both Middlefield Road and Winslow Street is 25 mph. Thus, a driver must be able to see 150 feet down Middlefield Road or Winslow Street to locate a sufficient gap to turn out of the parking lot driveway. On-street parking is restricted adjacent to both driveways an adequate amount that 150-feet of sight distance is provided at both locations.

On-Site Circulation

Based on the conceptual parking structure plan (see Figure 15), the new parking garage would have one access point on the existing driveway aisle serving the existing parking structure and connecting the two driveways. This access point would be at approximately the same location as the access point to the existing juror parking lot and would be offset from the existing parking garage entrance by approximately 80 feet. At the existing parking garage entrance, the north and west approaches are under stop control while the south approach (inbound from Middlefield Road) is uncontrolled. This configuration is advantageous because it prevents inbound traffic from backing up onto Middlefield Road.



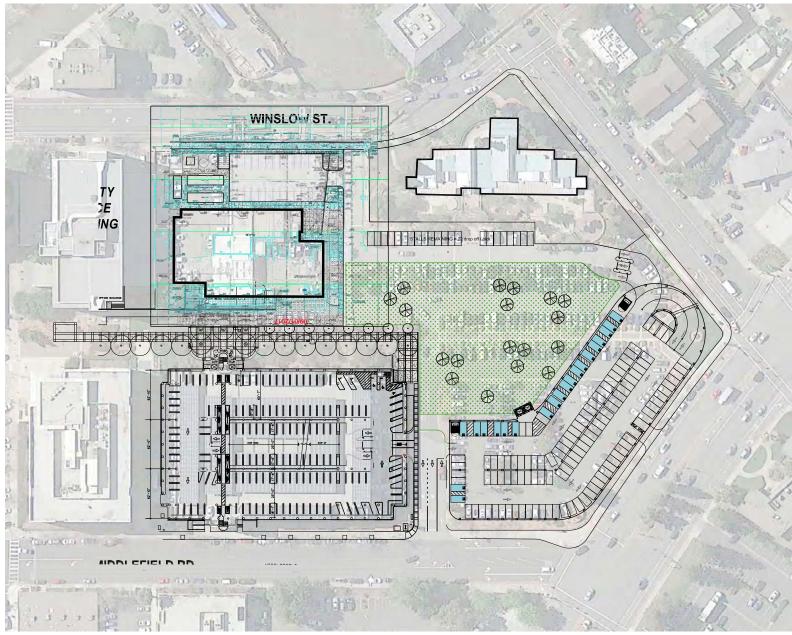


Figure 15 Conceptual Parking Plan





At the new parking garage entrance, it is recommended that the east approach (outbound from the new garage) be under stop control while the north and south approaches would be uncontrolled.

Due to the conceptual nature of the project site plans provided, a full analysis of on-site circulation is not included in this TIA. A full on-site circulation analysis should be conducted once the designs for the parking structure and layout have been finalized.

Transit, Pedestrian and Bicycle Analysis

The project is well served by existing pedestrian, bicycle, and transit facilities. The project would result in an increase in the number of conflicts where vehicles cross the path of pedestrians and bicycles due to increases in vehicle traffic crossing pedestrian and bicycle facilities. However, the project would improve the pedestrian environment in the project vicinity by creating a large pedestrian promenade as part of the closure of County Center and Hamilton Street. This pedestrian promenade would provide a safe pedestrian environment, connecting all office buildings in the Government Center. Pedestrian access between the COB3 building and the Redwood City Transit Center is well provided for via sidewalks along both sides of Hamilton Street, Middlefield Road, Broadway, and Winslow Street, as well as bulb-outs at nearly all intersections that would require crossing. Access to the nearby bus stops along Jefferson between Bradford Street and Marshall Street would be provided via sidewalks along Bradford Street and Jefferson Avenue, along with wide, striped crosswalks at intersections. Access to the nearby bus stops at the corner of Winslow Street and Brewster Street would be provided via sidewalks along the project's frontage on Winslow Avenue and marked crosswalks. The County will consult with the City of Redwood City on potential improvements to crosswalks at the following three intersections: Middlefield Road and Marshall Street, Middlefield Road and Bradford Street, and Jefferson Avenue and Bradford Street. Elsewhere, the existing pedestrian network in Downtown Redwood City provides safe and comfortable access between the COB3 and transit services.

Major pedestrian barriers include El Camino Real and US 101. Access across these barriers would be improved significantly through the implementation of the El Camino Real Corridor Plan and the Blomquist Bridge and Extension Project, described previously.

Planned Bicycle Facilities

Based on the Redwood City General Plan, Figure BE-12 Bikeway Plan, Class II bike lanes or Class III bike routes are proposed along Broadway between Winslow Street and Second Avenue, on Maple Street between Middlefield Road and Blomquist Street, and along El Camino Real. Other projects that will improve the existing bicycle network in the project vicinity include the El Camino Real Corridor Plan and the Blomquist Bridge and Street Extension Project.

The El Camino Real Corridor Plan includes design guidelines and streetscape improvements to improve the existing corridor into a "Grand Boulevard", supporting walking, transit, bicycling, and economic development. The plan includes streetscape improvements promoting non-automobile modes by increasing sidewalk widths, creating protected bicycle lanes, and developing intersection designs that increase safety and efficiency for all users. The plan will also increase the connectivity and relationship between the corridor and the downtown core, transit center, and surrounding neighborhoods.

The Blomquist Bridge and Street Extension project consists of both a street extension and new bridge connection across Redwood Creek on the east side of US 101. Blomquist Street will be extended from its current terminus at Maple Street, northwards to parallel US 101, then bridge across Redwood Creek to connect at the East Bayshore Road and Bair Island Road traffic circle. The project will also provide permanent bicycle and pedestrian access across Redwood Creek and connect to the Bay Trail. As proposed, the project would include bicycle and pedestrian paths travelling east-west below US 101, on



either side of Redwood Creek, connecting between the proposed bridge and Convention Way/Main Street. This improvement would significantly increase accessibility between the downtown core to areas east of US 101, including the Bay Trail and Pacific Shores.

The County will coordinate with the City of Redwood City to improve the Class II bicycle facility and right-turn movement from southbound Veterans Boulevard to westbound Middlefield Road. In addition, it is recommended that the proposed COB3 include additional bicycle parking facilities within close proximity of building entrances.

Transit Usage and Access

The project is not expected to cause any impacts to the local transit services. It is expected that a small portion of the COB3 new employees would use Caltrain to reach the project site. Based on surveys conducted of existing County employees as part of the County's Commute Alternative Program, approximately 11 percent of existing Government Center employees use transit. The additional 400 employees working at the County Government Center are estimated to result in an increase of 44 new transit trips. As described under the existing conditions, the project is well served by existing transit services, including 13 SamTrans buses and Caltrain. All of these transit services operate on relatively short headways during both peak hours. An increase in 44 transit riders would result in an increase in less than one rider per bus/train during each peak-hour due to the high volumes of transit services available within close proximity to the County Government Center.

Vehicle Miles Traveled

In accordance with SB 743, daily VMT for projects in San Mateo County versus the average of the San Francisco Bay area are presented based on the Metropolitan Transportation Commission (MTC) travel demand forecast model. The Year 2020 Plan Bay Area model forecasted daily VMT is 22.82 miles per worker employed in this area of Redwood City (TAZ 1454), while the San Francisco Bay Area average daily VMT is 21.8 miles per worker. Given that no standard approach or guidelines have been finalized under SB 743, the VMT presented in this report is for informational purposes only. It is not intended to provide any indication of the transportation impacts of the project under SB 743. Furthermore, according to the draft Office of Planning and Research guidelines, the project is assumed to have a less than significant impact on VMT because it is located within one half mile of the Redwood City Transit Center.

The TDM measures currently employed by the County for employees working at the County Government Center encourage alternative and active commuting behavior that would reduce single-occupant vehicle trips. These TDM measures would reduce the VMT generated by the proposed project.

TDM Measures

The County is committed to the implementation of TDM measures to encourage employees to carpool, take transit, or use active modes of transportation rather than driving individual vehicles to the County Government Center. Table 14 lists the TDM measures currently employed by the County, new TDM measures that are recommended for the new COB3, and the estimated C/CAG trip credits. TDM measures provided by the County that will continue to be provided to new employees of the COB3 include telework, flextime, and modified work schedules, incentives and parking for carpools and vanpools, County vehicles available to employees for business related trips, and guaranteed ride-home services (for emergency purposes).



Table 14
Existing and Proposed TDM Measures and Estimated C/CAG Trip Credits

		Size/Amo	ount	
			Recommended Addition	Trip
Proposed TDM Measures	Rate	Existing	for COB3	Credit
Bicycle Storage	1 trip per 3 spaces	40 bike rack spaces and 44 bike lockers	4 bike rack spaces and 12 locker spaces	5
Showers and Changing Rooms	10 trips per shower + 5 trips when combined with >= 5 bike lockers	unknown	8 showers total in COB3 (4 for women & 4 for men)	85
On-Site Amenities	5 trips per amenity	benches/picnic tables walking trail museum courtyard shops little libraries mail box/dispenser	no new amenities	0
Infill Development	2% of peak-hour trips	n/a	300 peak-hour trips generated by COB3	6
Preferential Carpool Parking	2 trips per space	53 spaces (at Law Library & History Museum)	5% of 1,200 spaces in the proposed new garage (60)	120
Subsidies for Pedestrian and Bicycle Commuters	1 trip per employee	26 employee participants (approximately 1% of all Government Center employees)	assume 1% utilization of new COB3 employees (4 employees)	4
Subsidized Transit Passes	1 trip per pass	263 employee participants (approximately 11% of all Government Center employees)	assume 11% utilization of new COB3 employees (44 employees)	44
Emergency Ride Home (through Peninsula Traffic Congestion Relief Alliance)	1 trip per ERH voucher used	unknown	assume 1% utilization of new COB3 employees (4 employees)	4
Employee Survey	3 trips	n/a	n/a	3
On-Site Child Care	1 trip per every 2 child care slots	unknown	no expansion planned	0
Provide use of County vehicles to employees who use alternate commute methods for County business	5 trips per vehicle	unknown	no expansion planned	0
Flextime: Alternative Work Hours	1 trip per employee	unknown	assume 5% utilization of new COB3 employees (20 employees)	20
Compressed Work Week	1 trip per 5 employees	unknown	assume 5% utilization of new COB3 employees (20 employees)	4
Combination of 10 or More Elements	5 trips	n/a	n/a	5
			Total Trip Credits	300

Based on the C/CAG requirements, a project is required to reduce the demand for all new peak-hour trips generated by the project. The project is estimated to generate up to 300 trips during the peak commute hours. The project's TDM plan would provide the project with 300 C/CAG trip credits, which meets the C/CAG requirement.



8. Conclusions

The proposed campus improvement project includes the construction of County Office Building #3 (COB3) with 121,000 to 156,000 square feet (s.f.), a new parking structure with 850 to 1,200 stalls, the relocation of the Lathrop House, the demolition of the Traffic Court and vacant Credit Union buildings, and the closure of two public streets to create a public plaza and promenade. The proposed street closures include Hamilton Street between Bradford Street and Marshall Street, and County Center between Hamilton Street and Middlefield Road.

The proposed COB3 is expected to be occupied by a total of 616 employees including 216 employees relocated from the Hall of Justice and County Office Building #1 within the County Government Center, and 400 employees relocated from existing facilities outside the County Government Center. The vacated Hall of Justice space will be reoccupied by the Traffic Court and other departments in the building that are currently undersized.

Project Trip Generation

Trip generation for the proposed development was estimated based on trip rates published in the ITE *Trip Generation Manual, 9th Edition* and reviewed by County staff. Trips generated by the new County office building were estimated by applying the average rates for government office complex to the total number of employees expected to work in the new COB3 building. Trip reductions were applied to account for employees that will relocate to the COB3 building from other buildings on the County Government Center campus, and for the high level of transit ridership by County Government Center employees.

After applying the trip generation rates and the applicable reductions, the project is estimated to generate 2,976 net new daily trips, including 232 net AM peak hour trips and 300 PM peak hour trips. During the AM peak hour, the project would generate 208 net new inbound trips and 24 net new outbound trips. During the PM peak hour, the project would generate 116 net new inbound trips and 184 net new outbound trips. Although the majority of project trips during the peak commute hours would be by employees coming to and leaving work (inbound in the AM and outbound in the PM), the proposed office building would also generate a small number of trips in the off-peak direction due to other trip purposes (e.g. visitor trips, deliveries, and employees traveling to an off-site meeting or job site).

The proposed project includes closing County Center between Middlefield Road and Hamilton Street, and Hamilton Street between County Center and Marshall Street in order to create a pedestrian promenade within the San Mateo County Government Center. The project would also result in the elimination of several off-street parking lots on the site of the proposed new office building and a small number of off-street parking spaces at the History Museum lot, where the Lathrop House is to be



relocated. In addition, due to the existing parking shortage at the Government Center, the County currently leases a portion of the surface parking lot on Bradford Street east of Jefferson Avenue for use by County employees. Other County employees and visitors park in nearby on-street parking spaces and City parking lots and garages in Downtown Redwood City. The construction of the new parking structure is expected to provide ample parking to allow all County employees and visitors to park within the County Government Center. Thus, the project will shift the trips associated with 508 parking spaces (226 County spaces eliminated by the project and 282 off-site public parking spaces used for excess unmet Government Center parking demand) to the proposed new parking structure. Traffic associated with the relocated parking spaces is estimated to include 265 AM peak hour trips and 224 PM peak hour trips.

Traffic Operations at Study Intersections

Traffic operations at the Redwood City and C/CAG CMP intersections were evaluated using TRAFFIX software to determine level of service. The level of service methodologies for signalized and unsignalized intersections are from the *2000 Highway Capacity Manual*. This methodology was disclosed to, and approved by, Redwood City and San Mateo County staff.

Significant Impacts

The intersection level of service analysis results are presented in Table ES-1. Based on Redwood City and C/CAG CMP level of service standards and impact criteria, the proposed project would generate a significant impact at one study intersection under existing plus project, background plus project, and cumulative plus project conditions. This intersection is:

Main Street and Woodside Road Westbound Ramps (unsignalized) – PM peak hour

Project Mitigations

Main Street and Woodside Road Westbound Ramp

The Main Street and Woodside Road Westbound Ramps intersection operates at an unacceptable LOS F under existing conditions during the PM peak hour. The intersection would continue to operate at LOS F under background and cumulative no project conditions during the PM peak hour. The stop-controlled westbound approach on the Woodside Road ramp encounters lengthy delays due to a lack of sufficient gaps on Main Street. Thus, even an extremely small increase in Main Street traffic as little as three trips would cause a significant impact. The project is expected to add 14 trips, causing the delay for the worst approach (westbound) at this intersection to increase by more than 5.0 seconds, which is the City's significance threshold. Additionally, based on the peak-hour signal warrant analysis for the intersection, signalization would be warranted under existing plus project, background plus project, and cumulative plus project conditions. Thus, by meeting these two criteria, the addition of project traffic would result in a significant impact.

This intersection was identified in the Downtown Precise Plan Draft EIR, dated August 26, 2010, as operating at an unacceptable LOS F during both peak hours under the cumulative conditions. The DPP DEIR identifies signalization of this intersection to mitigate this impact (Mitigation 9-12). This mitigation has been added to the Redwood City Traffic Impact Fee (TIF) projects list. The County will coordinate with the City to pursue the implementation of this improvement. However, the improvement is within the Woodside Road (SR 84) right-of-way and will require Caltrans approval. If Caltrans does not approve, and the City cannot implement these improvements, then this impact would be significant and unavoidable.



Freeway Segment and Ramp Analysis

The level of service standards for freeways in San Mateo County vary by segment from LOS D to LOS F according to the CMP. The segment along US 101 between Whipple Avenue and the Santa Clara County/San Mateo County border has a LOS standard of F (in both directions), and the segment between Whipple Avenue and SR 92 has a LOS standard of E. The project's impact on the freeway segments analyzed would be less than significant as the added project trips would represent less than one percent of the freeways capacity.

The addition of project trips to the study freeway ramps would not cause any ramps to exceed capacity during the AM or PM peak hour. This project's impact to the nearby freeway ramps would be less than significant.

Alternative Project Access Scenario

An alternative project access scenario was evaluated that includes a new driveway on Veterans Boulevard that would connect to the proposed new parking structure. The new and existing parking structures also would have direct access to Middlefield Road and Winslow Street via the existing site driveways. Due to the existing raised median on Veterans Boulevard, the new driveway would be restricted to right turns only in and out.

The analysis results show that a new driveway on Veterans Boulevard would cause little change to the intersection levels of service and vehicle delay. Thus, the alternative access scenario would result in the same impact at the intersection of Main Street and the Woodside Road Westbound Ramps and require the same mitigation measure as described above.

The new project driveway on Veterans Boulevard would have a positive impact on traffic operations by reducing the length of vehicle queues for selected intersection turn movements. Furthermore, the addition of a third project driveway would provide flexibility in the case of an emergency or a malfunction of the parking access controls.

Queuing Analysis

A queueing analysis was conducted for eight left-turn movements at seven study intersections. These movements were selected for analysis because the project is expected to add a substantial number of project trips during one or both peak hours. The analysis shows that four of the eight left-turn queues would exceed the existing storage during one or more analysis conditions. These four movements include:

- Westbound left-turn from Whipple Avenue onto Veterans Boulevard
- Eastbound left-turn from Brewster Avenue onto Veterans Boulevard
- Eastbound left-turn from Middlefield Road onto Veterans Boulevard
- Westbound left-turn from Brewster Avenue onto Winslow Street

The analysis concluded that the 95th percentile queues for each of these movements would exceed the existing storage during at least one scenario. 95th percentile queues that would exceed existing storage pockets by one vehicle are not expected to cause any operational issues. The extension of turn pockets to meet 95th percentile queues that exceeded existing storage by more than one vehicle was found to be infeasible at all locations. However, the left-turn storage on the eastbound Middlefield Road approach to Veterans Boulevard could be increase by converting the right-turn lane to a shared left/right-turn lane. This modification would require coordination with the City of Redwood City to restripe Middlefield Road to move the bike lane adjacent to the curb, add a bike box at the front of the shared left/right-turn lane, and modify the signal. The improvement is not required to mitigate an impact



on level of service but would facilitate outbound traffic flow exiting the Government Center onto Middlefield Road.

Site Access and On-Site Circulation

Driveway Operations

Based on AM and PM observations at the two driveways, the addition of project traffic is not expected to cause any major operational issues. The project driveway on Winslow Street is located approximately 200 feet south of the Winslow Street and Brewster Avenue intersection. This driveway is 26 feet wide with a single lane in each direction. This driveway experiences relatively low usage, likely due to a lack of visible signage for vehicles traveling on Winslow Street. It is recommended that the County provide additional signage along Winslow Street the clearly and understandably notifies drivers that public parking can be accessed from this driveway. The project driveway on Middlefield Road is located approximately 150 feet west of the Veterans Boulevard and Middlefield Road intersection. This driveway is 36 feet wide with three lanes (one inbound and two outbound). It is recommended that the driveway retain the existing striping for the two outbound travel lanes with one exclusive left-turn lane and one exclusive right-turn lane.

Sight Distance

The outbound driveways on Middlefield Road and Winslow Street should be free and clear of any obstructions to maximize sight distance, thereby ensuring that exiting vehicles can see pedestrians on the sidewalk and other vehicles traveling on adjacent streets. Landscaping and parking should not conflict with a driver's ability to locate a gap in traffic and see oncoming pedestrians and bicyclists. Based on Caltrans sight distance standards, 150 feet of sight distance is required at both driveways. On-street parking is restricted adjacent to both driveways an adequate amount that 150-feet of sight distance is provided at both locations.

On-Site Circulation

The new parking garage would have one access point on the existing driveway aisle serving the existing parking structure and connecting the two driveways. This access point would be at approximately the same location as the access point to the existing juror parking lot and would be offset from the existing parking garage entrance by approximately 80 feet. At the new parking garage entrance, it is recommended that the east approach (outbound from the new garage) be under stop control while the north and south approaches would be uncontrolled.

Due to the conceptual nature of the project site plans provided, a full analysis of on-site circulation is not included in this TIA. A full on-site circulation analysis should be conducted once the designs for the parking structure and layout have been finalized.

Transit, Pedestrian and Bicycle Analysis

The project is well served by existing pedestrian, bicycle, and transit facilities. The project would result in an increase in the number of conflicts where vehicles cross the path of pedestrians and bicycles due to an increase in vehicle traffic at the project driveways. The County will coordinate with the City of Redwood City to improve the Class II bicycle facility and right-turn movement from southbound Veterans Boulevard to westbound Middlefield Road. In addition, it is recommended that the proposed COB3 include additional bicycle parking facilities within close proximity of building entrances.

The project is not expected to cause any impacts to the local transit services. Based on surveys conducted of existing County Government Center employees, it is expected that 11 percent of the new



employees (44 employees) would commute to the campus using transit. This increase in 44 riders would not result in an impact on local transit services due to the relatively large availability of bus and train services within walking distance of the project site.

The project would improve the pedestrian environment in the project vicinity by creating a large pedestrian promenade as part of the closure of County Center and Hamilton Street. This pedestrian promenade would provide a safe pedestrian environment, connecting all office buildings in the Government Center. The County will consult with the City of Redwood City on potential improvements to crosswalks at the following three intersections: Middlefield Road and Marshall Street, Middlefield Road and Bradford Street, and Jefferson Avenue and Bradford Street. Elsewhere, the existing pedestrian network in Downtown Redwood City provides safe and comfortable access between the COB3 and transit services.

Recommendations

Based on the analysis provided in this TIA, Hexagon recommends the following:

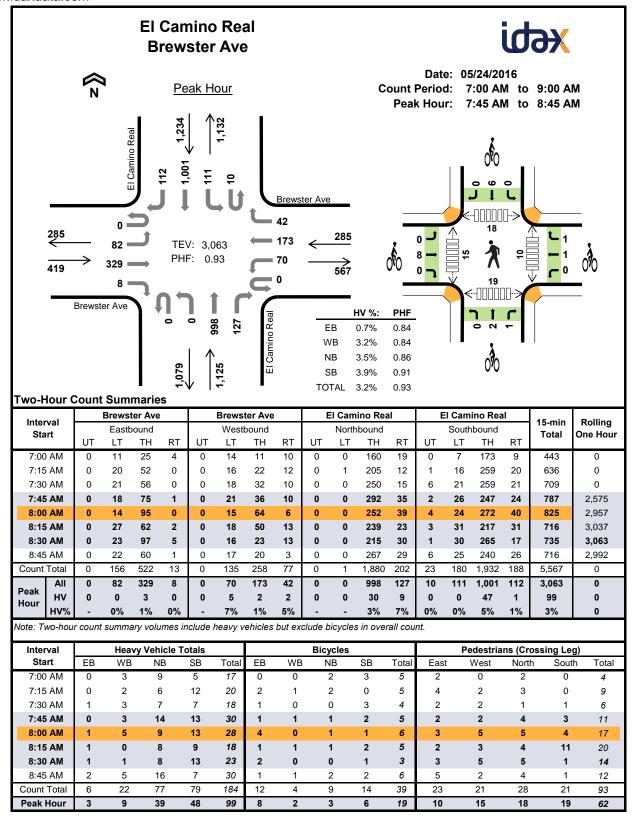
- The east approach (outbound from the new garage) at the new parking garage entrance should be under stop control while the north and south approaches would be uncontrolled.
- The project should provide additional signage along Winslow Street that clearly and understandably notifies drivers that public parking can be accessed from this driveway.
- A full site operations study should be conducted following the determination of a final site plan.
- The County should coordinate with the City to pursue the signalization of the Main Street and Woodside Road Westbound Ramps intersection.
- The County should coordinate with the City to consider converting the right-turn lane on
 eastbound Middlefield Road at Veterans Boulevard to a shared left/right-turn lane. This
 modification would require restriping Middlefield Road to move the bike lane adjacent to the
 curb, adding a bike box at the front of the shared left/right-turn lane, and modifying the signal.
- The County should consult with the City of Redwood City on potential improvements to crosswalks at the following three intersections: Middlefield Road and Marshall Street, Middlefield Road and Bradford Street, and Jefferson Avenue and Bradford Street.
- The County should coordinate with the City of Redwood City to improve the Class II bicycle facility and right-turn movement from southbound Veterans Boulevard to westbound Middlefield Road.
- The project should include additional bicycle parking facilities within close proximity of COB3 building entrances.
- The County should consider adding a new project driveway on Veterans Boulevard as it would reduce vehicle queues at selected locations and provide flexibility in the case of an emergency or a malfunction of the parking access controls.



San Mateo County Government Center Campus Improvements TIA

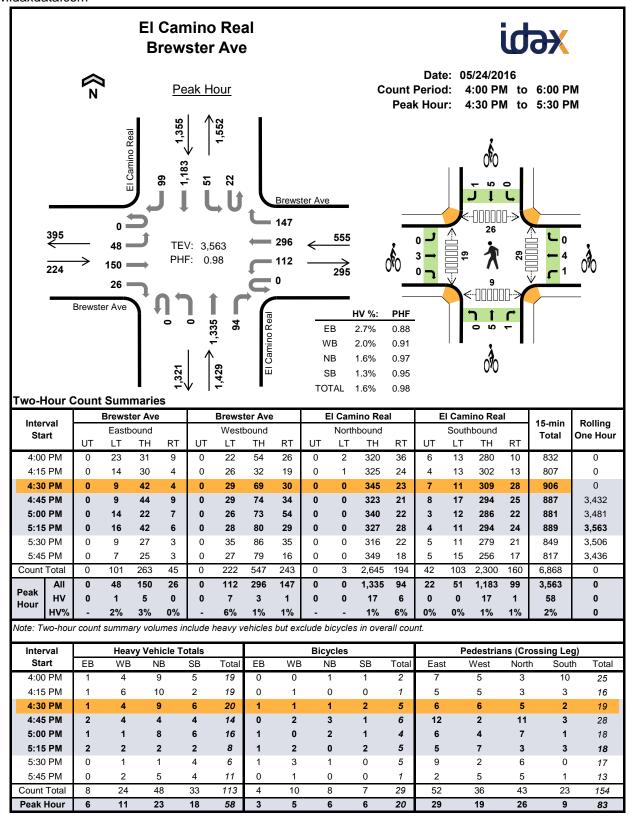
Technical Appendices

Appendix A Traffic Counts



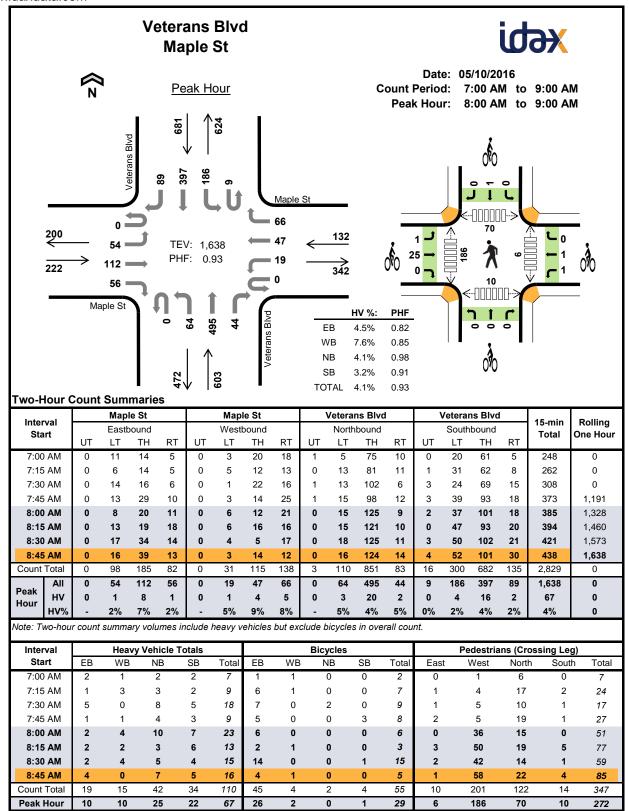
Interval		Brews	ter Ave	1		Brews	ter Ave)	Е	I Cam	ino Rea	al	E	I Cami	ino Rea	al	45 min	Rolling
Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
7:00 AM	0	0	0	0	0	2	0	1	0	0	7	2	0	0	5	0	17	0
7:15 AM	0	0	0	0	0	1	1	0	0	0	6	0	0	0	12	0	20	0
7:30 AM	0	0	1	0	0	2	1	0	0	0	7	0	0	0	7	0	18	0
7:45 AM	0	0	0	0	0	2	0	1	0	0	12	2	0	0	13	0	30	85
8:00 AM	0	0	1	0	0	3	2	0	0	0	8	1	0	0	13	0	28	96
8:15 AM	0	0	1	0	0	0	0	0	0	0	6	2	0	0	9	0	18	94
8:30 AM	0	0	1	0	0	0	0	1	0	0	4	4	0	0	12	1	23	99
8:45 AM	0	1	1	0	0	4	0	1	0	0	14	2	0	0	7	0	30	99
Count Total	0	1	5	0	0	14	4	4	0	0	64	13	0	0	78	1	184	0
Peak Hour	0	0	3	0	0	5	2	2	0	0	30	9	0	0	47	1	99	0

Interval	Br	ewster A	ve	Br	ewster A	Ave	El (Camino	Real	El (Camino I	Real	45 min	Dalling
Interval Start	E	astboun	d	٧	Vestbour	nd	١	lorthbou	nd	S	outhbour	nd	15-min Total	Rolling One Hour
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	. • • • • •	0.10 1.10 4.1
7:00 AM	0	0	0	0	0	0	0	2	0	0	3	0	5	0
7:15 AM	1	1	0	0	1	0	0	2	0	0	0	0	5	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	3	0	4	0
7:45 AM	0	1	0	0	1	0	0	1	0	0	2	0	5	19
8:00 AM	0	4	0	0	0	0	0	1	0	0	1	0	6	20
8:15 AM	0	1	0	0	0	1	0	0	1	0	2	0	5	20
8:30 AM	0	2	0	0	0	0	0	0	0	0	1	0	3	19
8:45 AM	0	1	0	0	1	0	0	2	0	0	2	0	6	20
Count Total	1	11	0	0	3	1	0	8	1	0	14	0	39	0
Peak Hour	0	8	0	0	1	1	0	2	1	0	6	0	19	0



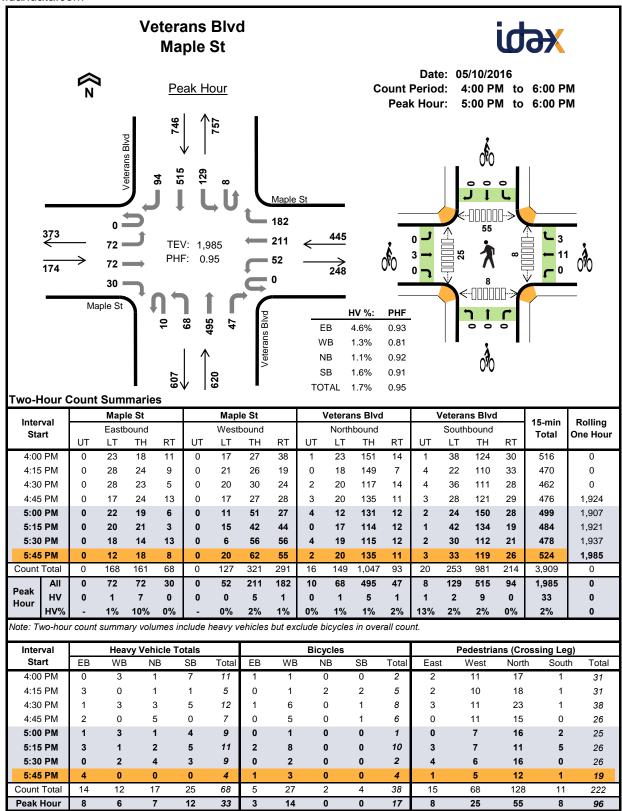
I4I		Brewst	er Ave			Brews	ter Ave)	E	I Cam	ino Rea	al	E	I Cami	no Rea	al	45	Dallia a
Interval Start		Eastb	ound			Westl	oound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nou
4:00 PM	0	0	1	0	0	1	2	1	0	1	6	2	0	1	4	0	19	0
4:15 PM	0	0	1	0	0	4	1	1	0	0	9	1	0	0	2	0	19	0
4:30 PM	0	0	1	0	0	4	0	0	0	0	6	3	0	0	5	1	20	0
4:45 PM	0	0	2	0	0	2	2	0	0	0	4	0	0	0	4	0	14	72
5:00 PM	0	0	1	0	0	0	0	1	0	0	5	3	0	0	6	0	16	69
5:15 PM	0	1	1	0	0	1	1	0	0	0	2	0	0	0	2	0	8	58
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	1	0	0	4	0	6	44
5:45 PM	0	0	0	0	0	1	0	1	0	0	4	1	0	1	3	0	11	41
Count Total	0	1	7	0	0	13	6	5	0	1	36	11	0	2	30	1	113	0
Peak Hour	0	1	5	0	0	7	3	1	0	0	17	6	0	0	17	1	58	0

Interval	Br	ewster A	ve	Br	ewster A	lve	EI (Camino F	Real	EI (Camino F	Real	15-min	Dalling
Start	E	astboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	Total	Rolling One Hour
Start	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	i otai	Ono rioui
4:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	2	0
4:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	1	0	1	0	0	0	1	0	0	2	0	5	0
4:45 PM	0	0	0	0	2	0	0	2	1	0	1	0	6	14
5:00 PM	0	1	0	0	0	0	0	2	0	0	0	1	4	16
5:15 PM	0	1	0	0	2	0	0	0	0	0	2	0	5	20
5:30 PM	0	1	0	0	3	0	0	1	0	0	0	0	5	20
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	15
Count Total	0	4	0	2	8	0	0	7	1	0	6	1	29	0
Peak Hour	0	3	0	1	4	0	0	5	1	0	5	1	20	0



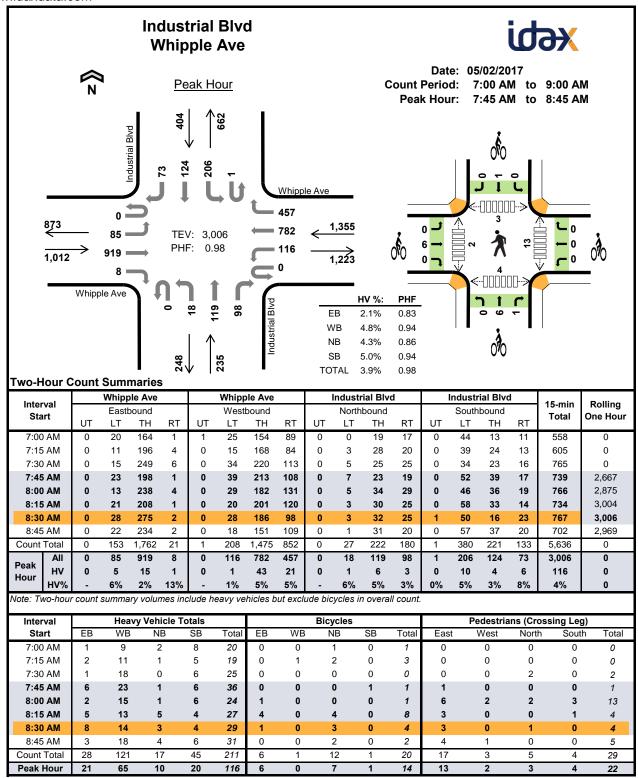
Interval		Мар	le St			Мар	le St		'	/eterai	ns Blvd	l	,	Veterai	ns Blvd		45	Dalling
Interval Start		Easth	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
7:00 AM	0	0	2	0	0	0	0	1	0	0	2	0	0	0	2	0	7	0
7:15 AM	0	0	1	0	0	0	2	1	0	0	2	1	0	1	0	1	9	0
7:30 AM	0	0	3	2	0	0	0	0	0	0	8	0	0	1	4	0	18	0
7:45 AM	0	0	1	0	0	0	1	0	0	1	3	0	0	0	3	0	9	43
8:00 AM	0	0	2	0	0	0	2	2	0	0	8	2	0	0	7	0	23	59
8:15 AM	0	0	2	0	0	1	1	0	0	1	2	0	0	2	3	1	13	63
8:30 AM	0	0	1	1	0	0	1	3	0	0	5	0	0	1	3	0	15	60
8:45 AM	0	1	3	0	0	0	0	0	0	2	5	0	0	1	3	1	16	67
Count Total	0	1	15	3	0	1	7	7	0	4	35	3	0	6	25	3	110	0
Peak Hour	0	1	8	1	0	1	4	5	0	3	20	2	0	4	16	2	67	0

Interval		Maple St			Maple St	t	Ve	terans B	lvd	Vet	terans B	lvd	45	Dalling
Interval Start		Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
Otart	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	Total	Ono mou
7:00 AM	0	1	0	1	0	0	0	0	0	0	0	0	2	0
7:15 AM	0	6	0	0	1	0	0	0	0	0	0	0	7	0
7:30 AM	0	7	0	0	0	0	0	1	1	0	0	0	9	0
7:45 AM	0	5	0	0	0	0	0	0	0	3	0	0	8	26
8:00 AM	1	5	0	0	0	0	0	0	0	0	0	0	6	30
8:15 AM	0	2	0	1	0	0	0	0	0	0	0	0	3	26
8:30 AM	0	14	0	0	0	0	0	0	0	0	1	0	15	32
8:45 AM	0	4	0	0	1	0	0	0	0	0	0	0	5	29
Count Total	1	44	0	2	2	0	0	1	1	3	1	0	55	0
Peak Hour	1	25	0	1	1	0	0	0	0	0	1	0	29	0



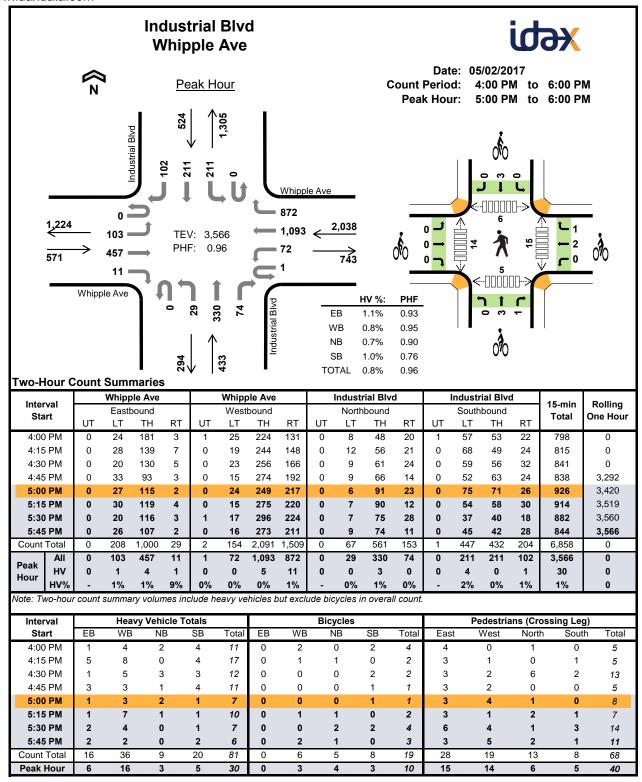
		Мар	le St			Мар	le St		'	/eterar	ns Blvd		,	Vetera	ns Blvd			
Interval Start		East	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Start	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	iotai	One noui
4:00 PM	0	0	0	0	0	0	2	1	0	0	1	0	0	1	6	0	11	0
4:15 PM	0	1	2	0	0	0	0	0	0	0	0	1	0	0	0	1	5	0
4:30 PM	0	0	1	0	0	1	2	0	0	1	2	0	0	2	3	0	12	0
4:45 PM	0	0	2	0	0	0	0	0	0	0	4	1	0	0	0	0	7	35
5:00 PM	0	0	1	0	0	0	2	1	0	0	0	1	0	0	4	0	9	33
5:15 PM	0	1	2	0	0	0	1	0	0	0	2	0	0	2	3	0	11	39
5:30 PM	0	0	0	0	0	0	2	0	0	1	3	0	1	0	2	0	9	36
5:45 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	33
Count Total	0	2	12	0	0	1	9	2	0	2	12	3	1	5	18	1	68	0
Peak Hour	0	1	7	0	0	0	5	1	0	1	5	1	1	2	9	0	33	0

Interval		Maple St			Maple St		Ve	terans B	lvd	Vet	erans B	lvd	15-min	Rolling
Start	E	Eastboun	d	٧	Vestboun	ıd	N	Northbour	nd	S	outhbour	nd	Total	One Hour
J.a	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
4:00 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	0
4:15 PM	0	0	0	0	1	0	1	1	0	0	2	0	5	0
4:30 PM	0	1	0	0	5	1	0	0	0	0	0	1	8	0
4:45 PM	0	0	0	0	4	1	0	0	0	0	1	0	6	21
5:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	20
5:15 PM	0	2	0	0	5	3	0	0	0	0	0	0	10	25
5:30 PM	0	0	0	0	2	0	0	0	0	0	0	0	2	19
5:45 PM	0	1	0	0	3	0	0	0	0	0	0	0	4	17
Count Total	0	5	0	0	22	5	1	1	0	0	3	1	38	0
Peak Hour	0	3	0	0	11	3	0	0	0	0	0	0	17	0



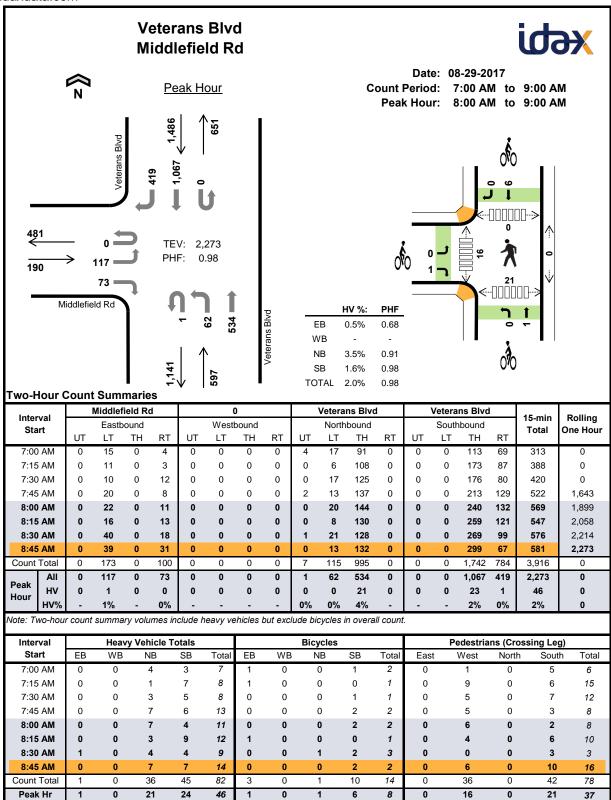
Interval		Whipp	le Ave			Whipp	le Ave			Industr	ial Blvo	t		Industr	ial Blvo	i	45	Dalling
Interval Start		Easth	ound			Westl	oound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nou
7:00 AM	0	0	1	0	0	0	8	1	0	0	2	0	0	6	1	1	20	0
7:15 AM	0	0	2	0	0	0	6	5	0	0	0	1	0	4	0	1	19	0
7:30 AM	0	0	1	0	0	0	12	6	0	0	0	0	0	2	3	1	25	0
7:45 AM	0	2	4	0	0	1	15	7	0	0	1	0	0	3	1	2	36	100
8:00 AM	0	0	1	1	0	0	7	8	0	0	1	0	0	4	1	1	24	104
8:15 AM	0	2	3	0	0	0	10	3	0	1	2	2	0	1	2	1	27	112
8:30 AM	0	1	7	0	0	0	11	3	0	0	2	1	0	2	0	2	29	116
8:45 AM	0	0	3	0	0	1	12	5	0	0	2	2	0	5	1	0	31	111
Count Total	0	5	22	1	0	2	81	38	0	1	10	6	0	27	9	9	211	0
Peak Hour	0	5	15	1	0	1	43	21	0	1	6	3	0	10	4	6	116	0

Interval	W	hipple A	ve	W	/hipple A	ve	Inc	lustrial B	Blvd	Ind	ustrial B	lvd	45 min	Dalling
Start		Eastbound	d	V	Vestbour	ıd	١	lorthbour	nd	S	outhbour	ıd	15-min Total	Rolling One Hour
Otart	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	Total	One Hour
7:00 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	0
7:15 AM	0	0	0	0	1	0	0	2	0	0	0	0	3	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	5
8:00 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	5
8:15 AM	0	4	0	0	0	0	0	4	0	0	0	0	8	10
8:30 AM	0	1	0	0	0	0	0	2	1	0	0	0	4	14
8:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2	15
Count Total	0	6	0	0	1	0	0	10	2	0	1	0	20	0
Peak Hour	0	6	0	0	0	0	0	6	1	0	1	0	14	0



Interval		Whipp	le Ave			Whipp	le Ave			Industr	ial Blv	t		Industr	ial Blv	t	45	Dalling
Interval Start		Easth	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	H RT UT LT TH RT UT LT TH						RT	Total	One nou		
4:00 PM	0	0	1	0	0	0	1	3	0	0	2	0	0	2	2	0	11	0
4:15 PM	0	1	4	0	0	1	5	2	0	0	0	0	0	3	0	1	17	0
4:30 PM	0	1	0	0	0	1	1	3	0	0	2	1	0	2	1	0	12	0
4:45 PM	0	2	1	0	0	0	1	2	0	0	1	0	0	1	2	1	11	51
5:00 PM	0	0	0	1	0	0	2	1	0	0	2	0	0	1	0	0	7	47
5:15 PM	0	0	1	0	0	0	2	5	0	0	1	0	0	1	0	0	10	40
5:30 PM	0	1	1	0	0	0	1	3	0	0	0	0	0	1	0	0	7	35
5:45 PM	0	0	2	0	0	0	0	2	0	0	0	0	0	1	0	1	6	30
Count Total	0	5	10	1	0	2	13	21	0	0	8	1	0	12	5	3	81	0
Peak Hour	0	1	4	1	0	0	5	11	0	0	3	0	0	4	0	1	30	0

Interval	W	hipple A	ve	W	hipple A	ve	Inc	lustrial E	Blvd	Ind	ustrial B	lvd	45 min	Dalling
Start		Eastbound	d	V	Vestboun	ıd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
Otart	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	Total	One riour
4:00 PM	0	0	0	0	2	0	0	0	0	0	2	0	4	0
4:15 PM	0	0	0	0	1	0	0	1	0	0	0	0	2	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	1	2	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	9
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	6
5:15 PM	0	0	0	0	1	0	0	0	1	0	0	0	2	6
5:30 PM	0	0	0	0	0	0	0	2	0	0	2	0	4	8
5:45 PM	0	0	0	0	1	1	0	1	0	0	0	0	3	10
Count Total	0	0	0	0	5	1	0	4	1	0	7	1	19	0
Peak Hour	0	0	0	0	2	1	0	3	1	0	3	0	10	0

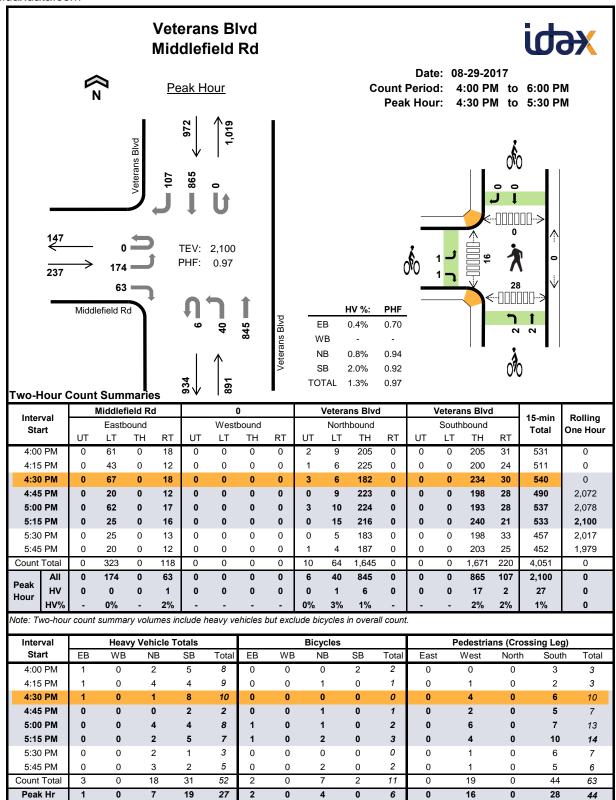


lutam ral		Middle	field Ro	t		(0			Vetera	ns Blvo	ł		Vetera	ns Blvd		45	Dalling
Interval Start		Easth	oound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	i otai	One mean
7:00 AM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	0	7	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	2	8	0
7:30 AM	0	0	0	0	0	0	0	0	0	1	2	0	0	0	5	0	8	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	5	1	13	36
8:00 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	4	0	11	40
8:15 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	9	0	12	44
8:30 AM	0	1	0	0	0	0	0	0	0	0	4	0	0	0	4	0	9	45
8:45 AM	0	0	0	0	0	0	0	0	0	0	7	0	0	0	6	1	14	46
Count Total	0	1	0	0	0	0	0	0	0	1	35	0	0	0	41	4	82	0
Peak Hour	0	1	0	0	0	0	0	0	0	0	21	0	0	0	23	1	46	0

luta maal	Mi	ddlefield	Rd		0		Ve	terans B	lvd	Ve	terans B	lvd	45	D. III.
Interval Start	I	Eastboun	d	V	Vestbour	nd	١	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
- Ctu. t	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	. • • • • •	0.101.104.1
7:00 AM	1	0	0	0	0	0	0	0	0	0	1	0	2	0
7:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	6
8:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	6
8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	6
8:30 AM	0	0	0	0	0	0	0	1	0	0	2	0	3	8
8:45 AM	0	0	0	0	0	0	0	0	0	0	2	0	2	8
Count Total	1	0	2	0	0	0	0	1	0	0	10	0	14	0
Peak Hour	0	0	1	0	0	0	0	1	0	0	6	0	8	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Project Manager: (415) 310-6469

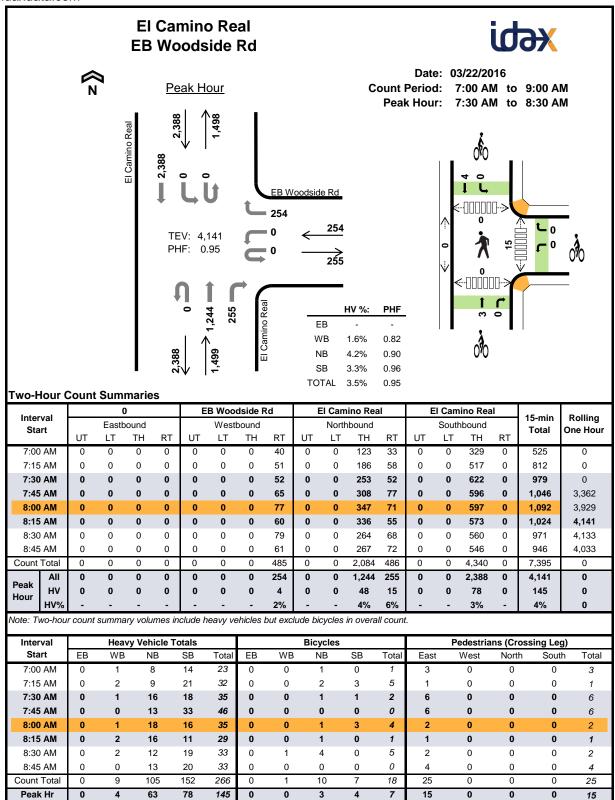


Two-Hour (Count	Sum	marie	s - He	eavy \	/ehic	les											
Intonial	I	Middlet	field Ro	t			0			Vetera	ns Blvo	t		Vetera	ns Blvd		45	Delling
Interval Start		Eastb	oound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One riou
4:00 PM	0	1	0	0	0	0	0	0	0	0	2	0	0	0	5	0	8	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	4	0	0	0	3	1	9	0
4:30 PM	0	0	0	1	0	0	0	0	0	0	1	0	0	0	8	0	10	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	29
5:00 PM	0	0	0	0	0	0	0	0	0	0	4	0	0	0	3	1	8	29
5:15 PM	0	0	0	0	0	0	0	0	0	1	1	0	0	0	5	0	7	27
5:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	20
5:45 PM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	1	1	5	23
Count Total	0	2	0	1	0	0	0	0	0	1	17	0	0	0	27	4	52	0
Peak Hour	0	0	0	1	0	0	0	0	0	1	6	0	0	0	17	2	27	0

luta maal	Mi	ddlefield	Rd		0		Ve	terans B	lvd	Ve	terans B	lvd	45	D. III
Interval Start		Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
Gtart	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	Total	Ono mou
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	1	0	0	0	0	0	1	4
5:00 PM	0	0	1	0	0	0	1	0	0	0	0	0	2	4
5:15 PM	1	0	0	0	0	0	0	2	0	0	0	0	3	6
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:45 PM	0	0	0	0	0	0	0	2	0	0	0	0	2	7
Count Total	1	0	1	0	0	0	2	5	0	0	2	0	11	0
Peak Hour	1	0	1	0	0	0	2	2	0	0	0	0	6	0

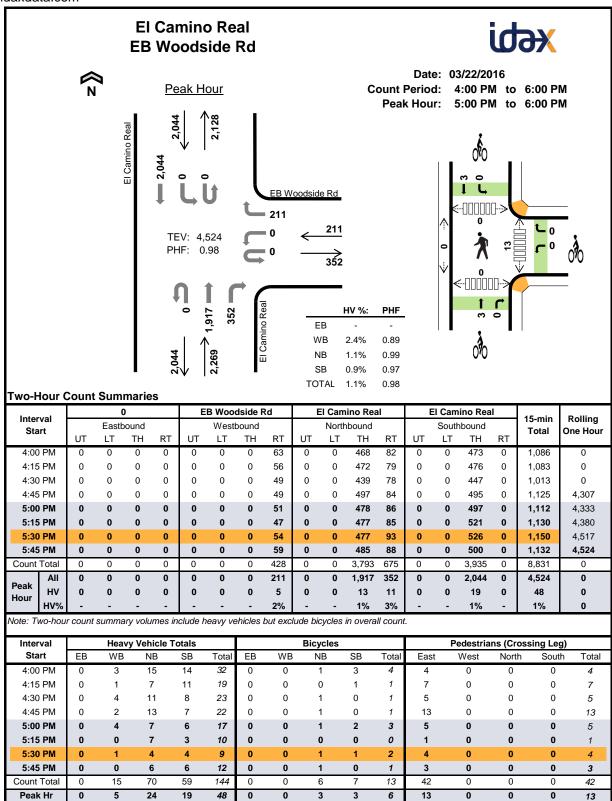
Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Project Manager: (415) 310-6469



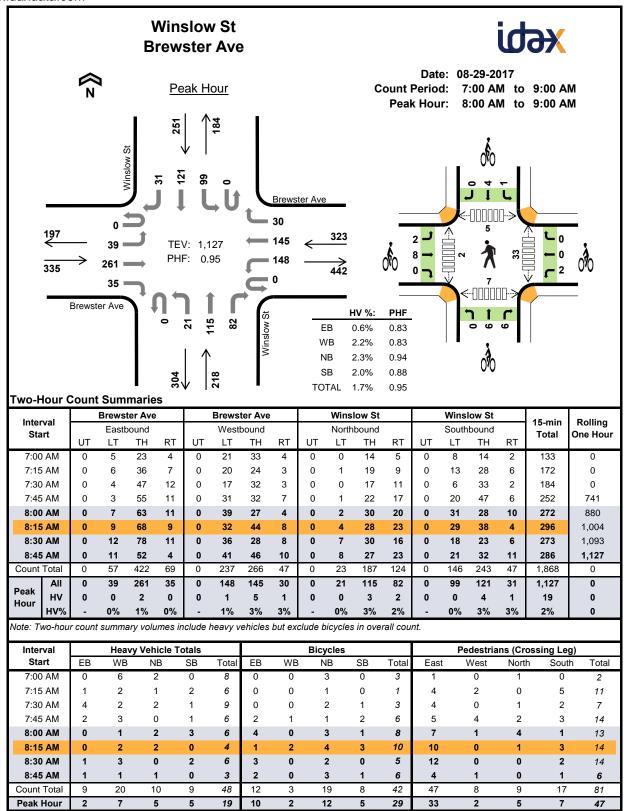
Two-Hour (Count	Sum	marie	s - He	eavy \	/ehic	les											
Interval		(0		Е	B Woo	dside F	₹d	E	I Cam	ino Rea	al		El Cam	ino Rea	al	45	Dalling
Interval Start		Eastb	oound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	rotui	One riou
7:00 AM	0	0	0	0	0	0	0	1	0	0	5	3	0	0	14	0	23	0
7:15 AM	0	0	0	0	0	0	0	2	0	0	8	1	0	0	21	0	32	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	13	3	0	0	18	0	35	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	10	3	0	0	33	0	46	136
8:00 AM	0	0	0	0	0	0	0	1	0	0	13	5	0	0	16	0	35	148
8:15 AM	0	0	0	0	0	0	0	2	0	0	12	4	0	0	11	0	29	145
8:30 AM	0	0	0	0	0	0	0	2	0	0	5	7	0	0	19	0	33	143
8:45 AM	0	0	0	0	0	0	0	0	0	0	7	6	0	0	20	0	33	130
Count Total	0	0	0	0	0	0	0	9	0	0	73	32	0	0	152	0	266	0
Peak Hour	0	0	0	0	0	0	0	4	0	0	48	15	0	0	78	0	145	0

Internal		0		EB V	Voodsid	e Rd	El (Camino F	Real	El (Camino I	Real	45	D. III
Interval Start		Eastboun	d	V	Vestbour	nd	١	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
Otare	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	Total	One riou
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	2	0	0	3	0	5	0
7:30 AM	0	0	0	0	0	0	0	1	0	0	1	0	2	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	8
8:00 AM	0	0	0	0	0	0	0	1	0	0	3	0	4	11
8:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	7
8:30 AM	0	0	0	0	0	1	0	4	0	0	0	0	5	10
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	10
Count Total	0	0	0	0	0	1	0	10	0	0	7	0	18	0
Peak Hour	0	0	0	0	0	0	0	3	0	0	4	0	7	0



lutamial		(0		Е	B Woo	dside F	₹d	E	El Cam	ino Rea	al	E	El Cam	ino Rea	ıl	45	Dallina
Interval Start		Easth	oound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	rotar	One riou
4:00 PM	0	0	0	0	0	0	0	3	0	0	5	10	0	0	14	0	32	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	3	4	0	0	11	0	19	0
4:30 PM	0	0	0	0	0	0	0	4	0	0	8	3	0	0	8	0	23	0
4:45 PM	0	0	0	0	0	0	0	2	0	0	9	4	0	0	7	0	22	96
5:00 PM	0	0	0	0	0	0	0	4	0	0	5	2	0	0	6	0	17	81
5:15 PM	0	0	0	0	0	0	0	0	0	0	4	3	0	0	3	0	10	72
5:30 PM	0	0	0	0	0	0	0	1	0	0	2	2	0	0	4	0	9	58
5:45 PM	0	0	0	0	0	0	0	0	0	0	2	4	0	0	6	0	12	48
Count Total	0	0	0	0	0	0	0	15	0	0	38	32	0	0	59	0	144	0
Peak Hour	0	0	0	0	0	0	0	5	0	0	13	11	0	0	19	0	48	0

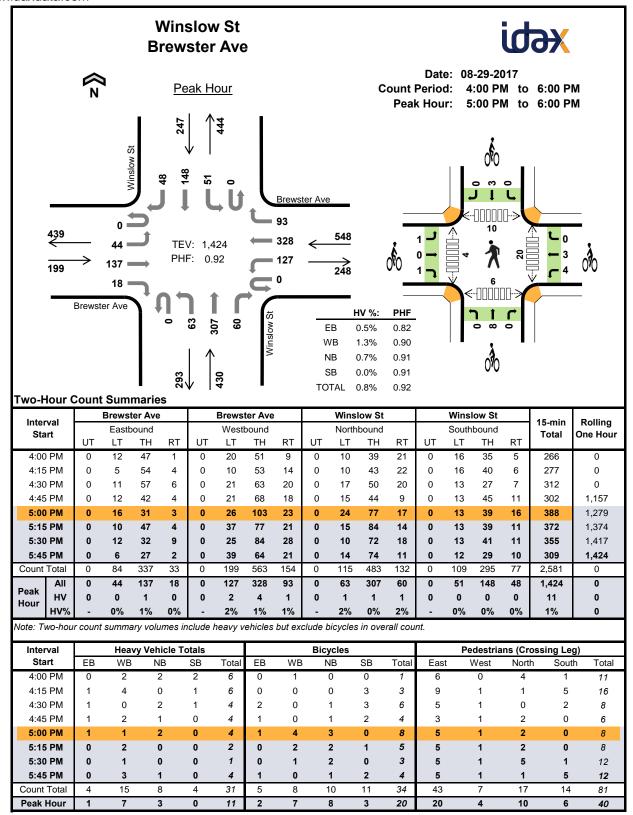
Intomosi		0		EB ¹	Woodsid	e Rd	El (Camino I	Real	El (Camino I	Real	45	D - III
Interval Start	I	Eastboun	d	V	Vestbour	nd	١	Northbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
Otare	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	Total	One riou
4:00 PM	0	0	0	0	0	0	0	1	0	0	3	0	4	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	7
5:00 PM	0	0	0	0	0	0	0	1	0	0	2	0	3	6
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	5
5:30 PM	0	0	0	0	0	0	0	1	0	0	1	0	2	6
5:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	6
Count Total	0	0	0	0	0	0	0	6	0	0	7	0	13	0
Peak Hour	0	0	0	0	0	0	0	3	0	0	3	0	6	0



Interval		Brews	ter Ave			Brews	ter Ave)		Wins	low St			Wins	low St		45	Rolling
Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One riour
7:00 AM	0	0	0	0	0	0	5	1	0	0	1	1	0	0	0	0	8	0
7:15 AM	0	0	1	0	0	1	1	0	0	0	1	0	0	1	1	0	6	0
7:30 AM	0	0	4	0	0	0	2	0	0	0	2	0	0	0	1	0	9	0
7:45 AM	0	0	2	0	0	1	1	1	0	0	0	0	0	0	1	0	6	29
8:00 AM	0	0	0	0	0	1	0	0	0	0	0	2	0	0	3	0	6	27
8:15 AM	0	0	0	0	0	0	1	1	0	0	2	0	0	0	0	0	4	25
8:30 AM	0	0	1	0	0	0	3	0	0	0	0	0	0	0	1	1	6	22
8:45 AM	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	3	19
Count Total	0	0	9	0	0	3	14	3	0	0	7	3	0	1	7	1	48	0
Peak Hour	0	0	2	0	0	1	5	1	0	0	3	2	0	0	4	1	19	0

Interval	Br	ewster A	ve	Br	ewster A	Ave	٧	Vinslow	St	V	Vinslow	St	45 min	Rolling
Start	E	astboun	d	٧	Vestbour	nd	N	Northbour	nd	S	outhbour	nd	15-min Total	One Hour
- Claire	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	. • • • • •	0.10 1.10
7:00 AM	0	0	0	0	0	0	0	2	1	0	0	0	3	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	1	1	0	1	0	3	0
7:45 AM	0	2	0	0	0	1	0	1	0	1	1	0	6	13
8:00 AM	0	4	0	0	0	0	0	1	2	0	1	0	8	18
8:15 AM	1	0	0	2	0	0	0	4	0	1	2	0	10	27
8:30 AM	0	3	0	0	0	0	0	1	1	0	0	0	5	29
8:45 AM	1	1	0	0	0	0	0	0	3	0	1	0	6	29
Count Total	2	10	0	2	0	1	0	11	8	2	6	0	42	0
Peak Hour	2	8	0	2	0	0	0	6	6	1	4	0	29	0

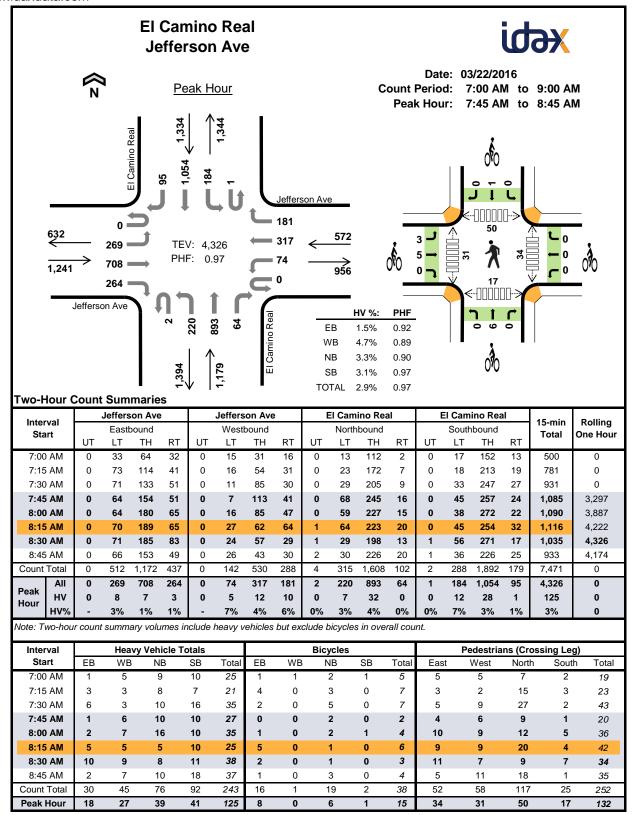
Note: U-Turn volumes for bikes are included in Left-Turn, if any.



		Brews	ter Ave	!		Brews	ter Ave)		Winsl	low St			Winsl	ow St		45	Dallia a
Interval Start		Easth	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
4:00 PM	0	0	0	0	0	0	1	1	0	0	1	1	0	1	1	0	6	0
4:15 PM	0	1	0	0	0	1	2	1	0	0	0	0	0	0	1	0	6	0
4:30 PM	0	0	1	0	0	0	0	0	0	0	1	1	0	1	0	0	4	0
4:45 PM	0	0	1	0	0	1	0	1	0	0	0	1	0	0	0	0	4	20
5:00 PM	0	0	1	0	0	0	1	0	0	1	1	0	0	0	0	0	4	18
5:15 PM	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	0	2	14
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	11
5:45 PM	0	0	0	0	0	2	1	0	0	0	0	1	0	0	0	0	4	11
Count Total	0	1	3	0	0	4	7	4	0	1	3	4	0	2	2	0	31	0
Peak Hour	0	0	1	0	0	2	4	1	0	1	1	1	0	0	0	0	11	0

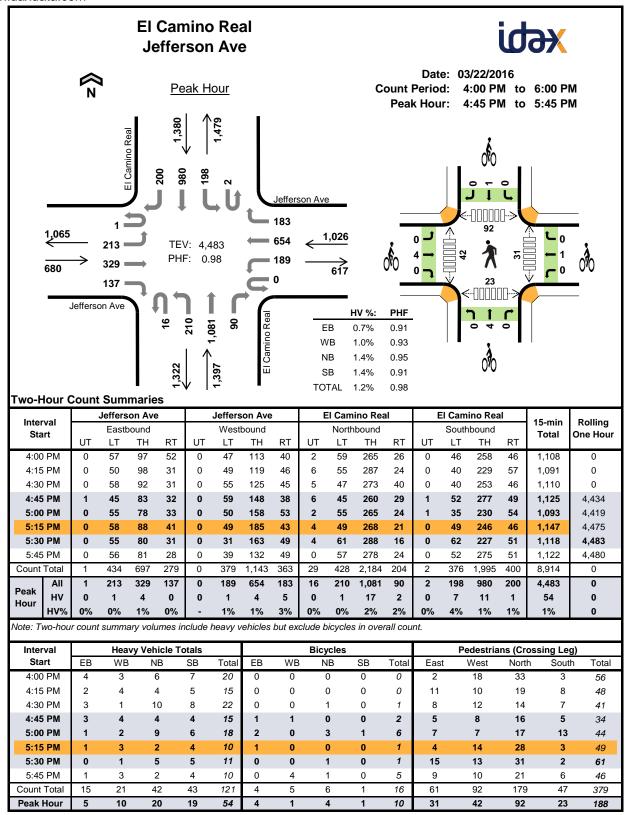
Interval	Br	ewster A	ve	Br	ewster A	lve	٧	Vinslow	St	٧	Vinslow 9	St	15-min	Rolling
Start	Е	Eastboun	d	٧	Vestbour	nd	N	Northbour	nd	S	outhbour	nd	Total	One Hour
- Ctair C	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
4:00 PM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	1	3	0
4:30 PM	1	0	1	0	0	0	0	1	0	0	1	2	6	0
4:45 PM	1	0	0	0	0	0	0	1	0	0	1	1	4	14
5:00 PM	0	0	1	1	3	0	0	3	0	0	0	0	8	21
5:15 PM	0	0	0	2	0	0	0	2	0	0	1	0	5	23
5:30 PM	0	0	0	1	0	0	0	2	0	0	0	0	3	20
5:45 PM	1	0	0	0	0	0	0	1	0	0	2	0	4	20
Count Total	3	0	2	4	3	1	0	10	0	0	7	4	34	0
Peak Hour	1	0	1	4	3	0	0	8	0	0	3	0	20	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.



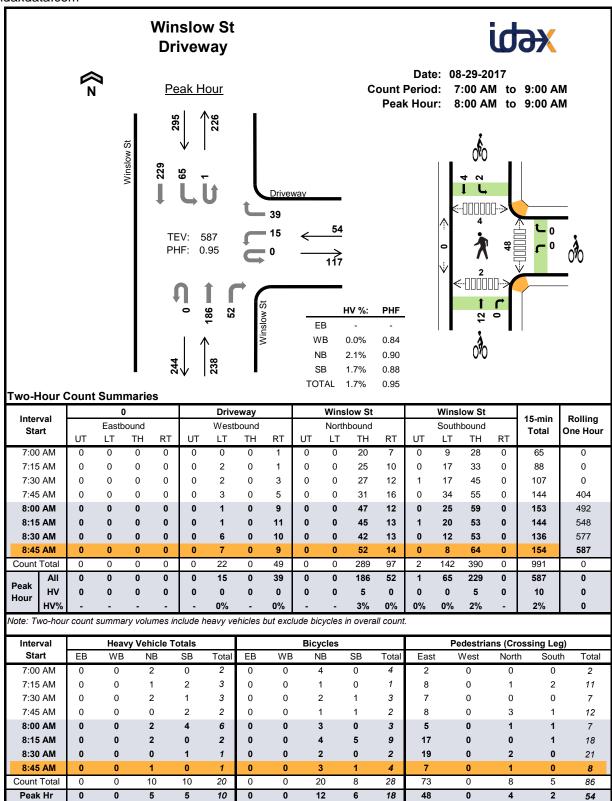
Two-Hour (Count	Sum	marie	s - He	eavy \	Vehic	les											
lests en en l		Jeffers	on Ave	,		Jeffers	on Ave	•	Е	I Cam	ino Rea	al		El Cami	ino Rea	al	45	D-III
Interval Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One riou
7:00 AM	0	0	0	1	0	2	1	2	0	0	9	0	0	2	8	0	25	0
7:15 AM	0	1	2	0	0	1	1	1	0	1	7	0	0	1	6	0	21	0
7:30 AM	0	1	2	3	0	1	0	2	0	2	6	2	0	2	12	2	35	0
7:45 AM	0	1	0	0	0	0	4	2	0	1	9	0	0	3	7	0	27	108
8:00 AM	0	2	0	0	0	0	5	2	0	1	15	0	0	3	7	0	35	118
8:15 AM	0	1	3	1	0	2	1	2	0	1	4	0	0	3	6	1	25	122
8:30 AM	0	4	4	2	0	3	2	4	0	4	4	0	0	3	8	0	38	125
8:45 AM	0	1	0	1	0	0	2	5	0	0	9	1	0	3	14	1	37	135
Count Total	0	11	11	8	0	9	16	20	0	10	63	3	0	20	68	4	243	0
Peak Hour	0	8	7	3	0	5	12	10	0	7	32	0	0	12	28	1	125	0

Interval	Je	fferson A	Ave	Je	fferson A	Ave	El (Camino I	Real	El (Camino I	Real	15-min	Rolling
Start	Е	astboun	d	٧	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	Total	One Hour
J.a	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	. • • • •	0.101.104.1
7:00 AM	1	0	0	0	1	0	0	2	0	0	1	0	5	0
7:15 AM	1	3	0	0	0	0	0	3	0	0	0	0	7	0
7:30 AM	1	1	0	0	0	0	0	5	0	0	0	0	7	0
7:45 AM	0	0	0	0	0	0	0	2	0	0	0	0	2	21
8:00 AM	0	1	0	0	0	0	0	2	0	0	1	0	4	20
8:15 AM	3	2	0	0	0	0	0	1	0	0	0	0	6	19
8:30 AM	0	2	0	0	0	0	0	1	0	0	0	0	3	15
8:45 AM	0	1	0	0	0	0	0	3	0	0	0	0	4	17
Count Total	6	10	0	0	1	0	0	19	0	0	2	0	38	0
Peak Hour	3	5	0	0	0	0	0	6	0	0	1	0	15	0



latemed		Jeffers	on Ave)		Jeffers	on Ave	•	E	I Cam	ino Rea	al	Е	I Cam	ino Rea	al	45	Dalling
Interval Start		Easth	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
4:00 PM	0	1	0	3	0	0	0	3	0	0	6	0	0	2	4	1	20	0
4:15 PM	0	0	2	0	0	0	1	3	0	0	3	1	0	1	4	0	15	0
4:30 PM	0	2	1	0	0	0	0	1	0	0	9	1	0	2	5	1	22	0
4:45 PM	0	1	2	0	0	0	2	2	0	0	4	0	0	1	3	0	15	72
5:00 PM	0	0	1	0	0	0	1	1	0	0	7	2	0	2	3	1	18	70
5:15 PM	0	0	1	0	0	0	1	2	0	0	2	0	0	1	3	0	10	65
5:30 PM	0	0	0	0	0	1	0	0	0	1	4	0	0	3	2	0	11	54
5:45 PM	0	0	0	1	0	0	0	3	0	0	2	0	0	0	4	0	10	49
Count Total	0	4	7	4	0	1	5	15	0	1	37	4	0	12	28	3	121	0
Peak Hour	0	1	4	0	0	1	4	5	0	1	17	2	0	7	11	1	54	0

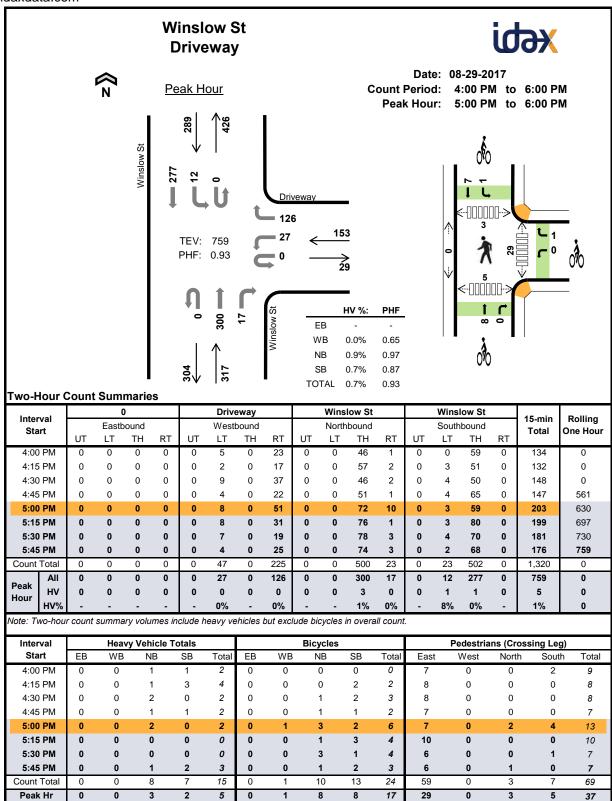
Interval	Je	fferson A	Ave	Je	fferson /	Ave	El (Camino I	Real	EI C	Camino I	Real	45	Dalling
Interval Start	E	Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
J.a	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:45 PM	0	1	0	0	1	0	0	0	0	0	0	0	2	3
5:00 PM	0	2	0	0	0	0	0	3	0	0	1	0	6	9
5:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	10
5:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	10
5:45 PM	0	0	0	1	3	0	0	1	0	0	0	0	5	13
Count Total	0	4	0	1	4	0	0	6	0	0	1	0	16	0
Peak Hour	0	4	0	0	1	0	0	4	0	0	1	0	10	0



Two-Hour (Count	Sum	marie	s - He	eavy \	/ehic	les											
Interval		(0			Driv	eway			Wins	low St			Wins	low St		15-min	Rolling
Start		Eastb	oound			West	bound			North	bound			South	bound		Total	One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One mour
7:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2	0	3	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	1	0	3	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	10
8:00 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	4	0	6	14
8:15 AM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	13
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	11
8:45 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	10
Count Total	0	0	0	0	0	0	0	0	0	0	10	0	0	0	10	0	20	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	5	0	0	0	5	0	10	0

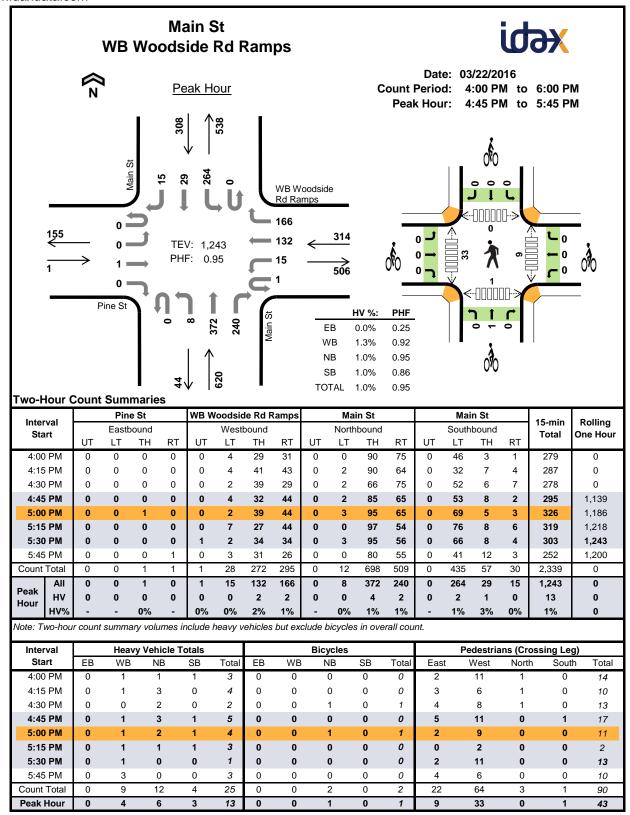
luta maal		0			Drivewa	У	٧	Vinslow 9	St	V	/inslow	St	45	D. III.
Interval Start		Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
- Ctu. t	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
7:00 AM	0	0	0	0	0	0	0	4	0	0	0	0	4	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	2	0	0	1	0	3	0
7:45 AM	0	0	0	0	0	0	0	1	0	1	0	0	2	10
8:00 AM	0	0	0	0	0	0	0	3	0	0	0	0	3	9
8:15 AM	0	0	0	0	0	0	0	4	0	2	3	0	9	17
8:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	2	16
8:45 AM	0	0	0	0	0	0	0	3	0	0	1	0	4	18
Count Total	0	0	0	0	0	0	0	20	0	3	5	0	28	0
Peak Hour	0	0	0	0	0	0	0	12	0	2	4	0	18	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.



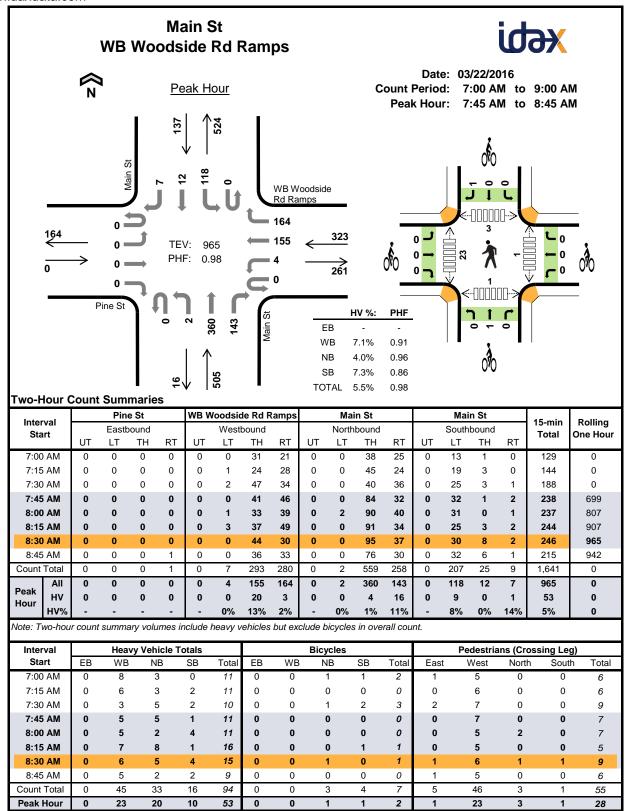
Two-Hour (Count	Sum	marie	s - He	eavy \	Vehic	les											
Intonial		(0			Driv	eway			Wins	low St			Wins	low St		45	Delling
Interval Start		Eastb	ound	<u> </u>		West	bound			North	bound			South	bound	<u> </u>	15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	1 Otal	One riou
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	3	0	4	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	10
5:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	10
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	3	5
Count Total	0	0	0	0	0	0	0	0	0	0	8	0	0	1	6	0	15	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	3	0	0	1	1	0	5	0

luta maal		0			Drivewa	У	٧	Vinslow	St	V	/inslow	St	45	D. III
Interval Start	- 1	Eastboun	d	V	Vestbour	nd	١	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
- Clair C	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	2	0	3	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	1	0	2	7
5:00 PM	0	0	0	0	0	1	0	3	0	1	1	0	6	13
5:15 PM	0	0	0	0	0	0	0	1	0	0	3	0	4	15
5:30 PM	0	0	0	0	0	0	0	3	0	0	1	0	4	16
5:45 PM	0	0	0	0	0	0	0	1	0	0	2	0	3	17
Count Total	0	0	0	0	0	1	0	10	0	1	12	0	24	0
Peak Hour	0	0	0	0	0	1	0	8	0	1	7	0	17	0



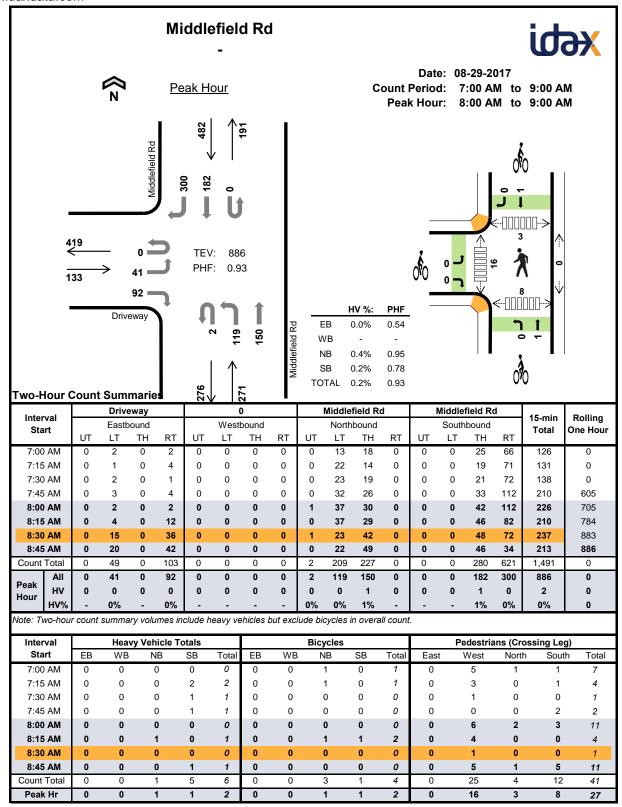
Interval		Pin	e St		WB W	oodsid	de Rd F	Ramps		Mai	n St			Mai	n St		45	Dalling
Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One riour
4:00 PM	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	3	0
4:15 PM	0	0	0	0	0	0	1	0	0	0	2	1	0	0	0	0	4	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	2	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	2	1	0	1	0	0	5	14
5:00 PM	0	0	0	0	0	0	0	1	0	0	2	0	0	1	0	0	4	15
5:15 PM	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	3	14
5:30 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	13
5:45 PM	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	3	11
Count Total	0	0	0	0	0	1	4	4	0	0	9	3	0	3	1	0	25	0
Peak Hour	0	0	0	0	0	0	2	2	0	0	4	2	0	2	1	0	13	0

Interval		Pine St		WB Woo	dside R	d Ramps		Main St			Main St		15-min	Rolling
Start	Е	Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	Total	One Hour
3. 5	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	0	0	2	0	0	0	0	2	0
Peak Hour	0	0	0	0	0	0	0	1	0	0	0	0	1	0



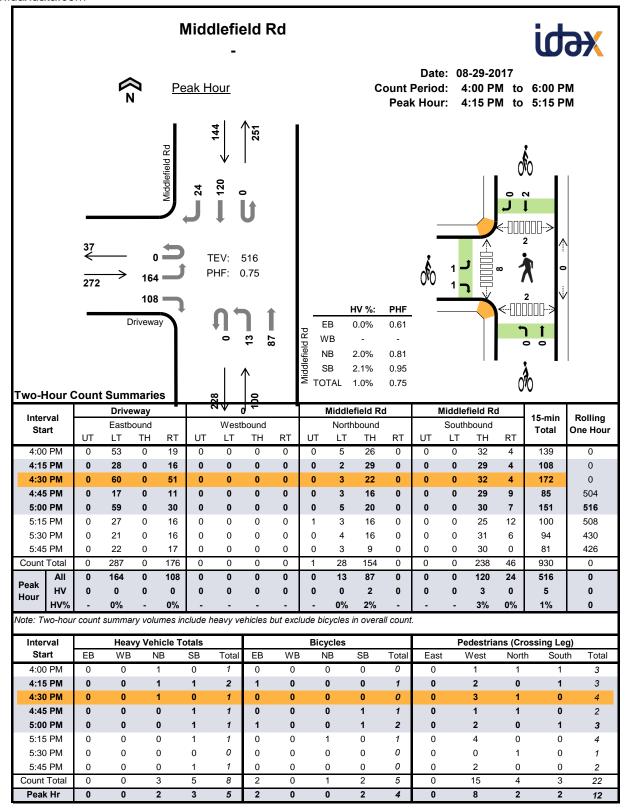
						/ehic												
Interval		Pin	e St		WB W	oodsid	de Rd F	≀amps		Mai	n St			Mai	n St		15-min	Rolling
Start		Eastb	ound			West	bound			North	bound			South	bound		Total	One Hour
	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT		
7:00 AM	0	0	0	0	0	0	5	3	0	0	2	1	0	0	0	0	11	0
7:15 AM	0	0	0	0	0	0	4	2	0	0	0	3	0	0	2	0	11	0
7:30 AM	0	0	0	0	0	0	2	1	0	0	1	4	0	1	0	1	10	0
7:45 AM	0	0	0	0	0	0	3	2	0	0	0	5	0	1	0	0	11	43
8:00 AM	0	0	0	0	0	0	5	0	0	0	1	1	0	3	0	1	11	43
8:15 AM	0	0	0	0	0	0	6	1	0	0	2	6	0	1	0	0	16	48
8:30 AM	0	0	0	0	0	0	6	0	0	0	1	4	0	4	0	0	15	53
8:45 AM	0	0	0	0	0	0	4	1	0	0	0	2	0	2	0	0	9	51
Count Total	0	0	0	0	0	0	35	10	0	0	7	26	0	12	2	2	94	0
Peak Hour	0	0	0	0	0	0	20	3	0	0	4	16	0	9	0	1	53	0

Interval		Pine St		WB Woo	dside R	d Ramps		Main St			Main St		15-min	Dalling
Interval Start	E	Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	Total	Rolling One Hour
0	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
7:00 AM	0	0	0	0	0	0	1	0	0	0	1	0	2	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:30 AM	0	0	0	0	0	0	0	0	1	0	2	0	3	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	5
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	1	1	4
8:30 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	0	0	0	1	1	1	0	3	1	7	0
Peak Hour	0	0	0	0	0	0	0	1	0	0	0	1	2	0



Interval		Driv	eway			-	0			Middle	field Ro	t		Middle	field Ro	t	45	Dalling
Start		Easth	oound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	Ono mou
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:15 AM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	3
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	2
Count Total	0	0	0	0	0	0	0	0	0	0	1	0	0	0	5	0	6	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0

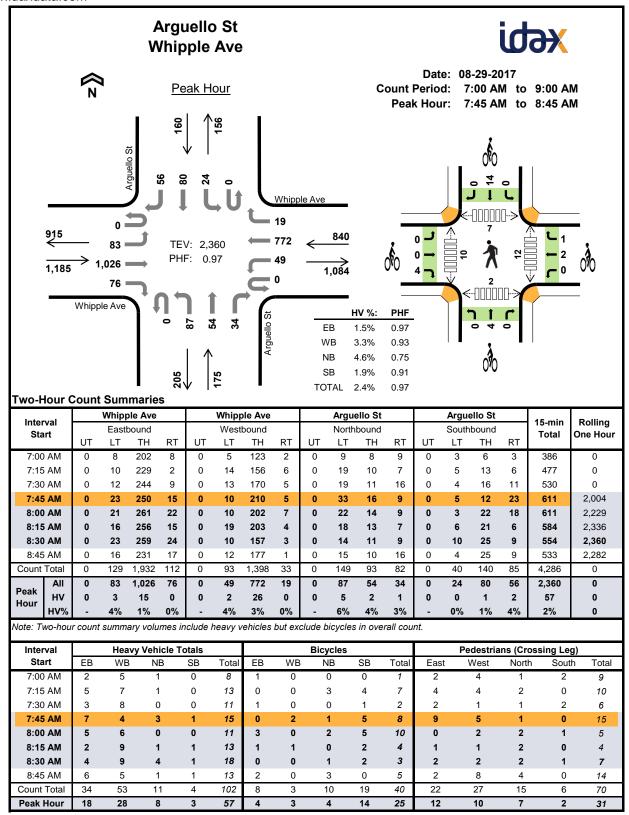
luta maal		Driveway	y		0		Mie	ddlefield	Rd	Mic	ddlefield	Rd	45	D. III
Interval Start		Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
Gtart	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	Total	Ono mou
7:00 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	1	0	0	1	0	2	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Count Total	0	0	0	0	0	0	0	3	0	0	1	0	4	0
Peak Hour	0	0	0	0	0	0	0	1	0	0	1	0	2	0



		Drive	eway				0			Middle	field Ro	d		Middle	field Ro	ı		
Interval Start			oound			West	bound			North	bound	-			bound		15-min Total	Rolling One Hour
Start	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	TOTAL	Offe Hour
4:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	2	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	5
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	3
Count Total	0	0	0	0	0	0	0	0	0	0	3	0	0	0	5	0	8	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	2	0	0	0	3	0	5	0

luta maal		Driveway	y		0		Mic	ddlefield	Rd	Mic	ddlefield	Rd	45	D. III
Interval Start		Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
Gtart	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	Total	Ono mou
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	1	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	2
5:00 PM	1	0	0	0	0	0	0	0	0	0	1	0	2	4
5:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	4
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
Count Total	1	0	1	0	0	0	0	1	0	0	2	0	5	0
Peak Hour	1	0	1	0	0	0	0	0	0	0	2	0	4	0

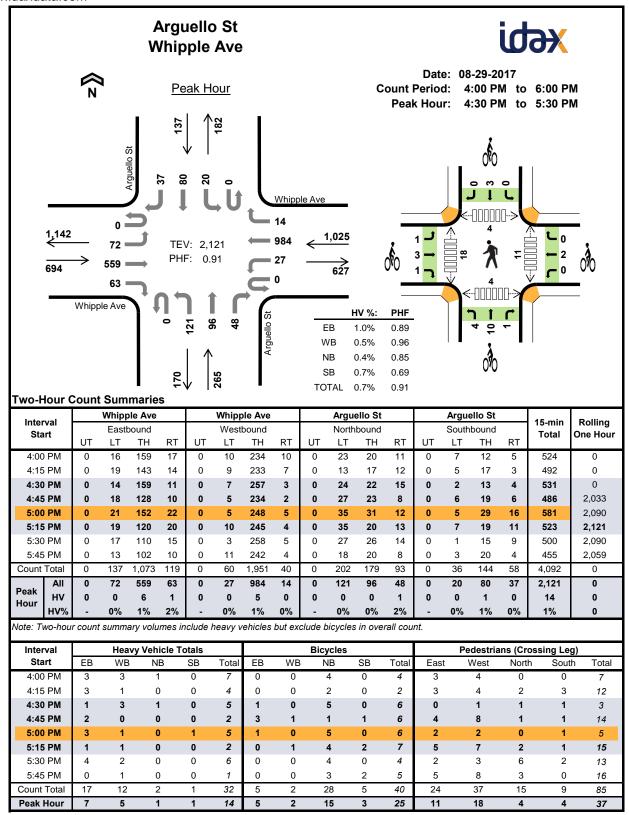
Note: U-Turn volumes for bikes are included in Left-Turn, if any.



141		Whipp	le Ave			Whipp	le Ave			Argue	ello St			Argue	ello St		45	Dallia a
Interval Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
7:00 AM	0	0	2	0	0	0	4	1	0	0	0	1	0	0	0	0	8	0
7:15 AM	0	0	5	0	0	0	7	0	0	0	0	1	0	0	0	0	13	0
7:30 AM	0	0	3	0	0	0	8	0	0	0	0	0	0	0	0	0	11	0
7:45 AM	0	1	6	0	0	0	4	0	0	2	0	1	0	0	0	1	15	47
8:00 AM	0	1	4	0	0	0	6	0	0	0	0	0	0	0	0	0	11	50
8:15 AM	0	1	1	0	0	1	8	0	0	0	1	0	0	0	0	1	13	50
8:30 AM	0	0	4	0	0	1	8	0	0	3	1	0	0	0	1	0	18	57
8:45 AM	0	0	6	0	0	0	5	0	0	0	0	1	0	0	0	1	13	55
Count Total	0	3	31	0	0	2	50	1	0	5	2	4	0	0	1	3	102	0
Peak Hour	0	3	15	0	0	2	26	0	0	5	2	1	0	0	1	2	57	0

Interval	W	hipple A	ve	W	hipple A	ve	Α	rguello	St	Α	rguello	St	15-min	Rolling
Start	Е	Eastboun	d	V	Vestbour	ıd	N	lorthbour	nd	S	outhbour	nd	Total	One Hour
J.L.	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	0	0	0	1	2	0	0	4	0	7	0
7:30 AM	0	1	0	0	0	0	0	0	0	0	1	0	2	0
7:45 AM	0	0	0	0	1	1	0	1	0	0	5	0	8	18
8:00 AM	0	0	3	0	0	0	0	2	0	0	5	0	10	27
8:15 AM	0	0	1	0	1	0	0	0	0	0	2	0	4	24
8:30 AM	0	0	0	0	0	0	0	1	0	0	2	0	3	25
8:45 AM	0	1	1	0	0	0	2	1	0	0	0	0	5	22
Count Total	1	2	5	0	2	1	3	7	0	0	19	0	40	0
Peak Hour	0	0	4	0	2	1	0	4	0	0	14	0	25	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.



141		Whipp	le Ave			Whipp	le Ave			Argue	ello St			Argue	llo St		45	D - 111
Interval Start		Eastb	ound			Westl	oound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
4:00 PM	0	0	3	0	0	0	3	0	0	1	0	0	0	0	0	0	7	0
4:15 PM	0	1	2	0	0	0	1	0	0	0	0	0	0	0	0	0	4	0
4:30 PM	0	0	1	0	0	0	3	0	0	0	0	1	0	0	0	0	5	0
4:45 PM	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	2	18
5:00 PM	0	0	2	1	0	0	1	0	0	0	0	0	0	0	1	0	5	16
5:15 PM	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	2	14
5:30 PM	0	0	4	0	0	0	2	0	0	0	0	0	0	0	0	0	6	15
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	14
Count Total	0	1	15	1	0	1	11	0	0	1	0	1	0	0	1	0	32	0
Peak Hour	0	0	6	1	0	0	5	0	0	0	0	1	0	0	1	0	14	0

Interval	W	hipple A	ve	W	hipple A	ve	Α	rguello s	St	Α	rguello	St	15-min	Rolling
Start	Е	astboun	d	٧	Vestbour	ıd	N	lorthbour	nd	S	outhbour	nd	Total	One Hour
J.a	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.10 1.10
4:00 PM	0	0	0	0	0	0	0	4	0	0	0	0	4	0
4:15 PM	0	0	0	0	0	0	1	1	0	0	0	0	2	0
4:30 PM	0	1	0	0	0	0	2	3	0	0	0	0	6	0
4:45 PM	0	2	1	0	1	0	0	0	1	0	1	0	6	18
5:00 PM	1	0	0	0	0	0	1	4	0	0	0	0	6	20
5:15 PM	0	0	0	0	1	0	1	3	0	0	2	0	7	25
5:30 PM	0	0	0	0	0	0	2	2	0	0	0	0	4	23
5:45 PM	0	0	0	0	0	0	0	3	0	0	2	0	5	22
Count Total	1	3	1	0	2	0	7	20	1	0	5	0	40	0
Peak Hour	1	3	1	0	2	0	4	10	1	0	3	0	25	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

San Jose, CA (408) 622-4787 tdsbay@cs.com

File Name: 1AM FINAL Site Code: 00000001

Start Date : 8/24/2016

Page No : 1

Groups Printed- Vehicles

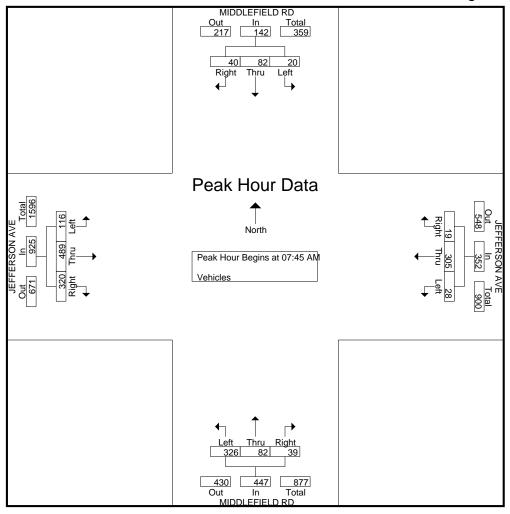
									Groups	Printe	a- ver	licies									
		MIDD	LEFIE	ELD RE)		JEFFE	ERSC	N AVE			MIDD	LEFIE	LD RE)		JEFF	ERSO	N AVE		
		Sc	outhbo	und			We	estbo	und			No	orthbo	und			E	astbou	ınd		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
07:00 AM	4	5	3	2	14	8	37	4	9	58	5	12	36	1	54	32	72	9	0	113	239
07:15 AM	7	7	3	0	17	4	48	1	24	77	7	23	50	1	81	40	82	8	0	130	305
07:30 AM	2	12	7	3	24	3	81	6	30	120	4	11	87	5	107	59	93	9	0	161	412
07:45 AM	5	21	4	4	34	5	84	5	29	123	9	18	109	2	138	97	107	29	0	233	528
Total	18	45	17	9	89	20	250	16	92	378	25	64	282	9	380	228	354	55	0	637	1484
08:00 AM	11	16	7	5	39	5	91	7	29	132	6	23	89	7	125	69	112	19	0	200	496
08:15 AM	11	18	4	9	42	5	69	11	23	108	9	30	78	6	123	60	130	35	0	225	498
08:30 AM	13	27	5	7	52	4	61	5	21	91	15	11	50	1	77	94	140	33	0	267	487
08:45 AM	14	11	3	10	38	8	64	7	23	102	10	25	35	4	74	91	112	32	0	235	449
Total	49	72	19	31	171	22	285	30	96	433	40	89	252	18	399	314	494	119	0	927	1930
Grand Total	67	117	36	40	260	42	535	46	188	811	65	153	534	27	779	542	848	174	0	1564	3414
Apprch %	25.8	45	13.8	15.4		5.2	66	5.7	23.2		8.3	19.6	68.5	3.5		34.7	54.2	11.1	0		
Total %	2	3.4	1.1	1.2	7.6	1.2	15.7	1.3	5.5	23.8	1.9	4.5	15.6	8.0	22.8	15.9	24.8	5.1	0	45.8	

	N	IIDDLEI	FIELD F	RD	J	EFFER	SON A	VΕ	N	IIDDLEI	FIELD F	RD	J	EFFER	SON A	VΕ	
		South	bound			West	bound			North	bound			East	bound		
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Ana	lysis Fro	om 07:0	0 AM to	08:45 Al	M - Peal	k 1 of 1			-				-				
Peak Hour for E	Entire In	tersection	on Begi	ns at 07:4	15 AM												
07:45 AM	5	21	4	30	5	84	5	94	9	18	109	136	97	107	29	233	493
08:00 AM	11	16	7	34	5	91	7	103	6	23	89	118	69	112	19	200	455
08:15 AM	11	18	4	33	5	69	11	85	9	30	78	117	60	130	35	225	460
08:30 AM	13	27	5	45	4	61	5	70	15	11	50	76	94	140	33	267	458
Total Volume	40	82	20	142	19	305	28	352	39	82	326	447	320	489	116	925	1866
% App. Total	28.2	57.7	14.1		5.4	86.6	8		8.7	18.3	72.9		34.6	52.9	12.5		
PHF	.769	.759	.714	.789	.950	.838	.636	.854	.650	.683	.748	.822	.825	.873	.829	.866	.946

San Jose, CA (408) 622-4787 tdsbay@cs.com

File Name: 1AM FINAL Site Code: 00000001 Start Date: 8/24/2016

Page No : 2



San Jose, CA (408) 622-4787 tdsbay@cs.com

File Name: 1PM FINAL Site Code: 00000001

Start Date : 8/24/2016

Page No : 1

Groups Printed- Vehicles

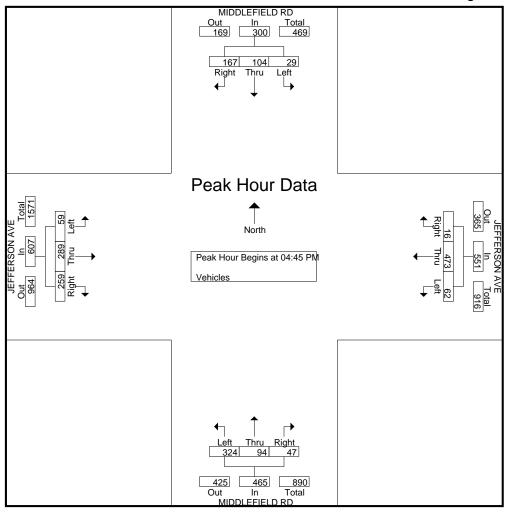
									Group	5 FIIIILE	u- vei	IICIES									
		MIDD	LEFIE	LD RE)		JEFF	ERSC	N AVE			MIDD	LEFIE	LD RE)		JEFF	ERSO	N AVE	Ē	
		Sc	uthbo	und			W	estbo	und			No	orthbo	und			E	<u>astboι</u>	ınd		
Start Time	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Right	Thru	Left	Peds	App. Total	Int. Total
04:00 PM	21	19	6	16	62	3	117	23	87	230	10	19	83	14	126	107	95	14	0	216	634
04:15 PM	34	22	8	22	86	3	104	7	57	171	15	20	61	20	116	65	71	7	1	144	517
04:30 PM	31	20	5	7	63	7	129	15	32	183	17	22	89	12	140	46	75	17	0	138	524
04:45 PM	35	24	9	27	95	3	113	23	55	194	13	15	93	16	137	65	79	13	0	157	583
Total	121	85	28	72	306	16	463	68	231	778	55	76	326	62	519	283	320	51	1	655	2258
05:00 PM	41	18	6	11	76	2	125	14	56	197	13	34	83	24	154	55	73	16	2	146	573
05:15 PM	49	25	8	19	101	3	118	17	49	187	14	23	72	18	127	67	75	11	0	153	568
05:30 PM	42	37	6	15	100	8	117	8	66	199	7	22	76	21	126	72	62	19	0	153	578
05:45 PM	43	18	10	10	81	5	116	21	39	181	16	19	80	10	125	66	75	16	0	157	544
Total	175	98	30	55	358	18	476	60	210	764	50	98	311	73	532	260	285	62	2	609	2263
Grand Total	296	183	58	127	664	34	939	128	441	1542	105	174	637	135	1051	543	605	113	3	1264	4521
Apprch %	44.6	27.6	8.7	19.1		2.2	60.9	8.3	28.6		10	16.6	60.6	12.8		43	47.9	8.9	0.2		
Total %	6.5	4	1.3	2.8	14.7	0.8	20.8	2.8	9.8	34.1	2.3	3.8	14.1	3	23.2	12	13.4	2.5	0.1	28	

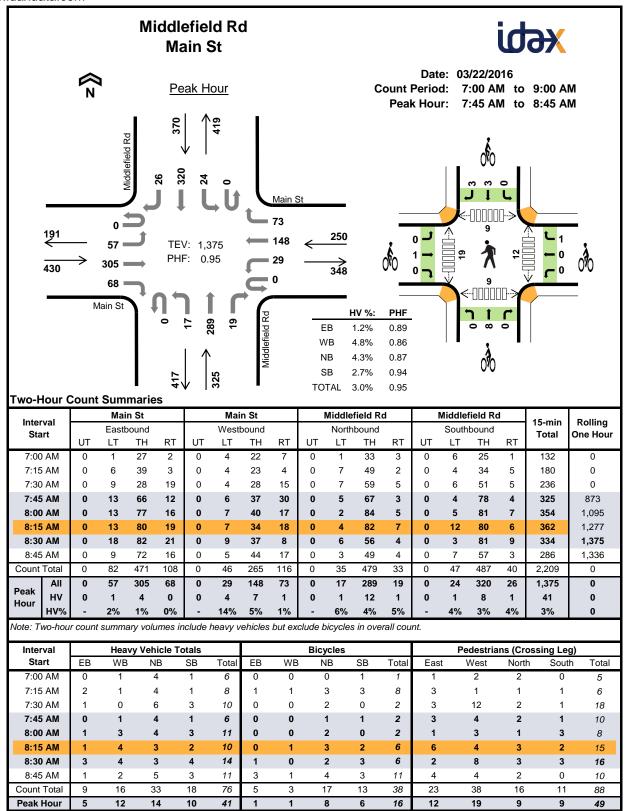
	N	IIDDLEF	FIELD F	RD	J	EFFER	SON A	VΕ	N	IIDDLEI	FIELD F	RD	J	EFFER	SON A	VΕ	
		South	bound			West	bound			North	bound			East	bound		
Start Time	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Right	Thru	Left	App. Total	Int. Total
Peak Hour Ana	lysis Fro	om 04:0	0 PM to	05:45 Pl	M - Peal	< 1 of 1			-				-				
Peak Hour for E	Entire In	tersection	on Begi	ns at 04:4	15 PM												
04:45 PM	35	24	9	68	3	113	23	139	13	15	93	121	65	79	13	157	485
05:00 PM	41	18	6	65	2	125	14	141	13	34	83	130	55	73	16	144	480
05:15 PM	49	25	8	82	3	118	17	138	14	23	72	109	67	75	11	153	482
05:30 PM	42	37	6	85	8	117	8	133	7	22	76	105	72	62	19	153	476
Total Volume	167	104	29	300	16	473	62	551	47	94	324	465	259	289	59	607	1923
% App. Total	55.7	34.7	9.7		2.9	85.8	11.3		10.1	20.2	69.7		42.7	47.6	9.7		
PHF	.852	.703	.806	.882	.500	.946	.674	.977	.839	.691	.871	.894	.899	.915	.776	.967	.991

San Jose, CA (408) 622-4787 tdsbay@cs.com

File Name: 1PM FINAL Site Code: 00000001 Start Date: 8/24/2016

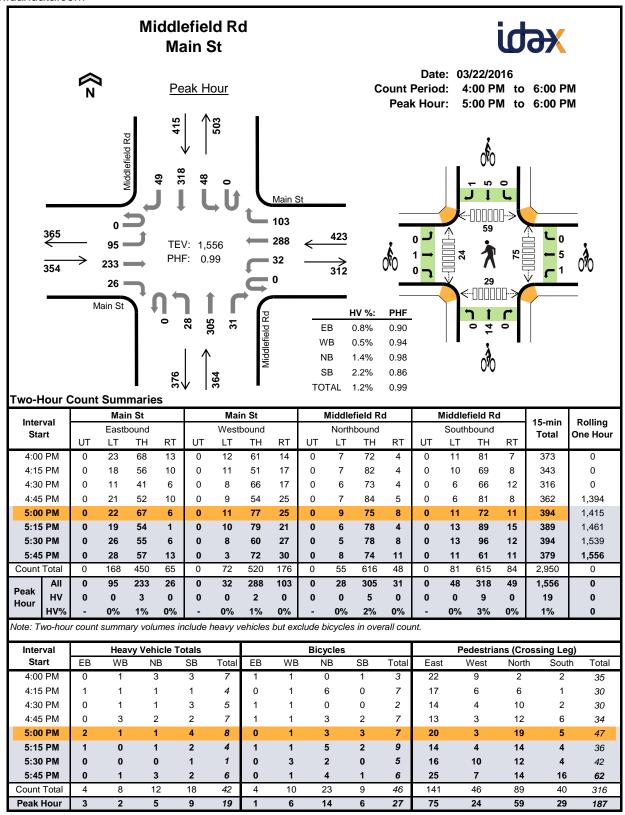
Page No : 2





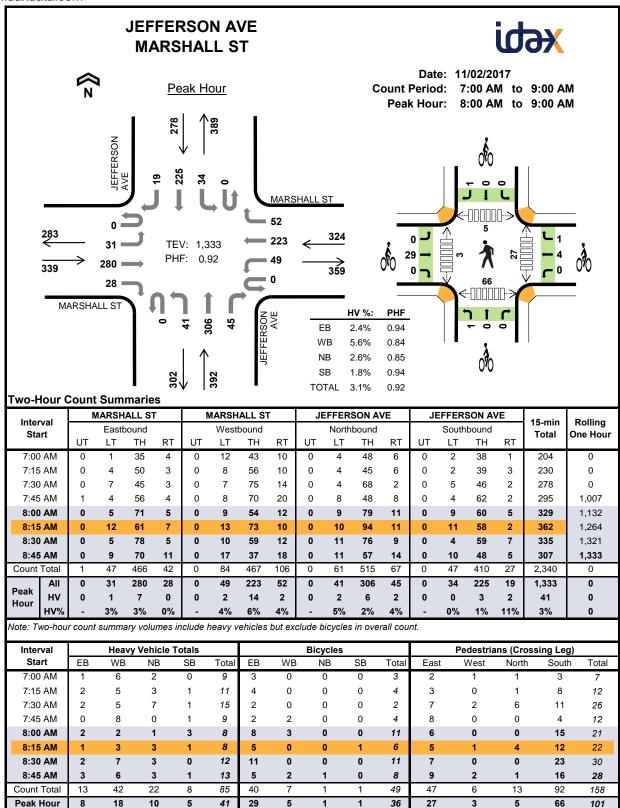
Two-Hour (Count	Sum	marie	s - He	eavy \	/ehic	les											
Interval		Mai	n St			Mai	in St		I	Middle	field R	d		Middle	field R	d	15-min	Rolling
Start		Eastb	ound			West	bound			North	bound			South	bound		Total	One Hour
Start	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	Ono mou
7:00 AM	0	0	0	0	0	0	1	0	0	1	2	1	0	0	1	0	6	0
7:15 AM	0	0	1	1	0	0	1	0	0	2	2	0	0	0	1	0	8	0
7:30 AM	0	0	0	1	0	0	0	0	0	1	5	0	0	0	3	0	10	0
7:45 AM	0	0	0	0	0	1	0	0	0	1	3	0	0	0	1	0	6	30
8:00 AM	0	0	1	0	0	0	3	0	0	0	4	0	0	1	2	0	11	35
8:15 AM	0	0	1	0	0	1	3	0	0	0	2	1	0	0	2	0	10	37
8:30 AM	0	1	2	0	0	2	1	1	0	0	3	0	0	0	3	1	14	41
8:45 AM	0	1	0	0	0	0	1	1	0	0	5	0	0	0	3	0	11	46
Count Total	0	2	5	2	0	4	10	2	0	5	26	2	0	1	16	1	76	0
Peak Hour	0	1	4	0	0	4	7	1	0	1	12	1	0	1	8	1	41	0

Interval		Main St			Main St		Mie	ddlefield	Rd	Mic	ddlefield	Rd	15-min	Rolling
Start	Е	Eastboun	d	V	Vestboun	nd	N	lorthbour	nd	S	outhbour	nd	Total	One Hour
O.a	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
7:00 AM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
7:15 AM	1	0	0	0	0	1	0	3	0	0	3	0	8	0
7:30 AM	0	0	0	0	0	0	0	2	0	0	0	0	2	0
7:45 AM	0	0	0	0	0	0	0	1	0	0	1	0	2	13
8:00 AM	0	0	0	0	0	0	0	2	0	0	0	0	2	14
8:15 AM	0	0	0	0	0	1	0	3	0	0	2	0	6	12
8:30 AM	0	1	0	0	0	0	0	2	0	0	0	3	6	16
8:45 AM	0	3	0	0	1	0	0	4	0	0	3	0	11	25
Count Total	1	4	0	0	1	2	0	17	0	0	10	3	38	0
Peak Hour	0	1	0	0	0	1	0	8	0	0	3	3	16	0



lusta mual		Mai	n St			Mai	in St		I	Middle	field R	d		Middle	field Ro	t	45	Dalling
Interval Start		Easth	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
4:00 PM	0	0	0	0	0	0	1	0	0	0	3	0	0	0	3	0	7	0
4:15 PM	0	0	0	1	0	0	1	0	0	0	1	0	0	0	1	0	4	0
4:30 PM	0	0	0	0	0	0	1	0	0	0	1	0	0	0	3	0	5	0
4:45 PM	0	0	0	0	0	1	2	0	0	0	2	0	0	0	2	0	7	23
5:00 PM	0	0	2	0	0	0	1	0	0	0	1	0	0	0	4	0	8	24
5:15 PM	0	0	1	0	0	0	0	0	0	0	1	0	0	0	2	0	4	24
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	20
5:45 PM	0	0	0	0	0	0	1	0	0	0	3	0	0	0	2	0	6	19
Count Total	0	0	3	1	0	1	7	0	0	0	12	0	0	0	18	0	42	0
Peak Hour	0	0	3	0	0	0	2	0	0	0	5	0	0	0	9	0	19	0

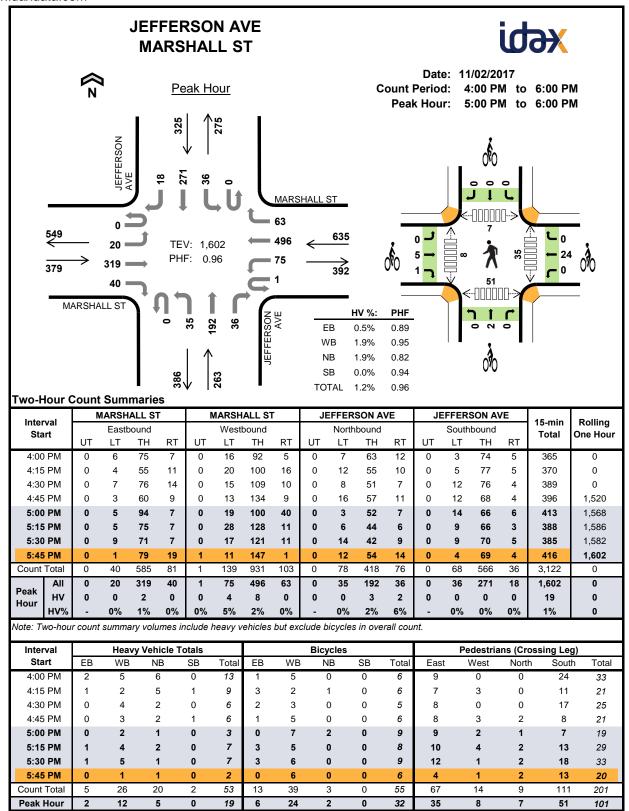
Interval		Main St			Main St		Mie	ddlefield	Rd	Mic	ddlefield	Rd	15-min	Rolling
Start		Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	Total	One Hour
Otart	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	rotai	Ono mou
4:00 PM	0	1	0	0	0	1	0	0	0	0	1	0	3	0
4:15 PM	0	0	0	0	1	0	0	6	0	0	0	0	7	0
4:30 PM	0	1	0	0	0	1	0	0	0	0	0	0	2	0
4:45 PM	0	1	0	0	0	1	1	2	0	0	2	0	7	19
5:00 PM	0	0	0	0	1	0	0	3	0	0	3	0	7	23
5:15 PM	0	1	0	1	0	0	0	5	0	0	1	1	9	25
5:30 PM	0	0	0	0	3	0	0	2	0	0	0	0	5	28
5:45 PM	0	0	0	0	1	0	0	4	0	0	1	0	6	27
Count Total	0	4	0	1	6	3	1	22	0	0	8	1	46	0
Peak Hour	0	1	0	1	5	0	0	14	0	0	5	1	27	0



Intonial	N	IARSH	ALL ST	Γ	N	IARSH	ALL S	T	JE	FFER	SON A	/E	JE	FFER	SON A	/E	45	Dallina
Interval Start		Easth	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	lotai	One Hour
7:00 AM	0	0	1	0	0	1	3	2	0	0	1	1	0	0	0	0	9	0
7:15 AM	0	0	1	1	0	0	5	0	0	0	3	0	0	0	1	0	11	0
7:30 AM	0	0	2	0	0	1	4	0	0	0	6	1	0	0	1	0	15	0
7:45 AM	0	0	0	0	0	0	7	1	0	0	0	0	0	0	1	0	9	44
8:00 AM	0	1	1	0	0	0	2	0	0	0	1	0	0	0	2	1	8	43
8:15 AM	0	0	1	0	0	1	2	0	0	0	2	1	0	0	1	0	8	40
8:30 AM	0	0	2	0	0	0	6	1	0	0	2	1	0	0	0	0	12	37
8:45 AM	0	0	3	0	0	1	4	1	0	2	1	0	0	0	0	1	13	41
Count Total	0	1	11	1	0	4	33	5	0	2	16	4	0	0	6	2	85	0
Peak Hour	0	1	7	0	0	2	14	2	0	2	6	2	0	0	3	2	41	0

Interval	MA	RSHALL	ST	MA	RSHALL	ST	JEF	FERSON	AVE	JEF	FERSON	AVE	45	Rolling
Start	E	astboun	d	٧	Vestbour	nd	N	lorthbou	nd	S	outhbour	nd	15-min Total	One Hour
- Claire	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.10 1.10
7:00 AM	0	3	0	0	0	0	0	0	0	0	0	0	3	0
7:15 AM	0	4	0	0	0	0	0	0	0	0	0	0	4	0
7:30 AM	0	2	0	0	0	0	0	0	0	0	0	0	2	0
7:45 AM	0	2	0	0	2	0	0	0	0	0	0	0	4	13
8:00 AM	0	8	0	0	2	1	0	0	0	0	0	0	11	21
8:15 AM	0	5	0	0	0	0	0	0	0	0	0	1	6	23
8:30 AM	0	11	0	0	0	0	0	0	0	0	0	0	11	32
8:45 AM	0	5	0	0	2	0	1	0	0	0	0	0	8	36
Count Total	0	40	0	0	6	1	1	0	0	0	0	1	49	0
Peak Hour	0	29	0	0	4	1	1	0	0	0	0	1	36	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.



Interval	N	IARSH	ALL S	Γ	N	// ARSH	ALL S	Τ	JE	FFER	SON A	VΕ	JE	FFER	SON A	/E	45	Rolling
Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One riour
4:00 PM	0	0	2	0	0	1	3	1	0	0	3	3	0	0	0	0	13	0
4:15 PM	0	0	0	1	0	1	1	0	0	0	3	2	0	0	1	0	9	0
4:30 PM	0	0	0	0	0	0	4	0	0	0	2	0	0	0	0	0	6	0
4:45 PM	0	0	0	0	0	1	2	0	0	0	1	1	0	1	0	0	6	34
5:00 PM	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	3	24
5:15 PM	0	0	1	0	0	1	3	0	0	0	1	1	0	0	0	0	7	22
5:30 PM	0	0	1	0	0	1	4	0	0	0	1	0	0	0	0	0	7	23
5:45 PM	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	2	19
Count Total	0	0	4	1	0	7	18	1	0	0	12	8	0	1	1	0	53	0
Peak Hour	0	0	2	0	0	4	8	0	0	0	3	2	0	0	0	0	19	0

Interval	MA	RSHALL	ST	MA	RSHALL	ST	JEF	FERSON	AVE	JEFI	FERSON	AVE	45 min	Rolling
Start	Е	astboun	d	٧	Vestbour	nd	١	lorthbou	nd	S	outhbour	nd	15-min Total	One Hour
- Claire	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.10 1.10
4:00 PM	0	0	1	0	5	0	0	0	0	0	0	0	6	0
4:15 PM	0	3	0	0	2	0	0	0	1	0	0	0	6	0
4:30 PM	0	2	0	0	3	0	0	0	0	0	0	0	5	0
4:45 PM	0	1	0	0	5	0	0	0	0	0	0	0	6	23
5:00 PM	0	0	0	0	7	0	0	2	0	0	0	0	9	26
5:15 PM	0	2	1	0	5	0	0	0	0	0	0	0	8	28
5:30 PM	0	3	0	0	6	0	0	0	0	0	0	0	9	32
5:45 PM	0	0	0	0	6	0	0	0	0	0	0	0	6	32
Count Total	0	11	2	0	39	0	0	2	1	0	0	0	55	0
Peak Hour	0	5	1	0	24	0	0	2	0	0	0	0	32	0

Note: U-Turn volumes for bikes are included in Left-Turn, if any.

Project Manager: (415) 310-6469



8:30 AM 8:45 AM

Count Total 102

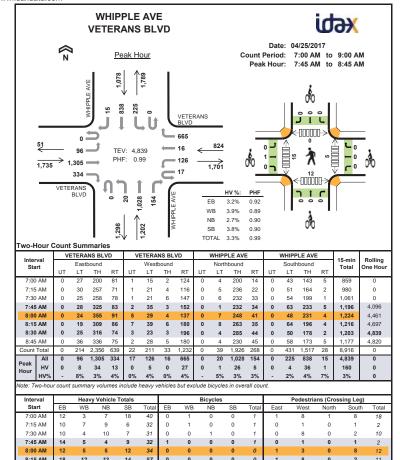
Peak Hour 55 32

53 68

32

302

160



www.idaxdata.com

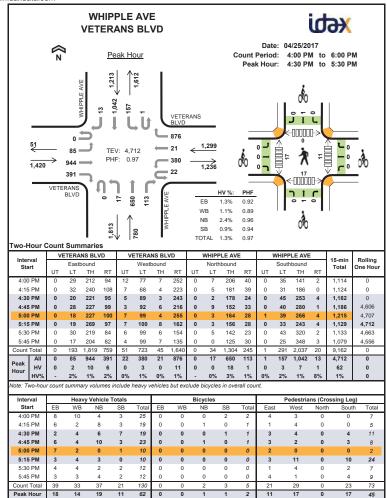
	VE	TERA	NS BL	/D	VE	ETERA	NS BL	VD		WHIPP	LE AVI	E		WHIPP	LE AVE		40.00	
Interval Start		Easth	oound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One mou
7:00 AM	0	3	6	3	0	0	1	2	0	1	4	2	0	2	15	1	40	0
7:15 AM	0	1	6	3	0	1	0	6	0	1	6	2	0	0	6	0	32	0
7:30 AM	0	2	4	4	0	0	0	4	0	1	8	1	0	0	7	0	31	0
7:45 AM	0	2	9	3	0	0	0	5	0	0	3	1	0	0	9	0	32	135
8:00 AM	0	2	8	2	0	1	0	4	0	0	5	0	0	0	12	0	34	129
8:15 AM	0	3	12	3	0	3	0	9	0	1	10	2	0	4	9	1	57	154
8:30 AM	0	1	5	5	0	1	0	9	0	0	8	2	0	0	6	0	37	160
8:45 AM	0	3	9	3	0	2	0	5	0	0	8	2	0	0	7	0	39	167
Count Total	0	17	59	26	0	8	1	44	0	4	52	12	0	6	71	2	302	0
Peak Hour	0	8	34	13	0	5	0	27	0	1	26	5	0	4	36	1	160	0

	VET	ERANS E	BLVD	VET	ERANS E	BLVD	WH	IIPPLE A	WE	WH	IIPPLE A	AVE	40	
Interval Start		astboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
Otait	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	Total	One mou
7:00 AM	0	0	0	0	0	1	0	0	0	0	0	0	1	0
7:15 AM	0	0	0	1	0	0	0	0	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	1	0	0	0	1	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:45 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	- 1
Count Total	0	1	0	1	0	1	0	1	1	0	0	0	5	0
Peak Hour	0	1	0	0	0	0	0	0	0	0	0	0	1	0

11

73

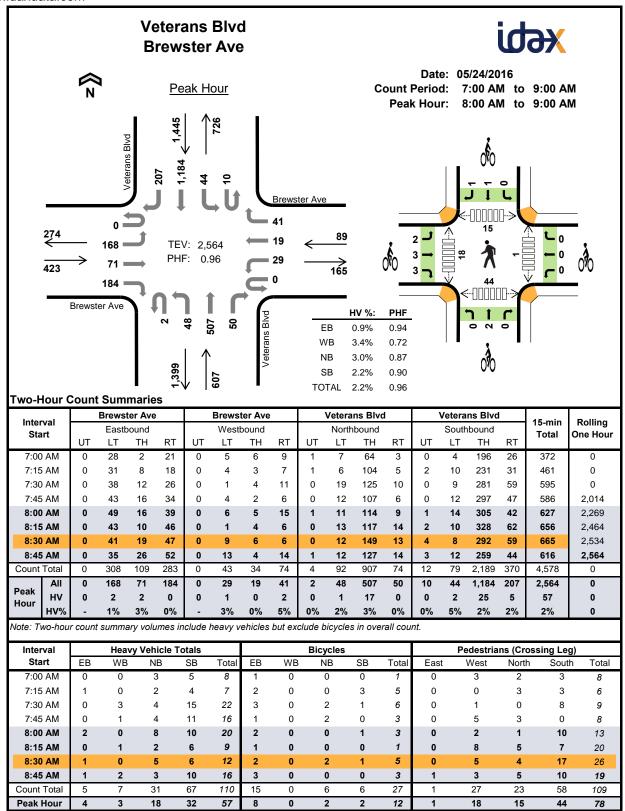




www.idaxdata.com

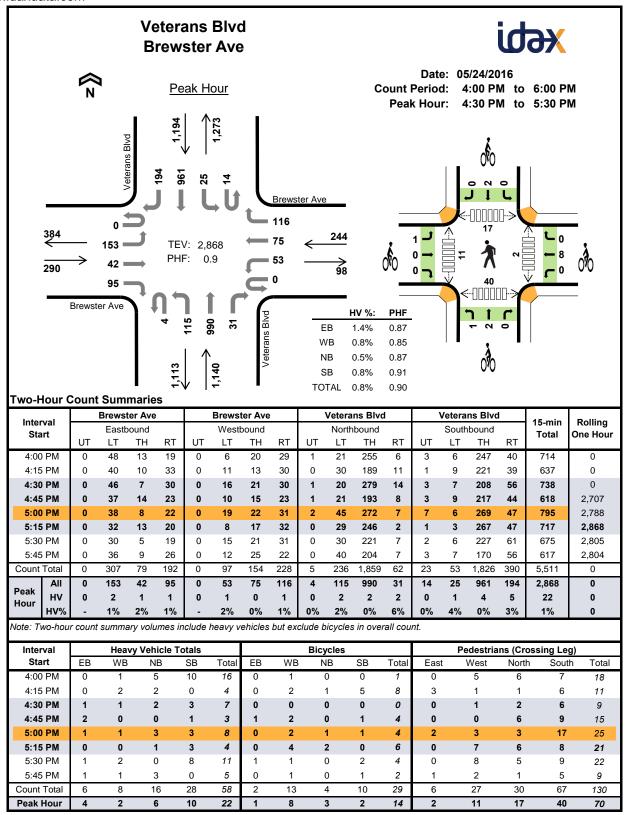
Interval	VE	TERA	NS BL	/D	VE	ETERA	NS BL	۷D		WHIPP	LE AVI	Ē		WHIPP	LE AVE		40	
Start		Easth	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nou
4:00 PM	0	0	7	1	0	0	2	8	0	0	4	0	0	0	3	0	25	0
4:15 PM	0	1	5	0	0	0	0	2	0	0	8	0	0	0	3	0	19	0
4:30 PM	0	1	1	0	0	0	0	4	0	0	6	0	0	2	4	1	19	0
4:45 PM	0	1	4	1	0	0	0	4	0	0	9	1	0	1	2	0	23	86
5:00 PM	0	0	4	3	0	2	0	0	0	0	0	0	0	0	1	0	10	71
5:15 PM	0	0	1	2	0	1	0	3	0	0	3	0	0	0	0	0	10	62
5:30 PM	0	0	4	0	0	2	0	2	0	0	2	0	0	0	2	0	12	55
5:45 PM	0	0	2	1	0	0	0	3	0	0	4	0	0	0	2	0	12	44
Count Total	0	3	28	8	0	5	2	26	0	0	36	1	0	3	17	1	130	0
Peak Hour	0	2	10	6	0	3	0	11	0	0	18	1	0	3	7	1	62	0

Interval	VET	ERANS E	BLVD	VET	ERANS E	BLVD	WH	IIPPLE A	WE	WH	IIPPLE A	WE	40.00	
Start	E	astboun	d	V	Vestbour	nd	N	orthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
Start	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	Total	One mour
4:00 PM	0	0	0	0	0	0	0	0	0	0	2	0	2	0
4:15 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	5
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	2	0	0	3	0	5	0
Peak Hour	0	0	0	0	0	0	0	1	0	0	1	0	2	0



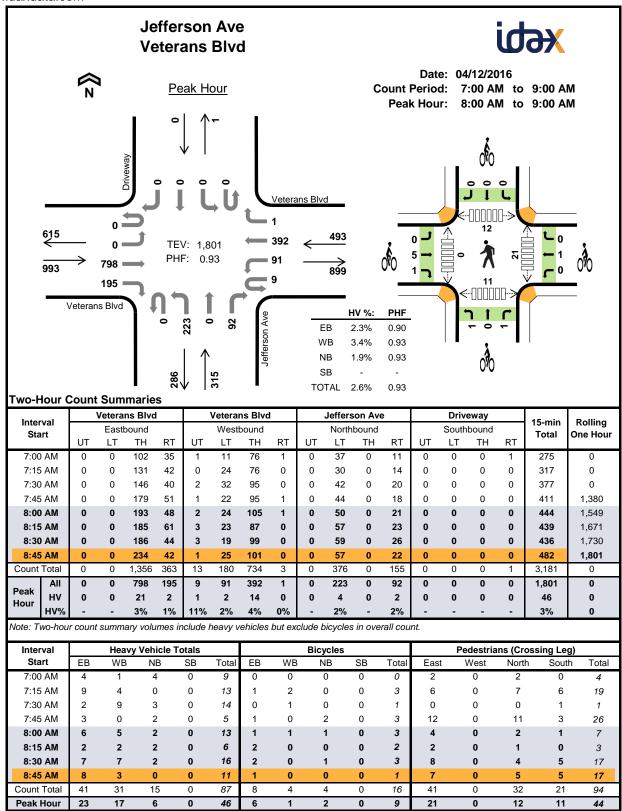
Intonial		Brews	ter Ave	1		Brews	ter Ave)		Vetera	ns Blvo	t		Vetera	ns Blvo	ŀ	45	Dalling
Interval Start		Easth	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
7:00 AM	0	0	0	0	0	0	0	0	0	0	3	0	0	0	3	2	8	0
7:15 AM	0	0	0	1	0	0	0	0	0	0	2	0	0	0	4	0	7	0
7:30 AM	0	0	0	0	0	0	1	2	0	1	3	0	0	0	12	3	22	0
7:45 AM	0	0	0	0	0	0	1	0	0	0	4	0	0	0	7	4	16	53
8:00 AM	0	1	1	0	0	0	0	0	0	0	8	0	0	1	6	3	20	65
8:15 AM	0	0	0	0	0	0	0	1	0	0	2	0	0	1	5	0	9	67
8:30 AM	0	0	1	0	0	0	0	0	0	1	4	0	0	0	5	1	12	57
8:45 AM	0	1	0	0	0	1	0	1	0	0	3	0	0	0	9	1	16	57
Count Total	0	2	2	1	0	1	2	4	0	2	29	0	0	2	51	14	110	0
Peak Hour	0	2	2	0	0	1	0	2	0	1	17	0	0	2	25	5	57	0

Interval	Br	ewster A	ve	Br	ewster A	ve	Ve	terans B	lvd	Ve	terans B	lvd	15-min	Rolling
Start	Е	Eastboun	d	٧	Vestbour	ıd	N	Northbour	nd	S	outhbour	nd	Total	One Hour
J.L.	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
7:00 AM	1	0	0	0	0	0	0	0	0	0	0	0	1	0
7:15 AM	1	1	0	0	0	0	0	0	0	0	2	1	5	0
7:30 AM	0	2	1	0	0	0	0	2	0	0	1	0	6	0
7:45 AM	1	0	0	0	0	0	1	1	0	0	0	0	3	15
8:00 AM	1	0	1	0	0	0	0	0	0	0	0	1	3	17
8:15 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	13
8:30 AM	0	2	0	0	0	0	0	2	0	0	1	0	5	12
8:45 AM	1	1	1	0	0	0	0	0	0	0	0	0	3	12
Count Total	5	6	4	0	0	0	1	5	0	0	4	2	27	0
Peak Hour	2	3	3	0	0	0	0	2	0	0	1	1	12	0



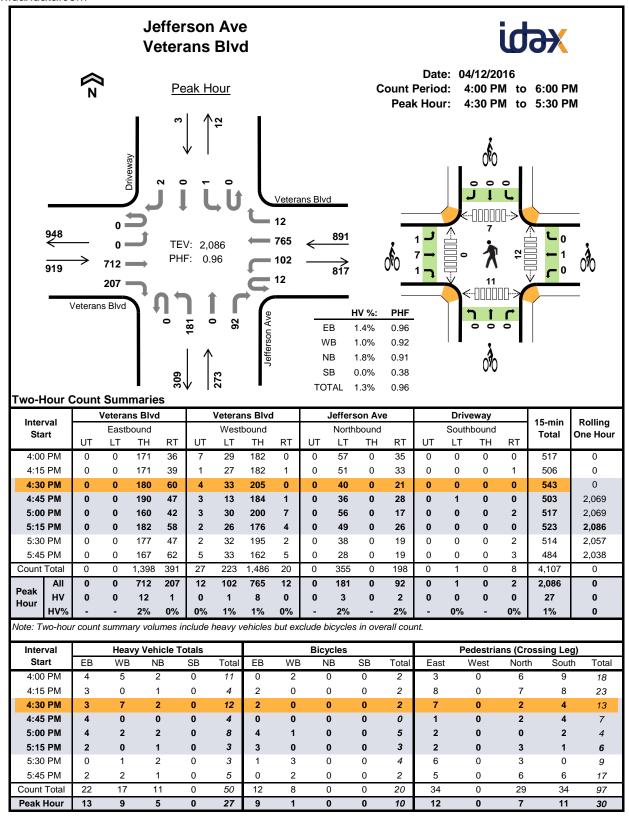
141		Brews	ter Ave			Brews	ter Ave		,	Vetera	ns Blvo	t		Vetera	ns Blvc	i	45	Dallia a
Interval Start		Eastb	ound			Westl	oound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
4:00 PM	0	0	0	0	0	0	0	1	0	2	3	0	1	1	6	2	16	0
4:15 PM	0	0	0	0	0	2	0	0	0	0	1	1	0	0	0	0	4	0
4:30 PM	0	0	0	1	0	1	0	0	0	1	1	0	0	0	0	3	7	0
4:45 PM	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	3	30
5:00 PM	0	1	0	0	0	0	0	1	0	0	1	2	0	1	2	0	8	22
5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	2	4	22
5:30 PM	0	1	0	0	0	0	2	0	0	0	0	0	1	0	5	2	11	26
5:45 PM	0	1	0	0	0	0	1	0	0	0	2	1	0	0	0	0	5	28
Count Total	0	4	1	1	0	3	3	2	0	4	8	4	2	2	15	9	58	0
Peak Hour	0	2	1	1	0	1	0	1	0	2	2	2	0	1	4	5	22	0

Interval	Br	ewster A	ve	Br	ewster A	lve	Ve	terans B	lvd	Ve	terans B	lvd	45	Dalling
Interval Start	E	Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
J.a	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:15 PM	0	0	0	0	2	0	0	1	0	0	4	1	8	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	1	0	0	0	2	0	0	0	0	0	1	0	4	13
5:00 PM	0	0	0	0	2	0	1	0	0	0	1	0	4	16
5:15 PM	0	0	0	0	4	0	0	2	0	0	0	0	6	14
5:30 PM	1	0	0	0	1	0	0	0	0	0	2	0	4	18
5:45 PM	0	0	0	0	1	0	0	0	0	0	1	0	2	16
Count Total	2	0	0	0	13	0	1	3	0	0	9	1	29	0
Peak Hour	1	0	0	0	8	0	1	2	0	0	2	0	14	0



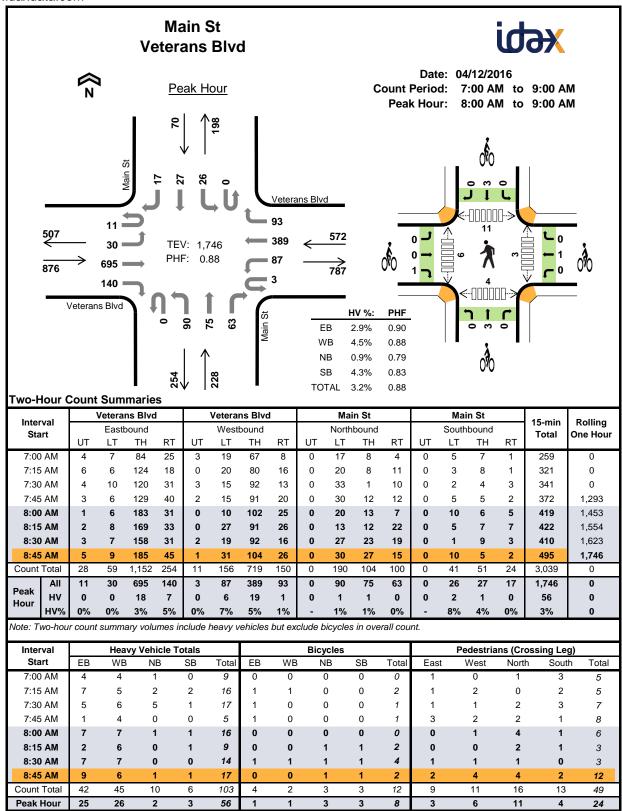
Interval	,	Vetera	ns Blvo	t	,	Vetera	ns Blv	t		Jeffers	on Ave)		Driv	eway		45	Dalling
Interval Start		Easth	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nour
7:00 AM	0	0	1	3	0	0	1	0	0	2	0	2	0	0	0	0	9	0
7:15 AM	0	0	5	4	0	0	4	0	0	0	0	0	0	0	0	0	13	0
7:30 AM	0	0	2	0	0	2	7	0	0	1	0	2	0	0	0	0	14	0
7:45 AM	0	0	2	1	0	0	0	0	0	2	0	0	0	0	0	0	5	41
8:00 AM	0	0	6	0	0	1	4	0	0	1	0	1	0	0	0	0	13	45
8:15 AM	0	0	2	0	1	0	1	0	0	2	0	0	0	0	0	0	6	38
8:30 AM	0	0	5	2	0	1	6	0	0	1	0	1	0	0	0	0	16	40
8:45 AM	0	0	8	0	0	0	3	0	0	0	0	0	0	0	0	0	11	46
Count Total	0	0	31	10	1	4	26	0	0	9	0	6	0	0	0	0	87	0
Peak Hour	0	0	21	2	1	2	14	0	0	4	0	2	0	0	0	0	46	0

Interval	Ve	terans B	lvd	Ve	terans B	lvd	Je	fferson /	Ave		Drivewa	у	15-min	Rolling
Start	E	Eastboun	d	٧	Vestbour	nd	١	Northbour	nd	S	outhbour	nd	Total	One Hour
5.	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	. • • • • •	0.101.104.1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	1	1	0	0	0	0	0	0	0	3	0
7:30 AM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
7:45 AM	0	1	0	0	0	0	2	0	0	0	0	0	3	7
8:00 AM	0	0	1	0	1	0	1	0	0	0	0	0	3	10
8:15 AM	0	2	0	0	0	0	0	0	0	0	0	0	2	9
8:30 AM	0	2	0	0	0	0	0	0	1	0	0	0	3	11
8:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	9
Count Total	0	7	1	1	3	0	3	0	1	0	0	0	16	0
Peak Hour	0	5	1	0	1	0	1	0	1	0	0	0	9	0



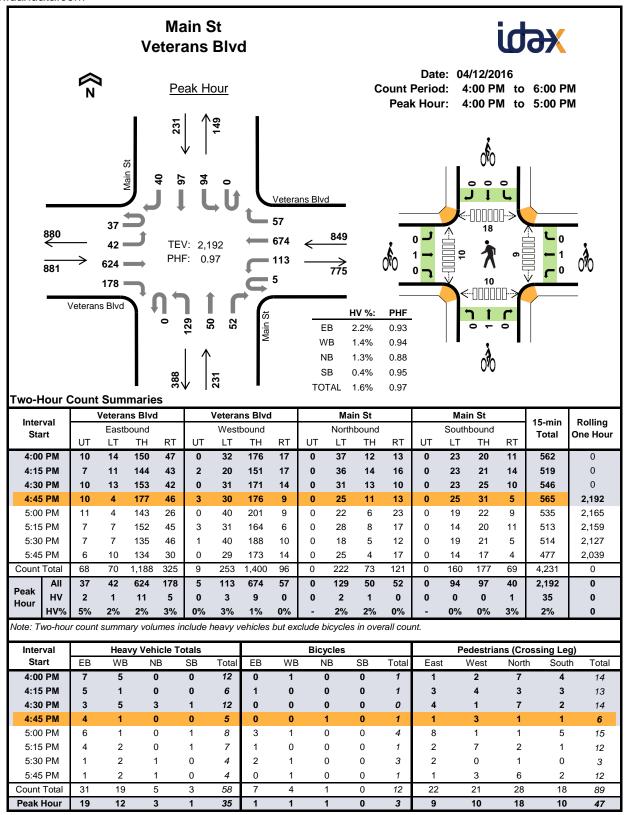
	,	Vetera	ns Blvd	l	,	Vetera	ns Blvo	ŀ		Jeffers	on Ave	•		Drive	eway		45	D - III
Interval Start		Easth	ound			Westl	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nou
4:00 PM	0	0	3	1	0	0	5	0	0	1	0	1	0	0	0	0	11	0
4:15 PM	0	0	3	0	0	0	0	0	0	1	0	0	0	0	0	0	4	0
4:30 PM	0	0	2	1	0	1	6	0	0	1	0	1	0	0	0	0	12	0
4:45 PM	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	4	31
5:00 PM	0	0	4	0	0	0	2	0	0	1	0	1	0	0	0	0	8	28
5:15 PM	0	0	2	0	0	0	0	0	0	1	0	0	0	0	0	0	3	27
5:30 PM	0	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	3	18
5:45 PM	0	0	1	1	0	0	2	0	0	0	0	1	0	0	0	0	5	19
Count Total	0	0	19	3	0	1	16	0	0	6	0	5	0	0	0	0	50	0
Peak Hour	0	0	12	1	0	1	8	0	0	3	0	2	0	0	0	0	27	0

Interval	Ve	terans B	lvd	Ve	terans B	lvd	Je	fferson A	Ave		Driveway	/	15-min	Rolling
Start	Е	astboun	d	V	Vestbour	ıd	N	lorthbour	nd	S	outhbour	nd	Total	One Hour
0	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
4:00 PM	0	0	0	0	2	0	0	0	0	0	0	0	2	0
4:15 PM	0	1	1	0	0	0	0	0	0	0	0	0	2	0
4:30 PM	1	1	0	0	0	0	0	0	0	0	0	0	2	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	6
5:00 PM	0	4	0	0	1	0	0	0	0	0	0	0	5	9
5:15 PM	0	2	1	0	0	0	0	0	0	0	0	0	3	10
5:30 PM	0	1	0	0	3	0	0	0	0	0	0	0	4	12
5:45 PM	0	0	0	0	2	0	0	0	0	0	0	0	2	14
Count Total	1	9	2	0	8	0	0	0	0	0	0	0	20	0
Peak Hour	1	7	1	0	1	0	0	0	0	0	0	0	10	0



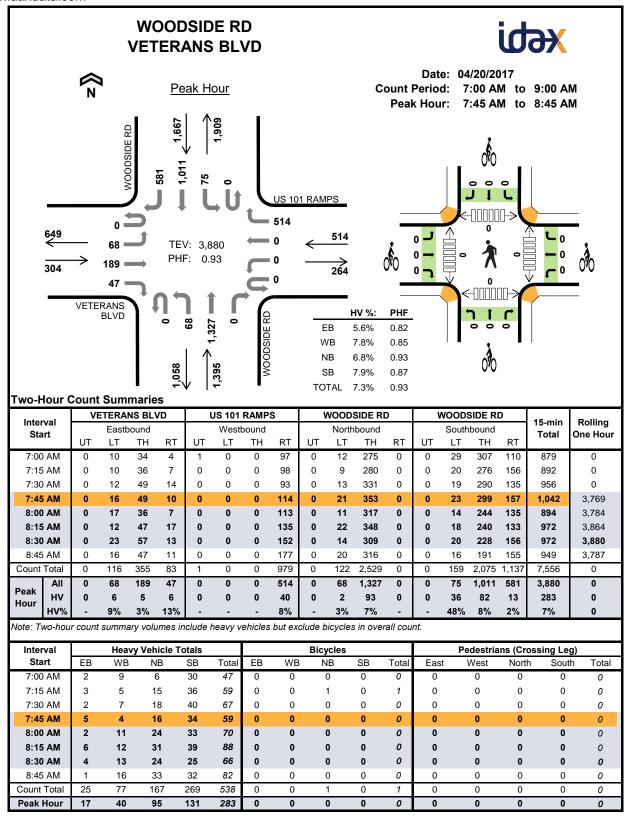
Interval	,	Vetera	ns Blvo	l		Vetera	ns Blvo	ŀ		Mai	n St			Mai	n St		45	Rolling
Start		Eastb	ound			West	bound			North	bound			South	bound		15-min Total	One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nou
7:00 AM	0	1	3	0	0	3	1	0	0	1	0	0	0	0	0	0	9	0
7:15 AM	1	0	4	2	0	1	4	0	0	1	1	0	0	0	2	0	16	0
7:30 AM	0	0	3	2	0	1	5	0	0	2	0	3	0	0	0	1	17	0
7:45 AM	0	0	1	0	0	1	1	2	0	0	0	0	0	0	0	0	5	47
8:00 AM	0	0	6	1	0	1	6	0	0	1	0	0	0	1	0	0	16	54
8:15 AM	0	0	1	1	0	2	4	0	0	0	0	0	0	0	1	0	9	47
8:30 AM	0	0	5	2	0	2	5	0	0	0	0	0	0	0	0	0	14	44
8:45 AM	0	0	6	3	0	1	4	1	0	0	1	0	0	1	0	0	17	56
Count Total	1	1	29	11	0	12	30	3	0	5	2	3	0	2	3	1	103	0
Peak Hour	0	0	18	7	0	6	19	1	0	1	1	0	0	2	1	0	56	0

Interval	Ve	terans B	lvd	Ve	terans B	lvd		Main St	t		Main St		45	Dalling
Interval Start	E	Eastboun	d	V	Vestbour	nd	١	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
3. 5	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	1	0	0	1	0	0	0	0	0	0	0	2	0
7:30 AM	0	0	1	0	0	0	0	0	0	0	0	0	1	0
7:45 AM	0	1	0	0	0	0	0	0	0	0	0	0	1	4
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	4
8:15 AM	0	0	0	0	0	0	0	1	0	0	1	0	2	4
8:30 AM	0	0	1	0	1	0	0	1	0	0	1	0	4	7
8:45 AM	0	0	0	0	0	0	0	1	0	0	1	0	2	8
Count Total	0	2	2	0	2	0	0	3	0	0	3	0	12	0
Peak Hour	0	0	1	0	1	0	0	3	0	0	3	0	8	0



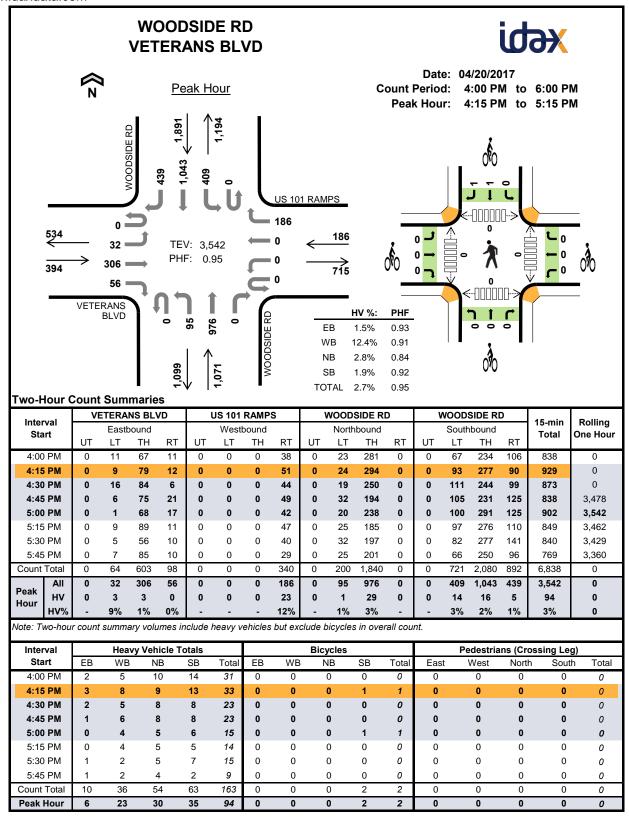
I	,	Vetera	ns Blvd	i	,	Vetera	ns Blvd	ı		Mai	n St			Mai	n St		45	D - III
Interval Start		Easth	ound			West	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nou
4:00 PM	1	1	3	2	0	1	4	0	0	0	0	0	0	0	0	0	12	0
4:15 PM	1	0	3	1	0	0	1	0	0	0	0	0	0	0	0	0	6	0
4:30 PM	0	0	2	1	0	1	4	0	0	2	1	0	0	0	0	1	12	0
4:45 PM	0	0	3	1	0	1	0	0	0	0	0	0	0	0	0	0	5	35
5:00 PM	0	0	5	1	0	0	1	0	0	0	0	0	0	0	0	1	8	31
5:15 PM	0	1	3	0	0	1	0	1	0	0	0	0	0	1	0	0	7	32
5:30 PM	0	0	1	0	0	2	0	0	0	1	0	0	0	0	0	0	4	24
5:45 PM	0	1	0	0	0	0	2	0	0	0	0	1	0	0	0	0	4	23
Count Total	2	3	20	6	0	6	12	1	0	3	1	1	0	1	0	2	58	0
Peak Hour	2	1	11	5	0	3	9	0	0	2	1	0	0	0	0	1	35	0

Interval	Ve	terans B	lvd	Ve	terans B	lvd		Main St			Main St		15-min	Rolling
Start	Е	Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	Total	One Hour
3. 5	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
4:00 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:15 PM	0	1	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	1	0	0	0	0	1	3
5:00 PM	0	1	2	0	1	0	0	0	0	0	0	0	4	6
5:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	1	6
5:30 PM	0	1	1	0	1	0	0	0	0	0	0	0	3	9
5:45 PM	0	0	0	0	1	0	0	0	0	0	0	0	1	9
Count Total	1	3	3	0	4	0	0	1	0	0	0	0	12	0
Peak Hour	0	1	0	0	1	0	0	1	0	0	0	0	3	0



	VE	TERA	NS BL	/D	ι	JS 101	RAMP	S	١	NOODS	SIDE R	D	٧	VOODS	SIDE RE	כ	4	.
Interval Start		Easth	oound			Westl	bound			North	bound			South	bound		15-min Total	Rolling One Hour
Otart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	Total	One nou
7:00 AM	0	0	2	0	0	0	0	9	0	0	6	0	0	8	22	0	47	0
7:15 AM	0	0	3	0	0	0	0	5	0	0	15	0	0	10	19	7	59	0
7:30 AM	0	1	0	1	0	0	0	7	0	0	18	0	0	10	27	3	67	0
7:45 AM	0	2	2	1	0	0	0	4	0	0	16	0	0	10	22	2	59	232
8:00 AM	0	2	0	0	0	0	0	11	0	0	24	0	0	7	23	3	70	255
8:15 AM	0	1	2	3	0	0	0	12	0	0	31	0	0	8	25	6	88	284
8:30 AM	0	1	1	2	0	0	0	13	0	2	22	0	0	11	12	2	66	283
8:45 AM	0	1	0	0	0	0	0	16	0	0	33	0	0	7	18	7	82	306
Count Total	0	8	10	7	0	0	0	77	0	2	165	0	0	71	168	30	538	0
Peak Hour	0	6	5	6	0	0	0	40	0	2	93	0	0	36	82	13	283	0

Interval	VET	ERANS E	BLVD	US	101 RAN	/IPS	WC	ODSIDE	RD	WO	ODSIDE	RD	45	Dalling
Interval Start		Eastboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	15-min Total	Rolling One Hour
Otart	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT	rotai	Ono mou
7:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	0	0	0	0	0	0	0	1	0	0	0	0	1	0
7:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
8:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Count Total	0	0	0	0	0	0	0	1	0	0	0	0	1	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	0	0	0	0



Two-Hour C	Count	Sum	marie	s - He	eavy \	V ehic	les											
Intomial	VE	TERA	NS BL\	/D	Į	JS 101	RAMP	S	V	VOODS	SIDE R	D	1	WOODS	SIDE RI	D	45	Delling
Interval Start		Easth	ound			West	bound			North	bound	•		South	bound	•	15-min Total	Rolling One Hour
Clart	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	UT	LT	TH	RT	· otai	O.I.O FIOUR
4:00 PM	0	1	1	0	0	0	0	5	0	1	9	0	0	4	5	5	31	0
4:15 PM	0	2	1	0	0	0	0	8	0	0	9	0	0	4	7	2	33	0
4:30 PM	0	1	1	0	0	0	0	5	0	0	8	0	0	3	4	1	23	0
4:45 PM	0	0	1	0	0	0	0	6	0	1	7	0	0	2	4	2	23	110
5:00 PM	0	0	0	0	0	0	0	4	0	0	5	0	0	5	1	0	15	94
5:15 PM	0	0	0	0	0	0	0	4	0	1	4	0	0	1	2	2	14	75
5:30 PM	0	0	1	0	0	0	0	2	0	0	5	0	0	2	4	1	15	67
5:45 PM	0	0	1	0	0	0	0	2	0	0	4	0	0	1	1	0	9	53
Count Total	0	4	6	0	0	0	0	36	0	3	51	0	0	22	28	13	163	0
Peak Hour	0	3	3	0	0	0	0	23	0	1	29	0	0	14	16	5	94	0

Interval	VET	ERANS E	BLVD	US	101 RAI	/IPS	WC	ODSIDE	RD	wo	ODSIDE	RD	15-min	Rolling
Interval Start	E	astboun	d	V	Vestbour	nd	N	lorthbour	nd	S	outhbour	nd	Total	One Hour
J.a	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT		0.101.104.1
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	1	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:00 PM	0	0	0	0	0	0	0	0	0	0	1	0	1	2
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Count Total	0	0	0	0	0	0	0	0	0	0	1	1	2	0
Peak Hour	0	0	0	0	0	0	0	0	0	0	1	1	2	0

Appendix BVolume Summary

1

Traffix Node Number: Intersection Name: & Whipple Ave Veterans Blvd AM

Peak Hour: Count Date: Scenario: 04/25/17

SMC Government Center

RC Growth Factor:

Future Growth % Per Year 1.060

1305 1 82 21	96 0 0	15 0	pproac TH 838		South A RT 665			West ART	Approac TH 1028	h LT 20	
TH 1305 1 82 21	96 0 0	15 0	838	h LT	South A	TH	LT	RT	TH	LT	_
TH 1305 1 82 21	96 0 0	15 0	838	LT	RT	TH	LT	RT	TH	LT	_
 1 82 21	 0 0		838	225	665	16	143	154	1028	20	
 1 82 21	 0 0			225	665	16	143	154	1028	20	4839
82 21	0										
82 21	0										
82 21	0		_								0
21			0	0	5	0	3	0	0	0	9
		0	0	5	56	0	1	1	67	0	217
5	2	0	-23	-1	0	0	0	8	0	0	7
J	0	0	0	0	0	0	0	0	0	0	5
60	0	0	0	8	50	0	5	12	0	0	135
169	2	0	-23	12	111	0	9	21	67	0	373
1474	98	15	815	237	776	16	152	175	1095	20	5212
83	0	0	0	10	10	0	2	18	0	0	123
83	0	0	0	10	10	0	2	18	0	0	123
1388	96	15	838	235	675	16	145	172	1028	20	4962
1557	98	15	815	247	786	16	154	193	1095	20	5335
146	101	0	6	0	0	0	5	22	22	0	302
71	5	1	45	12	36	1	8	8	56	1	262
1691	204	16	866	249	812	17	165	205	1173	21	5776
1774	204	16	866	259	822	17	167	223	1173	21	5899
1 1	169 474 83 83 388 557 146 71 691	60 0 169 2 474 98 83 0 83 0 388 96 557 98 146 101 71 5 691 204	60 0 0 169 2 0 474 98 15 83 0 0 388 96 15 557 98 15 146 101 0 71 5 1 691 204 16	60 0 0 0 169 2 0 -23 474 98 15 815 83 0 0 0 83 0 0 0 388 96 15 838 557 98 15 815 146 101 0 6 71 5 1 45 691 204 16 866	60 0 0 0 8 169 2 0 -23 12 474 98 15 815 237 83 0 0 0 10 83 0 0 0 10 388 96 15 838 235 557 98 15 815 247 146 101 0 6 0 71 5 1 45 12 691 204 16 866 249	60 0 0 0 8 50 169 2 0 -23 12 111 474 98 15 815 237 776 83 0 0 0 10 10 83 0 0 0 10 10 388 96 15 838 235 675 557 98 15 815 247 786 146 101 0 6 0 0 71 5 1 45 12 36 691 204 16 866 249 812	60 0 0 0 8 50 0 169 2 0 -23 12 111 0 474 98 15 815 237 776 16 83 0 0 0 10 10 0 83 0 0 0 10 10 0 388 96 15 838 235 675 16 557 98 15 815 247 786 16 146 101 0 6 0 0 0 71 5 1 45 12 36 1 691 204 16 866 249 812 17	60 0 0 0 8 50 0 5 169 2 0 -23 12 111 0 9 474 98 15 815 237 776 16 152 83 0 0 0 10 10 0 2 83 0 0 0 10 10 0 2 388 96 15 838 235 675 16 145 557 98 15 815 247 786 16 154 146 101 0 6 0 0 0 5 71 5 1 45 12 36 1 8 691 204 16 866 249 812 17 165	60 0 0 0 8 50 0 5 12 169 2 0 -23 12 111 0 9 21 474 98 15 815 237 776 16 152 175 83 0 0 0 10 10 0 2 18 83 0 0 0 10 10 0 2 18 388 96 15 838 235 675 16 145 172 557 98 15 815 247 786 16 154 193 146 101 0 6 0 0 0 5 22 71 5 1 45 12 36 1 8 8 691 204 16 866 249 812 17 165 205	60 0 0 0 8 50 0 5 12 0 169 2 0 -23 12 111 0 9 21 67 474 98 15 815 237 776 16 152 175 1095 83 0 0 0 10 10 0 2 18 0 83 0 0 0 10 10 0 2 18 0 388 96 15 838 235 675 16 145 172 1028 557 98 15 815 247 786 16 154 193 1095 146 101 0 6 0 0 0 5 22 22 71 5 1 45 12 36 1 8 8 56 691 204 16	60 0 0 0 8 50 0 5 12 0 0 169 2 0 -23 12 111 0 9 21 67 0 474 98 15 815 237 776 16 152 175 1095 20 83 0 0 0 10 10 0 2 18 0 0 83 0 0 0 10 10 0 2 18 0 0 388 96 15 838 235 675 16 145 172 1028 20 557 98 15 815 247 786 16 154 193 1095 20 146 101 0 6 0 0 0 5 22 22 2 0 71 5 1 45 12 <td< td=""></td<>

2

Traffix Node Number: Intersection Name:

Veterans Blvd

AM 05/24/16 & Brewster Ave

Peak Hour: Count Date: Scenario:

RC Growth Factor:

SMC Government Center

Future Growth % Per Year 1.060

Number of Years								Nun	nber of '	Years to B	uildout	6	i
							ements						_
		Approac		East A				Approa		West A			_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	207	1184	54	41	19	29	50	507	50	184	71	168	2564
													-
Approved Project Trips													_
One Marina & Pete's Harbor													0
849 Veterans Blvd	0	1	0	4	1	0	0	4	2	0	0	0	12
Downtown Precise Plan	37	52	0	0	0	0	0	18	26	9	0	39	181
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	5	0	0	0	0	0	0	0	0	0	0	5
Kaiser Phase II	0	80	0	0	0	0	0	55	0	0	0	0	135
Total Approved Trips	37	138	0	4	1	0	0	77	28	9	0	39	333
Background Conditions	244	1322	54	45	20	29	50	584	78	193	71	207	2897
Project Trips													
Project Trips	47	65	0	0	0	0	0	7	6	2	0	5	132
Net Project Trips	47	65	0	0	0	0	0	7	6	2	0	5	132
Existing + Project	254	1249	54	41	19	29	50	514	56	186	71	173	2696
Background + Project	291	1387	54	45	20	29	50	591	84	195	71	212	3029
Pending Project Trips													
Harbor View	0	68	0	0	0	0	0	5	0	0	0	0	73
Cumulative Growth	14	77	4	3	1	2	3	33	3	12	5	11	168
Cumulative w/o Project	258	1467	58	48	21	31	53	622	81	205	76	218	3138
Cumulative w/ Project	305	1532	58	48	21	31	53	629	87	207	76	223	3270

Traffix Node Number: Intersection Name: 3

Veterans Blvd & Middlefield Rd

Peak Hour: Count Date: Scenario: AM 08/29/17

SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Nun	nber of '	Years to B	uildout	5)
						Mov	ements						
	North	Approac	h	East A	pproac	h	South	Approa	ch	West A	pproa	ch	-
Scenario:	RT	TH	LT	RT	TH	LT	RT	ŤH	LT	RT	TH	LT	Total
Existing Conditions	419	1067	0	0	0	0	0	534	63	73	0	117	2273
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd	0	1	0	0	0	0	0	6	0	0	0	0	7
Downtown Precise Plan	0	61	0	0	0	0	0	44	0	0	0	0	105
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	5	0	0	0	0	0	0	0	0	0	0	5
Kaiser Phase II	0	80	0	0	0	0	0	55	0	0	0	0	135
Total Approved Trips	0	147	0	0	0	0	0	105	0	0	0	0	252
Background Conditions	419	1214	0	0	0	0	0	639	63	73	0	117	2525
Project Trips													
Project Trips	66	1	0	0	0	0	0	6	6	1	0	7	87
Net Project Trips	66	1	0	0	0	0	0	6	6	1	0	7	87
Existing + Project	485	1068	0	0	0	0	0	540	69	74	0	124	2360
Background + Project	485	1215	0	0	0	0	0	645	69	74	0	124	_ 2612
- Saongrouna - Froject								0.0					
Pending Project Trips													
Harbor View	0	68	0	0	0	0	0	5	0	0	0	0	73
Cumulative Growth	23	58	0	0	0	0	0	29	3	4	0	6	123
Cumulative w/o Project	442	1340	0	0	0	0	0	673	66	77	0	123	2721
Cumulative w/ Project	508	1341	0	0	0	0	0	679	72	78	0	130	_ 2808

4

Traffix Node Number: Intersection Name:

Veterans Blvd & Jefferson Ave

Peak Hour: Count Date: Scenario: AM

04/12/16 SMC Government Center

RC Growth Factor:

Future Growth % Per Year 1.060

Ν	um	her	of	Yea	ars	to	Buil	dout	

Number of Years								Nun	nber of \	ears to B	uildout	6	
							ements						_
		Approac		East A				Approa		West A			_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	195	798	0	0	0	0	1	392	100	92	0	223	1801
Existing Conditions	190	190		0	- 0		'	332	100	32	- 0	223	1 1001
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd	0	0	1	6	1	11	1	0	1	0	0	0	21
Downtown Precise Plan	52	9	0	0	0	0	0	26	3	4	0	18	112
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	5	0	0	0	0	0	0	0	0	0	0	5
Kaiser Phase II	0	80	0	0	0	0	0	55	0	0	0	0	135
Total Approved Trips	52	94	1	6	1	11	1	81	4	4	0	18	273
Background Conditions	247	892	1	6	1	11	2	473	104	96	0	241	2074
Project Trips													
Project Trips	0	2	0	0	0	0	0	12	0	0	0	0	14
Net Project Trips	0	2	0	0	0	0	0	12	0	0	0	0	14
Existing + Project	195	800	0	0	0	0	1	404	100	92	0	223	1815
Background + Project	247	894	1	6	1	11	2	485	104	96	0	241	2088
,													-
Pending Project Trips Harbor View	0	68	0	0	0	0	0	5	0	0	0	0	73
Transor view	U	00	U	U	U	U	U	J	U	U	U	U	13
Cumulative Growth	13	52	0	0	0	0	0	26	7	6	0	15	119
Cumulative w/o Project	260	1012	1	6	1	11	2	504	111	102	0	256	2266
Cumulative w/ Project	260	1014	1	6	1	11	2	516	111	102	0	256	2280

Traffix Node Number: Intersection Name: 5

Veterans Blvd & Maple St

AM 05/10/16

SMC Government Center

Peak Hour: Count Date: Scenario:

RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Nun	nber of \	rears to B	uildout	6	
						Mov	ements						
	North A	Approa	ch	East A	pproac	h	South	Approa	ch	West A	Approac	h	_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	89	397	195	66	47	19	44	495	64	56	112	54	1638
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	0	6	20	21	0	0	0	22	0	0	0	0	69
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	0	0	0	0	0	0	0	0	0	0	0	0
Kaiser Phase II	64	16	0	0	0	0	0	0	120	120	0	55	375
Total Approved Trips	64	22	20	21	0	0	0	22	120	120	0	55	444
Background Conditions	153	419	215	87	47	19	44	517	184	176	112	109	2082
Project Trips													
Project Trips	0	2	0	0	0	0	0	12	0	0	0	0	14
Net Project Trips	0	2	0	0	0	0	0	12	0	0	0	0	14
Existing + Project	89	399	195	66	47	19	44	507	64	56	112	54	1652
Background + Project	153	421	215	87	47	19	44	529	184	176	112	109	2096
Pending Project Trips													_
Harbor View	0	3	165	1	65	21	35	1	0	0	83	0	374
Cumulative Growth	6	26	13	4	3	1	3	32	4	4	7	4	107
Cumulative w/o Project	159	448	393	92	115	41	82	550	188	180	202	113	2563
Cumulative w/ Project	159	450	393	92	115	41	82	562	188	180	202	113	2577

6

Traffix Node Number: Intersection Name: Veterans Blvd

& Woodside Rd

Peak Hour: Count Date: Scenario:

AM 04/20/17

SMC Government Center

RC Growth Factor:

Future Growth % Per Year 1.060

Number of Years								Nun	nber of '	Years to E	Buildout	5)
						Move	ements						
	North /	Approac		East A	Approac		South A	Approa		West	Approac	h	
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	47	189	68	581	1011	75	514	0	0	0	1327	68	3880
Existing Conditions		103	- 00	301	1011	7.5	314	- 0			1021	00	_ 5000
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	1	4	0	78	47	0	0	0	0	45	4	0	179
Stanford in RC	25	0	-11	0	238	0	0	0	0	0	31	17	300
1629 Main Street	0	0	0	0	9	0	0	0	0	1	1	0	11
Kaiser Phase II	0	136	0	120	0	0	0	0	0	0	0	0	256
Total Approved Trips	26	140	-11	198	294	0	0	0	0	46	36	17	746
Background Conditions	73	329	57	779	1305	75	514	0	0	46	1363	85	4626
Project Trips													
Project Trips	0	2	0	10	0	0	0	0	0	0	0	0	12
Net Project Trips	0	2	0	10	0	0	0	0	0	0	0	0	12
Existing + Project	47	191	68	591	1011	75	514	0	0	0	1327	68	3892
Background + Project	73	331	57	789	1305	75	514	0	0	46	1363	85	4638
Pending Project Trips													
Harbor View	1	19	3	3	39	50	91	0	0	1	149	0	356
Cumulative Growth	3	10	4	31	55	4	28	0	0	0	72	4	211
Cumulative w/o Project	77	358	64	813	1399	129	633	0	0	47	1584	89	5193
Cumulative w/ Project	77	360	64	823	1399	129	633	0	0	47	1584	89	_ 5205

Traffix Node Number: Intersection Name:

Industrial Way/Winsle& Whipple Ave

Peak Hour: Count Date: Scenario: AM

05/02/17 SMC Government Center

RC Growth Factor:

Future Growth % Per Year 1.060

Number of Years								Nun	nber of '	Years to E	Buildout	5	5
						Move	ements						
	North /	Approa	ch	East A	pproac	h	South	Approa	ch	West	Approac	h	_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Eviatia a Canditiana	73	404	207	457	782	116	00	110	40		919	85	عمور
Existing Conditions	73	124	207	457	782	116	98	119	18	8	919	85	3006
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	0	11	0	1	5	0	2	6	0	2	66	2	95
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	0	0	0	0	0	0	0	0	0	0	0	0
Kaiser Phase II	0	0	0	0	5	0	0	0	0	0	12	0	17
Total Approved Trips	0	11	0	1	10	0	2	6	0	2	78	2	112
Background Conditions	73	135	207	458	792	116	100	125	18	10	997	87	3118
Project Trips													
Project Trips	0	2	2	0	1	0	0	0	2	9	16	0	32
Net Project Trips	0	2	2	0	1	0	0	0	2	9	16	0	32
Existing + Project	73	126	209	457	783	116	98	119	20	17	935	85	3038
Background + Project	73	137	209	458	793	116	100	125	20	19	1013	87	3150
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	4	7	11	25	42	6	5	6	1	0	50	5	162
Cumulative w/o Project	77	142	218	483	834	122	105	131	19	10	1047	92	3280
Cumulative w/ Project	77	144	220	483	835	122	105	131	21	19	1063	92	3312

Traffix Node Number: Intersection Name: 8

Winslow St & Brewster Ave

Peak Hour: Count Date: Scenario: AM 08/29/17

SMC Government Center

Future Growth % Per Year 1.060

RC Growth Factor:										owth % P		1.060)
Number of Years								Nun	nber of '	Years to E	Buildout	5)
						Move	ements						
	North .	Approa	ch	East A	pproac		South	Approa	ch	West	Approac	h	_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
													_
Existing Conditions	31	121	99	30	145	148	82	115	21	35	261	39	1127
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	1	12	0	0	11	52	6	4	1	4	42	5	138
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	0	0	0	0	0	0	0	0	0	0	0	0
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	1	12	0	0	11	52	6	4	1	4	42	5	138
Background Conditions	32	133	99	30	156	200	88	119	22	39	303	44	1265
Project Trips													
Project Trips	0	11	0	0	0	53	6	3	3	28	1	0	105
Net Project Trips	0	11	0	0	0	53	6	3	3	28	1	0	105
Existing + Project	31	132	99	30	145	201	88	118	24	63	262	39	1232
Background + Project	32	144	99	30	156	253	94	122	25	67	304	44	1370
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	2	7	5	2	8	8	4	6	1	2	14	2	61
Cumulative w/o Project	34	140	104	32	164	208	92	125	23	41	317	46	1326
Cumulative w/ Project	34	151	104	32	164	261	98	128	26	69	318	46	- 1431
Cumulative w/ Project	34	151	104	32	164	261	98	128	26	69	318	46	1431

Traffix Node Number:

Intersection Name:

Cumulative w/ Project

Winslow St & Driveway

Peak Hour: AM Count Date: 08/29/17

Scenario: SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060 Number of Years Number of Years to Buildout Movements North Approach East Approach South Approach West Approach Scenario: RT TH LT RT TH LT RT ŤΗ LT RT TH LT Total **Existing Conditions** Approved Project Trips One Marina & Pete's Harbor 849 Veterans Blvd ----Downtown Precise Plan Stanford in RC 1629 Main Street Kaiser Phase II Total Approved Trips Background Conditions Project Trips **Project Trips** -128 Net Project Trips -128 -6 Existing + Project Background + Project Pending Project Trips Harbor View Cumulative Growth Cumulative w/o Project

Traffix Node Number: Intersection Name: 10

Driveway & Middlefield Rd

Peak Hour: Count Date: Scenario: AM

08/29/17 SMC Government Center

RC Growth Factor:										owth % P		1.060	
Number of Years								Nur	nber of '	Years to E	Buildout	5	
							ements						_
		Approa			pproac			Approa			Approac		_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	92	0	41	300	182	0	0	0	0	0	150	121	886
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	0	0	0	0	0	0	0	0	0	0	0	0	0
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	: 0	0	0	0	0	0	0	0	0	0	0	0	0
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Conditions	92	0	41	300	182	0	0	0	0	0	150	121	886
Project Trips													
Project Trips	5	0	10	155	-83	0	0	0	0	0	-2	67	152
Net Project Trips	5	0	10	155	-83	0	0	0	0	0	-2	67	152
Existing + Project	97	0	51	455	99	0	0	0	0	0	148	188	1038
				4	-4							2	_
Background + Project	97	0	51	455	99	0	0	0	0	0	148	188	1038
				4	-4							2	
Pending Project Trips Harbor View	, 0	0	0	0	0	0	0	0	0	0	0	0	0
riaiboi view	0	U	Ü	O	Ü	O	O	Ü	O	O	O	O	O
Cumulative Growth	5	0	2	16	10	0	0	0	0	0	8	7	48
Cumulative w/o Project	97	0	43	316	192	0	0	0	0	0	158	128	934
Cumulative w/ Project	102	0	53	471	109	0	0	0	0	0	156	195	1086
,				-	- 4							2	-

Traffix Node Number: Intersection Name: 11

Arguello St & Whipple Ave

Peak Hour: Count Date: Scenario: ΑM

08/29/17 SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

											1.000	
							Nun	nber of '	Years to B	Buildout	5)
					Mov	ements						_
			East A	pproac		South A						_
RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
		0.1	10	770	40	0.4			70	1000		٦
56	80	24	19	772	49	34	54	87	76	1026	83	2360
												0
												0
0	0	0	0	6	0	0	0	2	17	70	0	95
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	5	0	0	0	0	0	12	0	17
0	0	0	0	11	0	0	0	2	17	82	0	112
56	80	24	19	783	49	34	54	89	93	1108	83	2472
0	0	0	0	4	0	0	0	1	13	25	0	43
0	0	0	0	4	0	0	0	1	13	25	0	43
56	80	24	19	776	49	34	54	88	89	1051	83	2403
56	80	24	19	787	49	34	54	90	106	1133	83	
- 00	- 00		10	707	-10	04	0-1	30	100	1100	- 00	_ 2010
0	0	0	0	0	0	0	0	0	0	0	0	0
3	4	1	1	42	3	2	3	5	4	56	4	128
59	84	25	20	825	52	36	57	94	97	1164	87	2600
59	84	25	20	829	52	36	57	95	110	1189	87	2643
	56 0 0 0 0 0 0 56 56 56 56	RT TH 56 80 0 0 0 0 0 0 0 0 0 0 0 0 0	56 80 24 0 56 80 24 0 0 0 0 0 56 80 24 56 80 24 0 0 0 0 0 3 4 1 59 84 25	RT TH LT RT 56 80 24 19 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 56 80 24 19 56 80 24 19 56 80 24 19 0 0 0 0 3 4 1 1 59 84 25 20	RT TH LT RT TH 56 80 24 19 772 0 0 0 0 6 0 0 0 0 0 0 0 11 0 0 0 0 0 11 0 0 0 0 0 0 11 0	North Approach RT TH LT RT TH LT	RT TH LT RT TH LT RT 56 80 24 19 772 49 34 0 0 0 0 6 0 0 0 0 <td< td=""><td> North Approach East Approach South Approach East Approach RT TH LT LT RT TH LT LT RT TH TH LT RT TH LT TH TH</td><td> North Approach East Approach South Approach RT TH LT TH TH</td><td> North Approach East Approach South Approach RT TH LT TR TH LT RT TH LT TH TH</td><td> North Approach RT TH LT TH LT TH LT TH LT RT TH LT TH TH</td><td> North Approach East Approach South Approach West Approach The transformation The</td></td<>	North Approach East Approach South Approach East Approach RT TH LT LT RT TH LT LT RT TH TH LT RT TH LT TH TH	North Approach East Approach South Approach RT TH LT TH TH	North Approach East Approach South Approach RT TH LT TR TH LT RT TH LT TH TH	North Approach RT TH LT TH LT TH LT TH LT RT TH LT TH TH	North Approach East Approach South Approach West Approach The transformation The

12

Traffix Node Number: Intersection Name: Middlefield Rd

& Jefferson Ave

Peak Hour: Count Date: Scenario:

AM

08/24/16 SMC Government Center

RC Growth Factor:

Future Growth % Per Year 1.060

Num	her	of \	/ears	to	Build	dout	

Number of Years								Nun	nber of \	Years to B	uildout	6	
							ements						_
		Approac			pproac			Approa			Approac		_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	40	82	20	19	305	28	39	82	326	320	489	116	1866
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	3	15	0	0	21	3	1	42	2	79	61	8	235
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	0	0	0	0	0	0	0	0	0	0	0	0
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	3	15	0	0	21	3	1	42	2	79	61	8	235
Background Conditions	43	97	20	19	326	31	40	124	328	399	550	124	2101
Project Trips													
Project Trips	1	1	0	0	1	0	2	4	0	0	2	2	13
Net Project Trips	1	1	0	0	1	0	2	4	0	0	2	2	13
Existing + Project	41	83	20	19	306	28	41	86	326	320	491	118	1879
Background + Project	44	98	20	19	327	31	42	128	328	399	552	126	2114
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	3	5	1	1	20	2	3	5	21	21	32	8	122
Cumulative w/o Project	46	102	21	20	346	33	43	129	349	420	582	132	2223
Cumulative w/ Project	47	103	21	20	347	33	45	133	349	420	584	134	2236

Traffix Node Number: Intersection Name:

13 Middlefield Rd & Main St

Peak Hour: Count Date: Scenario: AM

03/22/16 SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Nun	nber of '	Years to E	uildout	6	ì
						Mov	ements						_
		Approac			pproac		South	Approa		West	Approac		_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	26	320	24	73	149	29	19	289	17	68	305	57	1376
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	16	74	7	5	10	3	21	32	0	0	74	8	250
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	0	0	0	5	0	0	0	0	0	0	0	5
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	16	74	7	5	15	3	21	32	0	0	74	8	255
Background Conditions	42	394	31	78	164	32	40	321	17	68	379	65	1631
Project Trips													
Project Trips	0	0	0	0	0	0	8	4	0	0	11	2	25
Net Project Trips	0	0	0	0	0	0	8	4	0	0	11	2	25
Existing + Project	26	320	24	73	149	29	27	293	17	68	316	59	1401
Background + Project	42	394	31	78	164	32	48	325	17	68	390	67	1656
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	2	21	2	5	10	2	1	19	1	4	20	4	91
Cumulative w/o Project	44	415	33	83	174	34	41	340	18	72	399	69	1722
Cumulative w/ Project	44	415	33	83	174	34	49	344	18	72	410	71	1747

14

Traffix Node Number: Intersection Name:

14 El Camino Real

& Whipple Ave

Peak Hour: Count Date: Scenario:

AM

05/24/16 SMC Government Center

RC Growth Factor:

Future Growth % Per Year 1.060

Number of Years								Nun	nber of '	Years to B	uildout	6	
_	Movements												
	North Approach			East A	East Approach			South Approach			West Approach		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	69	977	290	261	277	283	454	866	43	27	379	94	4020
													-
Approved Project Trips													_
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	0	32	15	2	1	6	67	37	9	7	4	0	180
Stanford in RC	-2	25	0	-1	-8	-1	0	0	0	0	0	0	13
1629 Main Street	0	3	0	0	0	0	0	1	0	1	0	0	5
Kaiser Phase II	0	0	6	0	2	3	0	0	0	0	6	0	17
Total Approved Trips	-2	60	21	1	-5	8	67	38	9	8	10	0	215
Background Conditions	67	1037	311	262	272	291	521	904	52	35	389	94	4235
Project Trips													
Project Trips	0	8	19	2	3	0	0	1	2	20	20	0	75
Net Project Trips	0	8	19	2	3	0	0	1	2	20	20	0	75
Existing + Project	69	985	309	263	280	283	454	867	45	47	399	94	4095
Background + Project	67	1045	330	264	275	291	521	905	54	55	409	94	- 4310
Background + Project	07	1043	330	204	2/3	291	321	903	34	33	409	94	4310
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	5	64	19	17	18	18	30	57	3	2	25	6	264
Cumulative w/o Project	72	1101	330	279	290	309	551	961	55	37	414	100	4499
Cumulative w/ Project	72	1109	349	281	293	309	551	962	57	57	434	100	4574

Traffix Node Number: Intersection Name:

15 El Camino Real & Jefferson Ave

Peak Hour: Count Date: Scenario: AM

03/22/16 SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Nur	nber of \	Years to B	uildout	6	ı
-	Movements												
	North Approach			East Approach			South Approach			West Approach			_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	95	1054	185	181	317	74	64	893	222	264	708	269	4326
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													Ō
Downtown Precise Plan	8	23	25	18	12	11	103	99	14	0	32	8	353
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	5	0	0	0	0	0	1	0	2	0	0	8
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	8	28	25	18	12	11	103	100	14	2	32	8	361
Background Conditions	103	1082	210	199	329	85	167	993	236	266	740	277	4687
Project Trips													
Project Trips	0	0	0	0	0	2	1	0	0	0	2	0	5
Net Project Trips	0	0	0	0	0	2	1	0	0	0	2	0	5
Existing + Project	95	1054	185	181	317	76	65	893	222	264	710	269	4331
Background + Project	103	1082	210	199	329	87	168	993	236	266	742	277	4692
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	6	69	12	12	21	5	4	58	14	17	46	18	282
Cumulative w/o Project	109	1151	222	211	350	90	171	1051	250	283	786	295	4969
Cumulative w/ Project	109	1151	222	211	350	92	172	1051	250	283	788	295	4974

Intersection Number: Traffix Node Number: Intersection Name: 16

Main St & Woodside Rd WB Ramps AM

Peak Hour: Count Date: Scenario: 03/22/17

SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

NG GIOWIII FACIOI.										OWIII 70 FE		1.000	
Number of Years								Nun	iber of	Years to B	uildout	Ę)
							ements						_
		Approa		East A	pproac		South	Approa		West A			_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Friedra - Ocas ditions	7	40	440	404	455		4.40	000					٦ ,,,,
Existing Conditions		12	118	164	155	4	143	360	2	0	0	0	965
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	0	0	25	0	26	0	0	82	0	0	0	0	133
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	15	0	0	0	9	2	3	0	0	0	0	29
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	15	25	0	26	9	2	85	0	0	0	0	162
Background Conditions	7	27	143	164	181	13	145	445	2	0	0	0	1127
Project Trips													
Project Trips	0	0	1	0	0	0	0	12	0	0	0	0	13
Net Project Trips	0	0	1	0	0	0	0	12	0	0	0	0	13
Existing + Project	7	12	119	164	155	4	143	372	2	0	0	0	978
3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3, 3													_
Background + Project	7	27	144	164	181	13	145	457	2	0	0	0	1140
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	0	1	6	9	8	0	8	19	0	0	0	0	51
Cumulative w/o Project	7	28	149	173	189	13	153	464	2	0	0	0	1178
Cumulative w/ Project	7	28	150	173	189	13	153	476	2	0	0	0	_ 1191
Cumulative w/ FT0Ject		20	130	173	109	13	100	470		0	U	U	_ 1191

17

Traffix Node Number: Intersection Name: El Camino Real

& Woodside Rd EB Ramps

Peak Hour: Count Date: Scenario:

AM

03/22/17 SMC Government Center

RC Growth Factor:

Future Growth % Per Year 1.060

Number of Years								Num	ber of	Years to B	uildout	5)
						Mov	ements						_
		Approac		East A			South	Approac		West A			_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Eviation Conditions	0	2388		254	0	0	255	1244	0	0	0	0	7 4141
Existing Conditions	U	2388	0	254	U	0	255	1244	U	U	U	0	4141
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	0	43	0	50	0	0	0	52	0	0	0	0	145
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	1	0	3	0	0	0	5	0	0	0	0	9
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	44	0	53	0	0	0	57	0	0	0	0	154
Background Conditions	0	2432	0	307	0	0	255	1301	0	0	0	0	429
Project Trips													
Project Trips Project Trips	0	0	0	8	0	0	0	4	0	0	0	0	12
Net Project Trips	0	0	0	8	0	0	0	4	0	0	0	0	12
Existing + Project	0	2388	0	262	0	0	255	1248	0	0	0	0	4153
Background + Project	0	2432	0	315	0	0	255	1305	0	0	0	0	430
Danding Draiget Tring													
Pending Project Trips Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	0	129	0	14	0	0	14	67	0	0	0	0	224
Cumulative Wo Project	0	2561	0	321	0	0	269	1368	0	0	0	0	4519
				02.									
Cumulative w/ Project	0	2561	0	329	0	0	269	1372	0	0	0	0	4531

18

Traffix Node Number: Intersection Name: 18 El Camino Real

& Brewster Ave

Peak Hour: Count Date: Scenario:

AM

05/24/16 SMC Government Center

RC Growth Factor:

Future Growth % Per Year 1.060

Number of Years								Num	ber of '	Years to B	uildout	6	ì
						Move	ements						
		Approac		East A				Approac		West /	Approac		_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	99	1186	73	147	296	112	94	1335	0	26	150	48	356
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	0	35	10	10	8	29	10	103	0	6	17	0	228
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	4	0	0	0	0	0	1	0	0	0	0	5
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	39	10	10	8	29	10	104	0	6	17	0	233
Background Conditions	99	1225	83	157	304	141	104	1439	0	32	167	48	3799
Project Trips													
Project Trips	0	15	13	2	0	0	0	1	0	0	2	0	33
Net Project Trips	0	15	13	2	0	0	0	1	0	0	2	0	33
Existing + Project	99	1201	86	149	296	112	94	1336	0	26	152	48	3599
Background + Project	99	1240	96	159	304	141	104	1440	0	32	169	48	3832
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	6	77	5	10	19	7	6	87	0	2	10	3	232
Cumulative w/o Project	105	1302	88	167	323	148	110	1526	0	34	177	51	4031
Cumulative w/ Project	105	1317	101	169	323	148	110	1527	0	34	179	51	4064

Traffix Node Number: Intersection Name: 19

Marshall St & Jefferson Ave

Peak Hour: Count Date: Scenario: AM 11/02/17

SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

Number of Years										Years to B		5	
rtamber er reare						Mov	ements						
	North	Approac	ch	East A	pproac			Approa	ch	West	Approac	:h	-
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	28	280	31	19	225	34	52	223	49	45	306	41	1333
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	7	17	4	28	24	5	7	134	17	4	9	16	272
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	0	0	0	0	0	0	0	0	0	0	0	0
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	7	17	4	28	24	5	7	134	17	4	9	16	272
Background Conditions	35	297	35	47	249	39	59	357	66	49	315	57	1605
Project Trips													
Project Trips	0	0	0	0	1	0	0	0	0	0	1	2	4
Net Project Trips	0	0	0	0	1	0	0	0	0	0	1	2	4
Existing + Project	28	280	31	19	226	34	52	223	49	45	307	43	1337
Background + Project	35	297	35	47	250	39	59	357	66	49	316	59	- 1609
Background + Project	33	291	33	47	250	39	59	331	00	49	310	59	_ 1609
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	2	15	2	1	12	2	3	12	3	2	17	2	73
Cumulative w/o Project	37	312	37	48	261	41	62	369	69	51	332	59	1678
Cumulative w/ Project	37	312	37	48	262	41	62	369	69	51	333	61	1682

1

Traffix Node Number: Intersection Name: Veterans Blvd

& Whipple Ave

Peak Hour: Count Date: Scenario:

PM

04/25/17 SMC Government Center

RC Growth Factor:

Future Growth % Per Year 1.060

Number of Years								Nur	mber of \	Years to B	uildout	5	
						Move	ements						
	North.	Approac	h	East A	pproach	1	South A	Approa	ıch	West A	Approac	:h	_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
	004	0.1.1		40	1010	450	070	0.1	400	440	050	47	7 4740
Existing Conditions	391	944	86	13	1042	158	876	21	402	113	650	17	4713
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd	0	2	0	0	0	0	-2	0	-1	1	0	0	0
Downtown Precise Plan	21	59	0	0	0	21	82	0	1	4	48	0	236
Stanford in RC	0	-3	0	0	0	0	2	13	74	9	-1	0	94
1629 Main Street	0	1	0	0	0	0	0	0	0	0	0	0	1
Kaiser Phase II	0	53	0	0	0	7	54	0	6	11	0	0	131
Total Approved Trips	21	112	0	0	0	28	136	13	80	25	47	0	462
Background Conditions	412	1056	86	13	1042	186	1012	34	482	138	697	17	5175
Droinet Trine													
Project Trips Project Trips	0	46	0	0	0	6	77	0	13	10	0	0	152
Net Project Trips	0	46	0	0	0	6	77	0	13	10	0	0	152
Net Project Trips	U	40	U	U	U	O	77	U	13	10	U	U	152
Existing + Project	391	990	86	13	1042	164	953	21	415	123	650	17	4865
Background + Project	412	1102	86	13	1042	192	1089	34	495	148	697	17	5327
													_
Pending Project Trips													
Harbor View	0	52	66	0	6	0	9	0	23	7	10	0	173
Cumulative Growth	21	51	5	1	56	9	47	1	22	6	35	1	255
Cumulative w/o Condition	433	1159	157	14	1104	195	1068	35	527	151	742	18	5603
Cumulative w/ Project	433	1205	157	14	1104	201	1145	35	540	161	742	18	_ 5755
Oumulative W/ FTOJECL	400	1200	101	14	1104	201	1143	55	J 4 0	101	144	10	_ 5/35

Traffix Node Number: Intersection Name: 2

Veterans Blvd & Brewster Ave

Peak Hour: Count Date: Scenario: PM05/24/16

SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Nun	nber of \	ears to B	uildout	6	
						Move	ements						
	North	Approac	ch	East A	pproac	h	South	Approa	ch	West A	Approa	ch	
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	194	961	39	116	75	53	31	990	119	95	42	153	2868
A													-
Approved Project Trips One Marina & Pete's Harbor													0
													0
849 Veterans Blvd		1	1	-2	0	0	0	-1 50	-1	7	0	0	-1
Downtown Precise Plan		41	0	0	0	0	0	50	10	29	0	32	205
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street		1	0	0	0	0	0	0	0	0	0	0	1
Kaiser Phase II		71	0	0	0	0	0	60	0	0	0	0	131
Total Approved Trips	43	114	1	-2	0	0	0	109	9	30	0	32	336
Background Conditions	237	1075	40	114	75	53	31	1099	128	125	42	185	3204
Project Trips													
Project Trips	26	36	0	0	0	0	0	51	4	9	0	39	165
Net Project Trips	26	36	0	0	0	0	0	51	4	9	0	39	165
Existing + Project	220	997	39	116	75	53	31	1041	123	104	42	192	3033
Background + Project	263	1111	40	114	75	53	31	1150	132	134	42	224	3369
Dackground + 1 Toject	200	1111	70	117	73	- 55	- 01	1130	102	104	72	227	_ 5508
Pending Project Trips													
Harbor View	0	59	0	0	0	0	0	32	0	0	0	0	91
Cumulative Growth	13	63	3	8	5	3	2	65	8	6	3	10	189
Cumulative w/o Condition	250	1197	43	122	80	56	33	1196	136	131	45	195	3484
Cumulative w/ Proiect	276	1233	43	122	80	56	33	1247	140	140	45	234	3649

3

Traffix Node Number: Intersection Name: 3

tersection Name: Veterans Blvd

& Middlefield Rd

Peak Hour: Count Date: Scenario:

PM 08/28/17

SMC Government Center

RC Growth Factor:

Future Growth % Per Year 1.060

Date of Analysis: N/A

Number of Years to Buildout

Number of Years								Nun	ber of \	Years to B	uildout	5	
							ements						_
		Approac		East A				Approa		West A			_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	107	865	0	0	0	0	0	845	46	63	0	174	2100
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd	0	2	0	0	0	0	0	-2	0	0	0	0	0
Downtown Precise Plan	0	70	0	0	0	0	0	60	0	0	0	0	130
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	1	0	0	0	0	0	0	0	0	0	0	1
Kaiser Phase II	0	71	0	0	0	0	0	60	0	0	0	0	131
Total Approved Trips	0	144	0	0	0	0	0	118	0	0	0	0	262
Background Conditions	107	1009	0	0	0	0	0	963	46	63	0	174	2362
Project Trips													
Project Trips	37	8	0	0	0	0	0	3	3	8	0	52	111
Net Project Trips	37	8	0	0	0	0	0	3	3	8	0	52	111
Existing + Project	144	873	0	0	0	0	0	848	49	71	0	226	2211
Background + Project	144	1017	0	0	0	0	0	966	49	71	0	226	2473
Pending Project Trips													
Harbor View	0	59	0	0	0	0	0	32	0	0	0	0	91
Cumulative Growth	6	47	0	0	0	0	0	46	2	3	0	9	113
Cumulative w/o Condition	113	1115	0	0	0	0	0	1041	48	66	0	183	2566
Cumulative w/ Project	150	1123	0	0	0	0	0	1044	51	74	0	235	2677

Traffix Node Number: Intersection Name:

4

Veterans Blvd & Jefferson Ave

Peak Hour: Count Date: Scenario: PM

04/12/16 SMC Government Center

RC Growth Factor:

Future Growth % Per Year 1.060

Number of Years								Nun	nber of \	ears to B	uildout	6	
						Mov	ements						
•	North /	Approac	h	East A	pproac	h	South	Approa	ch	West A	pproa	ch	_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	207	712	0	2	0	1	12	765	114	92	0	181	2086
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd	0	0	2	-2	0	0	3	0	0	0	1	0	4
Downtown Precise Plan	41	29	0	0	0	0	0	10	12	3	0	50	145
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	1	0	0	0	0	0	0	0	0	0	0	1
Kaiser Phase II	0	71	0	0	0	0	0	60	0	0	0	0	131
Total Approved Trips	41	101	2	-2	0	0	3	70	12	3	1	50	281
Background Conditions	248	813	2	0	0	1	15	835	126	95	1	231	2367
Project Trips													
Project Trips	0	16	0	0	0	0	0	7	0	0	0	0	23
Net Project Trips	0	16	0	0	0	0	0	7	0	0	0	0	23
Existing + Project	207	728	0	2	0	1	12	772	114	92	0	181	2109
Background + Project	248	829	2	0	0	1	15	842	126	95	1	231	2390
Pending Project Trips													
Harbor View	0	59	0	0	0	0	0	32	0	0	0	0	91
Cumulative Growth	14	47	0	0	0	0	1	50	7	6	0	12	137
Cumulative w/o Condition	262	919	2	0	0	1	16	917	133	101	1	243	2595
Cumulative w/ Project	262	935	2	0	0	1	16	924	133	101	1	243	2618

Traffix Node Number: Intersection Name: 5

Veterans Blvd & Maple St

PM

Peak Hour: Count Date: Scenario: 05/10/16 SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Nun	nber of \	Years to B	uildout	6	
						Move	ements						
	North /	Approa	ch	East A	pproac		South	Approa	ch	West A	pproac	h	
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	94	515	137	182	211	52	47	495	78	30	72	72	1985
Existing Conditions	J-T	010	101	102	211	02	71	700	, 0	- 00	12	- 12] 1000
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	0	24	27	15	0	0	0	13	0	0	0	0	79
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	0	0	0	0	0	0	0	0	0	0	0	0
Kaiser Phase II	58	13	0	0	0	0	0	0	110	82	0	60	323
Total Approved Trips	58	37	27	15	0	0	0	13	110	82	0	60	402
Background Conditions	152	552	164	197	211	52	47	508	188	112	72	132	2387
Project Trips													
Project Trips	0	16	0	0	0	0	0	7	0	0	0	0	23
Net Project Trips	0	16	0	0	0	0	0	7	0	0	0	0	23
Existing + Project	94	531	137	182	211	52	47	502	78	30	72	72	2008
Background + Project	152	568	164	197	211	52	47	515	188	112	72	132	_ 2410
- Lackground - Froject								0.0	.00				
Pending Project Trips													
Harbor View	0	1	58	53	197	88	18	3	0	0	58	0	476
Cumulative Growth	6	34	9	12	14	3	3	32	5	2	5	5	130
Cumulative w/o Condition	158	587	231	262	422	143	68	543	193	114	135	137	2993
Cumulative w/ Project	158	603	231	262	422	143	68	550	193	114	135	137	3016

6

Traffix Node Number: Intersection Name:

Veterans Blvd & Woodside Rd

Peak Hour: Count Date: Scenario: PM04/20/17

SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Nur	nber of \	Years to E	uildout	5	
<u>-</u>							ements						_
		Approac			pproach		South A				Approac		_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	56	306	32	439	1043	409	186	0	0	0	976	95	3542
Existing Conditions	30	300	J2	700	1043	703	100	- 0			310	33	0042
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	5	19	0	25	77	0	0	0	0	98	8	1	233
Stanford in RC	-11	-124	-11	-177	61	-91	0	0	0	0	47	183	-123
1629 Main Street	0	0	0	0	2	0	0	0	0	7	6	0	15
Kaiser Phase II	0	95	0	110	0	0	0	0	0	0	0	0	205
Total Approved Trips	-6	-10	-11	-42	140	-91	0	0	0	105	61	184	330
Background Conditions	50	296	21	397	1183	318	186	0	0	105	1037	279	3872
Project Trips													
Project Trips	0	15	0	6	0	0	0	0	0	0	0	0	21
Net Project Trips	0	15	0	6	0	0	0	0	0	0	0	0	21
Existing + Project	56	321	32	445	1043	409	186	0	0	0	976	95	3563
Background + Project	50	311	21	403	1183	318	186	0	0	105	1037	279	3893
													='
Pending Project Trips Harbor View	3	84	1	15	167	207	48	0	0	0	60	4	589
Cumulative Growth	3	17	2	24	56	22	10	0	0	0	53	5	192
Cumulative w/o Condition	56	397	24	436	1406	547	244	0	0	105	1150	288	4653
Cumulative w/ Project	56	412	24	442	1406	547	244	0	0	105	1150	288	4674

Traffix Node Number: Intersection Name:

Industrial Way/Winsl & Whipple Ave

Peak Hour: Count Date: Scenario: PM

05/02/17 SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Nun	nber of `	Years to B	uildout	5	
							ements						_
		Approa			pproach			Approa			Approac		_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	102	211	211	872	1093	73	74	330	29	11	457	103	3566
Existing Conditions	102			012	1000			000			101	100	_ 0000
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	1	8	1	1	21	0	13	12	2	0	38	1	98
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	0	0	0	0	0	0	0	0	0	0	0	0
Kaiser Phase II	0	0	0	0	6	0	0	0	0	0	11	0	17
Total Approved Trips	1	8	1	1	27	0	13	12	2	0	49	1	115
Background Conditions	103	219	212	873	1120	73	87	342	31	11	506	104	3681
Project Trips													
Project Trips	0	1	1	2	11	0	0	2	19	5	9	0	50
Net Project Trips	0	1	1	2	11	0	0	2	19	5	9	0	50
Existing + Project	102	212	212	874	1104	73	74	332	48	16	466	103	3616
Background + Project	103	220	213	875	1131	73	87	344	50	16	515	104	3731
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	6	11	11	47	59	4	4	18	2	1	25	6	194
Cumulative w/o Condition	109	230	223	920	1179	77	91	360	33	12	531	110	3875
Cumulative w/ Project	109	231	224	922	1190	77	91	362	52	17	540	110	3925

Traffix Node Number: Intersection Name: 8

Winslow St & Brewster Ave

PM08/29/17

SMC Government Center

Peak Hour:
Count Date:
Scenario:
RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Nun	nber of '	Years to B	uildout	5	į
							ements						
		Approac			pproacl			Approa			Approac		_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Friedland Constitutions	48	4.40			000	407	00	007	00	18	407	4.4	٦ ، ، ٥ ،
Existing Conditions	48	148	51	93	328	127	60	307	63	18	137	44	1424
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	5	4	0	0	41	11	40	24	3	1	22	3	154
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	0	0	0	0	0	0	0	0	0	0	0	0
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	5	4	0	0	41	11	40	24	3	1	22	3	154
Background Conditions	53	152	51	93	369	138	100	331	66	19	159	47	1578
Project Trips													
Project Trips	0	6	0	0	1	30	47	21	21	15	0	0	141
Net Project Trips	0	6	0	0	1	30	47	21	21	15	0	0	141
Existing + Project	48	154	51	93	329	157	107	328	84	33	137	44	1565
Background + Project	53	158	51	93	370	168	147	352	87	34	159	47	1719
, , , , , , , , , , , , , , , , , , ,													-
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	3	8	3	5	18	7	3	17	3	1	7	2	77
Cumulative w/o Condition	56	160	54	98	387	145	103	348	69	20	166	49	1655
Cumulative w/ Project	56	166	54	98	388	175	150	369	90	35	166	49	_ 1796

Traffix Node Number: Intersection Name: 9

Winslow St & Driveway PM

Peak Hour: Count Date: Scenario: 08/29/17

SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Nun	ber of	Years to B	uildout	5	;)
						Mov	ements						
	North .	Approad	ch	East A	pproac	h	South	Approa	ch	West A	Approad	ch	_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	0	277	12	126	0	27	17	300	0	0	0	0	759
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan		16	0	0	0	0	0	67	0	0	0	0	83
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	-	0	0	0	0	0	0	0	0	0	0	0	0
Kaiser Phase II		0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	16	0	0	0	0	0	67	0	0	0	0	83
Background Conditions	0	293	12	126	0	27	17	367	0	0	0	0	842
Project Trips													
Project Trips	0	-13	64	195	0	32	8	-106	0	0	0	0	180
Net Project Trips	0	-13	64	195	0	32	8	-106	0	0	0	0	180
Existing + Project	0	264	76	321	0	59	25	194	0	0	0	0	939
				5		1	1	-5					_
Background + Project	0	280	76	321	0	59	25	261	0	0	0	0	1022
				5		1	1	-5					
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	0	15	1	7	0	1	1	16	0	0	0	0	41
Cumulative w/o Condition	0	308	13	133	0	28	18	383	0	0	0	0	_ 883
Cumulative w/ Project	0	295	77	328	0	60	26	277	0	0	0	0	1063
<u>.</u>				5		1	4	5					

Traffix Node Number: Intersection Name: Driveway & Middlefield Rd

Peak Hour: Count Date: Scenario: PM

08/29/17 SMC Government Center

RC Growth Factor:										owth % Po		1.060)
Number of Years								Nur	nber of '	Years to E	Buildout	5)
						Mov	ements						
	North A	Approa	ch		pproacl	า		Approa	ich		Approad	ch	
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
													_
Existing Conditions	108	0	164	24	120	0	0	0	0	0	87	13	516
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	0	0	0	0	0	0	0	0	0	0	0	0	0
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	0	0	0	0	0	0	0	0	0	0	0	0
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	0	0	0	0	0	0	0	0	0	0	0	0
Background Conditions	108	0	164	24	120	0	0	0	0	0	87	13	516
Project Trips													
Project Trips	57	0	107	47	-7	0	0	0	0	0	-47	21	178
Net Project Trips	57	0	107	47	-7	0	0	0	0	0	-47	21	178
Existing + Project	165	0	271	71	113	0	0	0	0	0	40	34	- 694
	3		1								-1		
Background + Project	165	0	271	71	113	0	0	0	0	0	40	34	694
	3		1								-1		_
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	6	0	9	1	6	0	0	0	0	0	5	1	28
Cumulative w/o Condition	114	0	173	25	126	0	0	0	0	0	92	14	544
Cumulative w/ Project	171	0	280	72	119	0	0	0	0	0	45	35	- 722
-	2		4								4		-

11

Traffix Node Number: Intersection Name:

Arguello St РM

& Whipple Ave

Peak Hour: Count Date: Scenario:

08/29/17 SMC Government Center

RC Growth Factor:

Future Growth % Per Year 1.060

Number of Years								Nur	nber of \	ears to B	Buildout	5)
						Mov	ements						_
		Approac			Approach			Approa			Approac		_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	37	80	20	14	984	27	48	96	121	63	559	72	2121
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	0	0	0	0	24	0	0	0	15	4	39	0	82
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	0	0	0	0	0	0	0	0	0	0	0	0
Kaiser Phase II	0	0	0	0	6	0	0	0	0	0	11	0	17
Total Approved Trips	0	0	0	0	30	0	0	0	15	4	50	0	99
Background Conditions	37	80	20	14	1014	27	48	96	136	67	609	72	2220
Project Trips													
Project Trips	0	0	0	0	29	0	0	0	8	7	14	0	58
Net Project Trips	0	0	0	0	29	0	0	0	8	7	14	0	58
Existing + Project	37	80	20	14	1013	27	48	96	129	70	573	72	2179
Background + Project	37	80	20	14	1043	27	48	96	144	74	623	72	2278
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	2	4	1	1	53	1	3	5	7	3	30	4	114
Cumulative w/o Condition	39	84	21	15	1067	28	51	101	143	70	639	76	_ 2334
Cumulative w/ Project	39	84	21	15	1096	28	51	101	151	77	653	76	2392

Traffix Node Number: Intersection Name: 12

Middlefield Rd & Jefferson Ave

PM

Peak Hour: Count Date: Scenario: 08/24/16 SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Nun	nber of Y	ears to B	uildout	6	;
_						Move	ements						
· ·	North A	Approac	h	East A	pproach	n	South	Approa	ch	West A	Approac	h	_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	167	104	29	16	473	62	47	94	324	259	289	59	1923
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	17	55	0	0	85	2	3	19	9	42	34	2	268
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	0	0	0	0	0	0	0	0	0	0	0	0
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	17	55	0	0	85	2	3	19	9	42	34	2	268
Background Conditions	184	159	29	16	558	64	50	113	333	301	323	61	2191
Project Trips													
Project Trips	9	6	0	0	6	2	1	2	0	0	11	_1_	28
Net Project Trips	9	6	0	0	6	2	1	2	0	0	1	1	28
Existing + Project	176	110	29	16	479	64	48	96	324	259	290	60	1951
Background + Project	193	165	29	16	564	66	51	115	333	301	324	62	2219
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	11	7	2	1	31	4	3	6	21	17	19	4	126
Cumulative w/o Condition	195	166	31	17	589	68	53	119	354	318	342	65	_ 2317
Cumulative w/ Project	204	172	31	17	595	70	54	121	354	318	343	66	2345

Traffix Node Number: Intersection Name:

13 Middlefield Rd & Main St

Peak Hour: Count Date: Scenario: PM

03/22/16 SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Nun	nber of	Years to B	uildout	6	j
							ements						_
		Approac			pproach			Approa			Approac		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	49	218	48	103	288	32	31	305	28	26	233	95	1456
Existing Conditions	49	210	40	103	200	32	31	305	20	20	233	90	1450
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	17	58	25	5	40	20	5	23	0	0	18	2	213
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	. 0	0	0	0	1	0	0	0	0	0	0	0	1
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	17	58	25	5	41	20	5	23	0	0	18	2	214
Background Conditions	66	276	73	108	329	52	36	328	28	26	251	97	1670
Project Trips													
Project Trips	4	4	0	0	4	0	5	2	0	0	6	_1_	26
Net Project Trips	4	4	0	0	4	0	5	2	0	0	6	1	26
Existing + Project	53	222	48	103	292	32	36	307	28	26	239	96	1482
Background + Project	70	280	73	108	333	52	41	330	28	26	257	98	1696
D 11 D 1 (T)													_
Pending Project Trips	0	0	0	0	0	0	0	0	0	0	0	•	•
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	3	14	3	7	19	2	2	20	2	2	15	6	95
Cumulative w/o Condition	69	290	76	115	348	54	38	348	30	28	266	103	1765
Cumulative w/ Project	73	294	76	115	352	54	43	350	30	28	272	104	_ 1791
													-

Traffix Node Number: Intersection Name:

14 El Camino Real & Whipple Ave

PM

05/24/16 SMC Government Center

Peak Hour:
Count Date:
Scenario:
RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Num	ber of	Years to E	Buildout	6	
						Move	ements						
	North.	Approac	ch	East A	pproac	h	South	Approac	ch	West	Approac	h	_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	107	999	226	454	428	350	259	1283	56	60	209	146	4577
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	0	38	5	13	4	22	36	42	10	9	1	0	180
Stanford in RC	0	0	14	11	0	0	0	0	0	-1	4	0	28
1629 Main Street	0	1	0	0	0	0	0	3	1	0	0	0	5
Kaiser Phase II	0	0	6	0	3	3	0	0	0	0	5	0	17
Total Approved Trips	0	39	25	24	7	25	36	45	11	8	10	0	230
Background Conditions	107	1038	251	478	435	375	295	1328	67	68	219	146	4807
Project Trips													
Project Trips	0	5	11	17	21	0	0	7	14	11	11	0	97
Net Project Trips	0	5	11	17	21	0	0	7	14	11	11	0	97
Existing + Project	107	1004	237	471	449	350	259	1290	70	71	220	146	4674
Background + Project	107	1043	262	495	456	375	295	1335	81	79	230	146	4904
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	7	65	15	30	28	23	17	84	4	4	14	10	301
Cumulative w/o Condition	114	1103	266	508	463	398	312	1412	71	72	233	156	5108
Cumulative w/ Project	114	1108	277	525	484	398	312	1419	85	83	244	156	5205

Traffix Node Number: Intersection Name:

15 El Camino Real & Jefferson Ave

Peak Hour: Count Date: Scenario: PM

03/22/16 SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Nun	nber of	Years to B	uildout	6	j
						Mov	ements						
		Approac		East A	pproacl			Approa	ch		Approac	ch	-
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
													_ ¬
Existing Conditions	200	980	200	183	654	189	90	1081	226	137	329	214	4483
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	10	21	66	19	31	44	61	70	7	0	29	8	366
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	. 0	1	0	0	0	0	0	5	2	0	0	0	8
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	10	22	66	19	31	44	61	75	9	0	29	8	374
Background Conditions	210	1002	266	202	685	233	151	1156	235	137	358	222	4857
<u> </u>													-
Project Trips	0	0	0	0	0	40		0	0	0		0	47
Project Trips		0	0	0	2	13	1	0	0	0	1	<u> </u>	_ 17
Net Project Trips	0	0	0	U	2	13	1	0	0	0	1	0	17
Existing + Project	200	980	200	183	656	202	91	1081	226	137	330	214	4500
Background + Project	210	1002	266	202	687	246	152	1156	235	137	359	222	- 4874
													-
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	13	64	13	12	43	12	6	71	15	9	21	14	293
Cumulative w/o Condition	223	1066	279	214	728	245	157	1227	250	146	379	236	5150
Cumulative w/ Project	223	1066	279	214	730	258	158	1227	250	146	380	236	_ 5167
Odifidiative W/ 1 Toject		1000			700	200	100	1221	200	170	000	200	_ 0107

Intersection Number: Traffix Node Number: Intersection Name: 16

Main St & Woodside Rd WB Ramps

Peak Hour: Count Date: Scenario: PM03/22/17

SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Nun	nber of '	Years to B	uildout	Ę	5
							ements						
	North /				pproach			Approa		West A			_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	15	29	264	166	132	16	240	372	8	0	0	0	1242
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	0	0	56	0	101	0	0	20	0	0	0	0	177
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	3	0	0	0	2	8	14	0	0	0	0	27
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	3	56	0	101	2	8	34	0	0	0	0	204
Background Conditions	15	32	320	166	233	18	248	406	8	0	0	0	1446
Project Trips													
Project Trips	0	0	7	0	0	0	0	7	0	0	0	0	14
Net Project Trips	0	0	7	0	0	0	0	7	0	0	0	0	14
Existing + Project	15	29	271	166	132	16	240	379	8	0	0	0	1256
Background + Project	15	32	327	166	233	18	248	413	8	0	0	0	1460
Pending Project Trips													į
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	1	2	14	9	7	1	13	20	0	0	0	0	67
Cumulative w/o Condition	16	34	334	175	240	19	261	426	8	0	0	0	1513
Cumulative w/ Project	16	34	341	175	240	19	261	433	8	0	0	0	_ _ 1527

17

Traffix Node Number: Intersection Name: El Camino Real

& Woodside Rd EB Ramps

Peak Hour: Count Date: Scenario:

PM03/22/17

SMC Government Center

2226 0

279

0

371 2072

RC Growth Factor:

Cumulative w/ Project

Future Growth % Per Year 1.060

Date of Analysis: N/A

Number of Years										Years to B		1.000	5
						Mov	ements						
	North	Approac	:h	East A	pproac			Approac	ch	West A	Approad	ch	_
Scenario:	RT	TH	LT	RT	TH	LT	RT	ŤΗ	LT	RT	TH	LT	Total
Existing Conditions	0	2044	0	211	0	0	352	1917	0	0	0	0	4524
Approved Project Trips													_
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan		62	0	51	0	0	0	48	0	0	0	0	161
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	5	0	1	0	0	0	1	0	0	0	0	7
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	67	0	52	0	0	0	49	0	0	0	0	168
Background Conditions	0	2111	0	263	0	0	352	1966	0	0	0	0	4692
Project Trips													
Project Trips	0	4	0	5	0	0	0	2	0	0	0	0	11
Net Project Trips	0	4	0	5	0	0	0	2	0	0	0	0	11
Existing + Project	0	2048	0	216	0	0	352	1919	0	0	0	0	_ 4535
Background + Project	0	2115	0	268	0	0	352	1968	0	0	0	0	- 4703
Background + Froject	0	2113	U	200	U	0	332	1900	U	0	U	U	_ 4/03
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	0	111	0	11	0	0	19	104	0	0	0	0	245
Cumulative w/o Condition	0	2222	0	274	0	0	371	2070	0	0	0	0	4937
													_

4948

Traffix Node Number: Intersection Name:

18 El Camino Real & Brewster Ave PM

Peak Hour: Count Date: Scenario: 05/24/16 SMC Government Center

RC Growth Factor: Future Growth % Per Year 1.060

Number of Years								Nun	nber of '	Years to E	uildout	6)
							ements						_
		Approac			pproach			Approa			Approac		_
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	112	1001	121	42	173	70	127	998	0	8	329	82	3063
											020] 0000
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	0	58	12	5	18	18	30	82	0	12	10	0	245
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	1	0	0	0	0	0	4	0	0	0	0	5
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	0	59	12	5	18	18	30	86	0	12	10	0	250
Background Conditions	112	1060	133	47	191	88	157	1084	0	20	339	82	3313
Project Trips													
Project Trips	0	8	7	12	2	0	0	9	0	0	1	0	39
Net Project Trips	0	8	7	12	2	0	0	9	0	0	1	0	39
Existing + Project	112	1009	128	54	175	70	127	1007	0	8	330	82	3102
Background + Project	112	1068	140	59	193	88	157	1093	0	20	340	82	3352
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	7	65	8	3	11	5	8	65	0	1	21	5	199
Cumulative w/o Condition	119	1125	141	50	202	93	165	1149	0	21	360	87	3512
Cumulative w/ Project	119	1133	148	62	204	93	165	1158	0	21	361	87	_ 3551

19

Traffix Node Number: Intersection Name:

19

Marshall St

& Jefferson Ave

PM

11/02/17 SMC Government Center

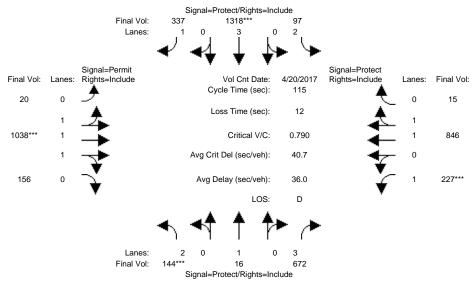
Peak Hour:
Count Date:
Scenario:
RC Growth Factor:

Future Growth % Per Year 1.060

Number of Years								Nun	nber of '	Years to E	Buildout	5	
							ements						_
		Approac			pproacl			Approa			Approac		
Scenario:	RT	TH	LT	RT	TH	LT	RT	TH	LT	RT	TH	LT	Total
Existing Conditions	40	319	20	18	271	36	63	496	76	36	192	35	1602
Approved Project Trips													
One Marina & Pete's Harbor													0
849 Veterans Blvd													0
Downtown Precise Plan	30	96	25	6	27	18	5	30	13	16	24	5	295
Stanford in RC	0	0	0	0	0	0	0	0	0	0	0	0	0
1629 Main Street	0	0	0	0	0	0	0	0	0	0	0	0	0
Kaiser Phase II	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Approved Trips	30	96	25	6	27	18	5	30	13	16	24	5	295
Background Conditions	70	415	45	24	298	54	68	526	89	52	216	40	1897
Project Trips													
Project Trips	2	0	0	0	5	0	0	0	0	0	1	1	9
Net Project Trips	2	0	0	0	5	0	0	0	0	0	1	1	9
Existing + Project	42	319	20	18	276	36	63	496	76	36	193	36	1611
Background + Project	72	415	45	24	303	54	68	526	89	52	217	41	1906
Pending Project Trips													
Harbor View	0	0	0	0	0	0	0	0	0	0	0	0	0
Cumulative Growth	2	17	1	1	15	2	3	27	4	2	10	2	86
Cumulative w/o Condition	72	432	46	25	313	56	71	553	93	54	226	42	1983
Cumulative w/ Project	74	432	46	25	318	56	71	553	93	54	227	43	_ 1992

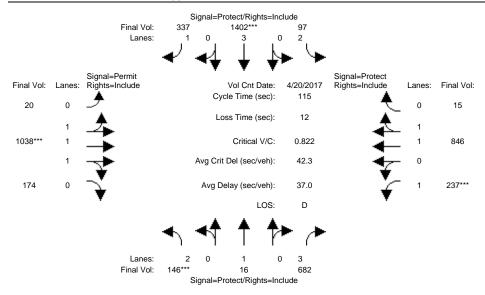
Appendix CLevel of Service Calculations

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



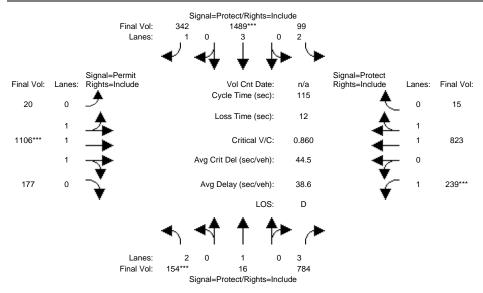
Street Name: Approach:	Mar	b. De	Vetera	ns Bl	.+b D.		П.	D-	Whipp	le Av	D-	
	NO.	r CII BO	una	501	JUII BU	- R	E c	ast bo	una	- W	est bo - T	
Movement:	ь .	– T.	- K	т.	- T	- R	Г.	- T	- R	т.		
			1.0		1.0	1.0	1.0	1.0	1.0			
Min. Green: Y+R:		10 4.0	4.0			10 4.0			4.0	7		
1+R•											4.0	4.0
Volume Module												
Base Vol:	143	16			1305	334		1028	154	225	838	15
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:			665		1305	334		1028	154	225	838	15
Added Vol:			0	0		224	20	0	124	0		0
PasserByVol:	0	0	0	0		0	0	0	0	0		0
Initial Fut:			665			334		1028		225		15
									154			
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			0.99		0.99	0.99		0.99	0.99		0.99	0.99
PHF Volume:			672		1318	337		1038	156	227	846	15
Reduct Vol:			0	0	0	0	0	0	0	0	0	0
Reduced Vol:			672		1318	337			156	227		15
		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:				. 97		337	. 20		156	227		15
Saturation F												
Sat/Lane:		1900	1900		1900			1900	1900		1900	1900
Adjustment:			0.73		0.88	0.83		0.78	0.78		0.91	0.91
		1.00	3.00		3.00	1.00			0.38	1.00	1.96	0.04
Final Sat.:					5037		74		571		3402	61
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	0.04	0.01	0.16	0.03	0.26	0.22	0.27	0.27	0.27	0.13	0.25	0.25
Crit Moves:	****				****			****		****		
Green/Cycle:	0.06	0.28	0.28	0.11	0.33	0.33	0.34	0.34	0.34	0.16	0.51	0.51
Volume/Cap:	0.70	0.03	0.57	0.27	0.80	0.65	0.80	0.80	0.80	0.80	0.49	0.49
Delay/Veh:	63.0	29.8	35.9	47.7	37.9	36.0	37.3	37.3	37.3	60.6	18.9	18.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	63.0	29.8	35.9	47.7	37.9	36.0	37.3	37.3	37.3	60.6	18.9	18.9
LOS by Move:			D	D	D	D	D	D	D	E	В	В
		0	8	2	17	11	15	15	15	10	10	10
Note: Queue :												
~						- 1						

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj AM



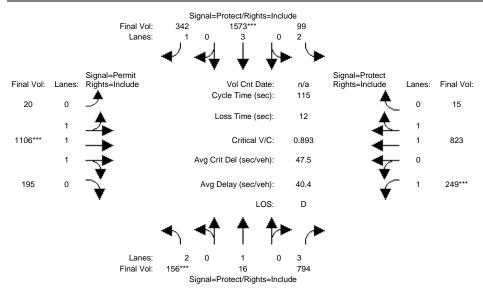
Street Name:						,	Whipple Av East Bound West Bound					
Approach:												
Movement:	, ц.	- T ·	- R	ь -	- T.	- R	ь.	- T	- R	ь -	- T	- R
 Min. Green:		10				10				7		
Y+R:	4.0		4.0		4.0			4.0	4.0			4.0
1+K•												
Volume Module									ı	I		ı
	143	16	665	_	1305	334		1028	154	225	838	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143		665	96	1305	334	20	1028	154	225	838	15
Added Vol:	2		10	0	83	0	0	0	18	10	0	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			675	96	1388	334	20	1028	172	235	838	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	146	16	682	97	1402	337	20	1038	174	237	846	15
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	146	16	682	97	1402	337	20	1038	174	237	846	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	146	16	682	97	1402	337	20	1038	174	237	846	15
Saturation F	low Mo	odule:	•			·	•			•		•
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	0.97	0.73	0.89	0.88	0.83	0.78	0.78	0.78	0.91	0.91	0.91
Lanes:	2.00	1.00	3.00	2.00	3.00	1.00	0.05	2.53	0.42	1.00	1.96	0.04
Final Sat.:	3400	1845	4140	3400	5037	1568	73	3738	625	1736	3402	61
Capacity Anal	lysis	Module	e:			·			•			·
Vol/Sat:	0.04	0.01	0.16	0.03	0.28	0.22	0.28	0.28	0.28	0.14	0.25	0.25
Crit Moves:	****				****			****		****		
Green/Cycle:	0.06	0.29	0.29	0.11	0.34	0.34	0.33	0.33	0.33	0.17	0.50	0.50
Volume/Cap:	0.71	0.03	0.57	0.27	0.83	0.64	0.83	0.83	0.83	0.83	0.50	0.50
Delay/Veh:	63.7	29.3	35.4	47.6	38.7	34.9	39.5	39.5	39.5	64.3	19.5	19.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	63.7	29.3	35.4	47.6	38.7	34.9	39.5	39.5	39.5	64.3	19.5	19.5
LOS by Move:			D	D	D	С	D	D	D	E	В	В
HCM2kAvgQ:	4	0	8	2	19	11	15	15	15	11	11	11
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd AM



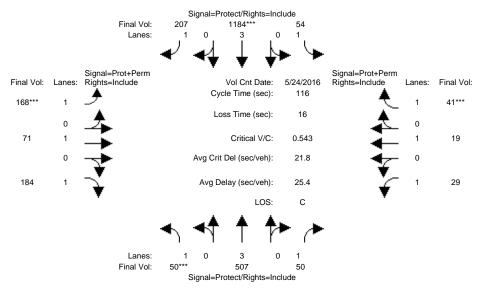
Street Name: Approach:			Vetera	ns Bl	l outh Bound East B				Whipple Av ound West Bound			
Movement:		гин во - Т				- R					est BO - T	
Min. Green:		10			10					7		10
Y+R:		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0
	1											
Volume Modul		1.0	776	0.0	1 4 7 4	220	2.0	1005	175	007	015	1.5
Base Vol:	152		776		1474	339		1095	175	237		15
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		16	776		1474	339		1095	175	237	815	15
Added Vol:	0		0	0	0	0	0		0	0	0	0
Reassigned:			0	0	0	0	0	0	0	0	0	0
Initial Fut:			776		1474	339		1095	175	237		15
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			0.99		0.99	0.99		0.99	0.99		0.99	0.99
PHF Volume:	154		784	99	1489	342	20	1106	177	239	823	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	154	16	784	99	1489	342	20	1106	177	239	823	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	154	16	784	99	1489	342	20	1106	177	239	823	15
Saturation F	low M	odule:	·	•		•			•	•		•
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	0.97	0.73	0.89	0.88	0.83	0.78	0.78	0.78	0.91	0.91	0.91
Lanes:	2.00	1.00	3.00	2.00	3.00	1.00	0.05	2.54	0.41	1.00	1.96	0.04
Final Sat.:			4140	3400	5037	1568	69	3794	606	1736	3400	63
Capacity Ana	İysis	Modul	e: ˈ				•			•		
Vol/Sat:	0.05	0.01	0.19	0.03	0.30	0.22	0.29	0.29	0.29	0.14	0.24	0.24
Crit Moves:	****				***			****		****		
Green/Cycle:	0.06	0.30	0.30	0.10	0.34	0.34	0.34	0.34	0.34	0.16	0.49	0.49
Volume/Cap:			0.62	0.30	0.87	0.64		0.87	0.87		0.49	0.49
Delay/Veh:			35.3		40.5	34.6		41.6	41.6		19.6	19.6
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:				48.7		34.6		41.6	41.6		19.6	19.6
LOS by Move:			D	D		C	D		D	, I . E		В
HCM2kAvqQ:		0	10	2		11	17		17	11		10
Note: Queue :									Τ,		10	10
1,000 Queue	- CPO1	ccu is	CIIC II	CI	or ca	TO PCT	Tanc	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj AM



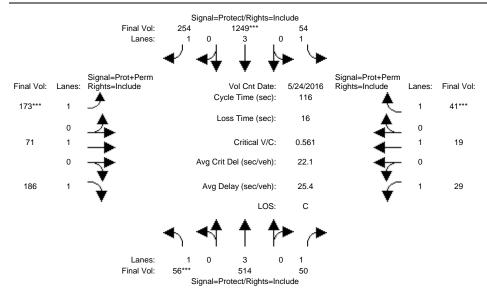
Street Name:	No	Veterans Bl North Bound South Bound						Whipple Av East Bound West Bound				
Movement:						- R					- Т	
Min. Green:	7	10		7					10			
Y+R:		4.0						4.0			4.0	
Volume Module												
	152	16	776	98	1474	339	20	1095	175	237	815	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	152	16	776	98	1474	339	20	1095	175	237	815	15
Added Vol:	2	0	10	0	83	0	0	0	18	10	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	154	16	786	98	1557	339	20	1095	193	247	815	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:		0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	156	16	794	99	1573	342	20	1106	195	249	823	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	156	16	794	99	1573	342	20	1106	195	249	823	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:				99		342		1106	195	249		15
Saturation F												
Sat/Lane:			1900		1900			1900	1900		1900	1900
Adjustment:			0.73	0.89		0.83		0.78	0.78		0.91	0.91
		1.00	3.00		3.00	1.00		2.51	0.44			0.04
Final Sat.:					5037				655		3400	63
Capacity Ana	-			0 00	0 01		0 00	0 00	0 00	0 1 4	0 0 4	0 0 1
		0.01	0.19	0.03	0.31	0.22	0.30	0.30	0.30	0.14 ****	0.24	0.24
Crit Moves:		0 21	0 21	0 10		0.25	0 22		0 22		0 40	0.49
Green/Cycle:			0.31	0.10		0.35		0.33	0.33		0.49	0.49
Volume/Cap:			0.62 34.9		0.90 42.6	0.63 33.8	45.3	0.91	0.91 45.3	77.2	0.50	20.1
Delay/Veh: User DelAdj:			1.00		1.00	1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:				48.7		33.8		45.3	45.3		20.1	20.1
LOS by Move:			34.9 C	40.7 D	42.0 D	33.0 C	45.3 D		45.3 D	//.∠ E		20.1 C
		0	10	2		11	18		18	12	_	10
Note: Queue :	_								Τ0	12	10	10
Note: Queue .	rebor	ceu is	che il	idilibet	OT C	rra her	Tane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



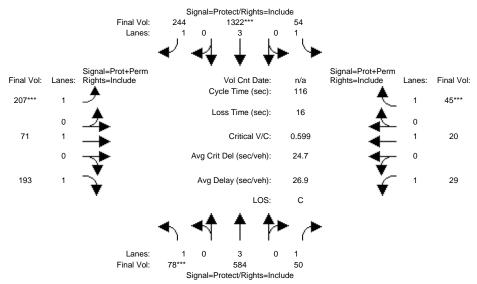
Approach:	No	rth Bo	Bound South Bound - R L - T - R l				Ea	ast Bo	und	West Bound		
Movement:		- T						- T			- T	
Min. Green:		10			10		7		 10	7		10
Y+R:		4.0			4.0			4.0		4.0		4.0
Volume Module										İ		I
Base Vol:	50	507	50		1184	207	168	71	184	29	19	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	507	50	54	1184	207	168	71	184	29	19	41
Added Vol:	0		0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	50	507	50	54	1184	207	168	71	184	29	19	41
User Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	507	50	54	1184	207	168	71	184	29	19	41
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	507	50	54	1184	207	168	71	184	29	19	41
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:				54		207	168		184	29	19	41
	1											
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.85		0.91	0.85		1.00	0.85		1.00	0.85
	1.00		1.00		3.00	1.00		1.00	1.00		1.00	1.00
Final Sat.:			1615		5187	1615		1900	1615		1900	1615
	1											
Capacity Ana				0 00		0 10		0 0 1	0 11		0 01	0 00
Vol/Sat:		0.10	0.03	0.03	0.23	0.13	0.09 ****	0.04	0.11	0.02	0.01	0.03
Crit Moves:	****	0 25	0 25	0 00		0 51		0 10	0 10	0 10	0 00	
Green/Cycle:			0.35		0.51	0.51		0.19	0.19		0.09	0.09
Volume/Cap:			0.09		0.45	0.25		0.20	0.59		0.12	0.29
Delay/Veh: User DelAdj:			25.2		18.4	16.3 1.00		39.6 1.00	45.9 1.00		49.2	50.9 1.00
AdiDel/Veh:			1.00 25.2	36.8		16.3		39.6	45.9		49.2	50.9
LOS by Move:			∠5.∠ C	30.8 D		16.3 B	∠9.3 C		45.9 D	39.0 D	49.2 D	50.9 D
HCM2kAvq0:		5	1	ں 2		4	4		6	1		2
Note: Queue				_		· -	_	_	0		1	2
Note: Queue .	rebor	ceu is	che II	unber	OT Ca	rs ber	тапе	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj AM



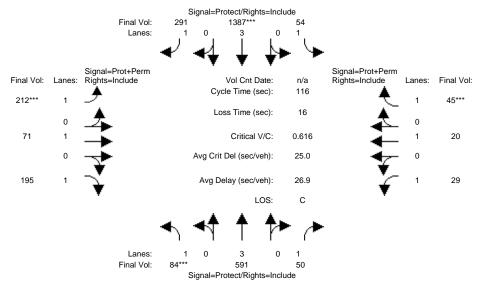
Movement: L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R Min. Green: 7 10 10 7 10 10 7 10 10 7 10 10 7 10 10 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Min. Green: 7 10 10 7 10 10 7 10 10 7 10 10 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Volume Module: >> Count Date: 24 Marz 2016 << 8:00-9:00 AM
Base Vol: 50 507 50 54 1184 207 168 71 184 29 19 41
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Initial Bse: 50 507 50 54 1184 207 168 71 184 29 19 41
Added Vol: 6 7 0 0 65 47 5 0 2 0 0
Reassigned: 0 0 0 0 0 0 0 0 0 0
Initial Fut: 56 514 50 54 1249 254 173 71 186 29 19 41
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Volume: 56 514 50 54 1249 254 173 71 186 29 19 41
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 56 514 50 54 1249 254 173 71 186 29 19 41
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
FinalVolume: 56 514 50 54 1249 254 173 71 186 29 19 41
Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190
Adjustment: 0.95 0.91 0.85 0.95 0.91 0.85 0.95 1.00 0.85 0.95 1.00 0.85
Lanes: 1.00 3.00 1.00 1.00 3.00 1.00 1.00 1.00
Final Sat.: 1805 5187 1615 1805 5187 1615 1805 1900 1615 1805 1900 1615
Capacity Analysis Module:
Vol/Sat: 0.03 0.10 0.03 0.03 0.24 0.16 0.10 0.04 0.12 0.02 0.01 0.03
Crit Moves: **** **** ****
Green/Cycle: 0.07 0.36 0.36 0.22 0.51 0.51 0.32 0.19 0.19 0.19 0.09 0.09
Volume/Cap: 0.47 0.28 0.09 0.14 0.47 0.31 0.33 0.20 0.61 0.10 0.12 0.29
Delay/Veh: 55.3 26.7 24.8 36.8 18.6 16.9 29.8 39.9 46.6 39.3 49.2 50.9
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
AdjDel/Veh: 55.3 26.7 24.8 36.8 18.6 16.9 29.8 39.9 46.6 39.3 49.2 50.9
LOS by Move: E C C D B B C D D D D
HCM2kAvgQ: 2 5 1 2 10 5 4 2 6 1 1 2
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd AM



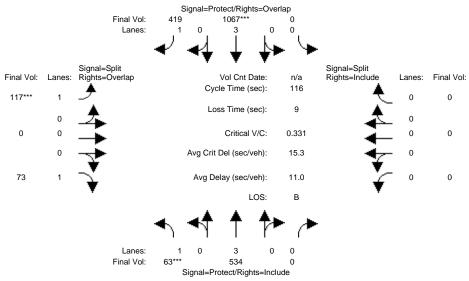
Approach:	No	rth Bo	und	South Bound			Ea	ast Bo	und	West Bound			
Movement:	L .		- R		- T			- T			- T	- R	
Min. Green:	. 7	10	10	· 7	10	10	. 7	10	10	· 7	10	10	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Volume Module	≘:												
Base Vol:	78	584	50		1322	244	207	71	193	29	20	45	
Growth Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Initial Bse:		584	50		1322	244	207	71	193	29	20	45	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	78		50		1322	244	207	71	193	29	20	45	
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Volume:	78	584	50		1322	244	207	71	193	29	20	45	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:		584	50		1322	244	207	71	193	29	20	45	
PCE Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
MLF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
FinalVolume:			50		1322	244	207	71	193	29	20	45	
Cotumption E	1												
Saturation Fi		1900	1900	1000	1900	1900	1000	1900	1900	1000	1900	1900	
	0.95		0.85		0.91	0.85		1.00	0.85		1.00	0.85	
Lanes:	1.00		1.00		3.00	1.00		1.00	1.00		1.00	1.00	
	1805		1615		5187	1615		1900	1615		1900	1615	
Capacity Anal	Į.									1		1	
Vol/Sat:	-	0.11	0.03	0 03	0.25	0.15	0 11	0.04	0.12	0 02	0.01	0.03	
Crit Moves:	****	0.11	0.05	0.03	****	0.15	****	0.01	0.12	0.02	0.01	****	
Green/Cycle:	0.08	0.36	0.36	0.20	0.48	0.48	0.34	0.20	0.20	0.19	0.09	0.09	
Volume/Cap:		0.31	0.08		0.53	0.32		0.19	0.60		0.12	0.32	
Delay/Veh:		26.5	24.2	38.9		18.8		38.7	45.1		49.3	51.2	
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00	
AdjDel/Veh:		26.5	24.2	38.9	21.3	18.8		38.7	45.1		49.3	51.2	
LOS by Move:		С	C	D	С	В	С	D	D	D	D	D	
HCM2kAvqQ:	3	5	1	2	12	5	5	2	6	1	1	2	
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane						

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj AM



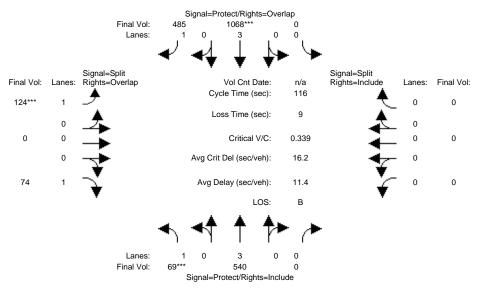
Approach:	No	rth Boi	und	Soi	ıth Bo	und	Ea	ast Bo	und	West Bound			
Movement:		- T			- T			- T			- T	- R	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
	1												
Volume Module													
Base Vol:	78	584	50		1322	244	207	71	193	29	20	45	
Growth Adj:		1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	
Initial Bse:		584	50		1322	244	207	71	193	29	20	45	
Added Vol:	6	7	0	0	65	47	5	0	2	0	0	0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	84		50		1387	291	212	71	195	29	20	45	
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
PHF Volume:	84	591	50		1387	291	212	71	195	29	20	45	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:			50		1387	291	212	71	195	29	20	45	
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
MLF Adj:		1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00	
FinalVolume:			50		1387	291	212	71	195	. 29	20	45	
	1												
Saturation F.			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900	
-	0.95		0.85		0.91	0.85		1.00	0.85		1.00	0.85	
Lanes:	1.00		1.00		3.00	1.00		1.00	1.00		1.00	1.00	
Final Sat.:			1615		5187	1615	1805		1615		1900	1615	
	1												
Capacity Anal	_		0.03	0 03	0 27	0 10	0 10	0 04	0 10	0 02	0 01	0.03	
Vol/Sat:	****	0.11	0.03	0.03	0.27 ****	0.18	U.⊥∠ ****	0.04	0.12	0.02	0.01	0.03 ****	
Crit Moves: Green/Cycle:		0 27	0.37	0 20	0.48	0.48		0.20	0.20	0 10	0.09	0.09	
			0.37	0.20		0.48		0.20	0.20		0.09	0.09	
Volume/Cap: Delay/Veh:		26.1	23.9	38.9		19.4		39.0	45.8		49.3	51.2	
User DelAdj:			1.00		1.00	1.00	1.00		1.00		1.00	1.00	
AdjDel/Veh:		26.1	23.9	38.9		19.4		39.0	45.8		49.3	51.2	
LOS by Move:			23.9 C	30.9 D	21.6 C	19.4 B	∠9.0 C	39.0 D	45.6 D	39.3 D	49.3 D	51.Z D	
HCM2kAvqQ:	3		1	2	13	Б 7	5		6	1	1	2	
Note: Queue			_	_			_	_	0		Τ.	4	
Note: Queue	rebor	Leu IS	che II	unber	or ca	ra her	тапе	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



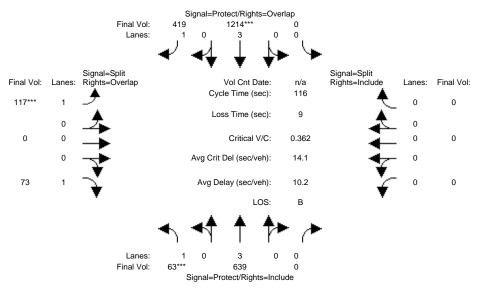
Approach:	No	rth Bo	und	Soi	ıth Bo	und	Ea	ast Bo	und	West Bound			
Movement:		- T				- R		- T				- R	
Min. Green:	7	10	0	0	10	10	10	0	10	0	0	0	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Volume Module													
Base Vol:	63	534	0		1067	419	117	0	73	0	0	0	
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Initial Bse:		534	0		1067	419	117	0	73	0	0	0	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:			0		1067	419	117	0	73	0	0	0	
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00	
	63	534	0		1067	419	117	0	73	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:			0		1067	419	117	0	73	0	0	0	
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00	
FinalVolume:			0		1067	419	. 117		73	. 0	0	0	
	ı												
Saturation F													
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900	
-	0.95		1.00		0.91	0.85		1.00	0.85		1.00	1.00	
Lanes:	1.00		0.00		3.00	1.00		0.00	1.00		0.00	0.00	
Final Sat.:			0		5187	1615	1805	0	1615	0	0	0	
	1												
Capacity Anal				0 00	0 01	0 06	0 06		0 05	0 00	0 00	0 00	
Vol/Sat:		0.10	0.00	0.00	0.21	0.26		0.00	0.05	0.00	0.00	0.00	
Crit Moves:	****		0 00		****	0 00	****		0 00	0 00	0 00	0 00	
Green/Cycle:			0.00		0.62	0.82		0.00	0.30		0.00	0.00	
Volume/Cap:			0.00		0.33	0.32		0.00	0.15		0.00	0.00	
Delay/Veh:			0.0		10.5	2.8	40.7	0.0	29.8	0.0	0.0	0.0	
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00	
AdjDel/Veh:			0.0		10.5	2.8	40.7		29.8	0.0		0.0	
LOS by Move:			A	A	В	A	D	A	C	A	A	A	
HCM2kAvgQ:	2		0	0	6	4	4	-	2	0	0	0	
Note: Queue	repor	ted is	the n	umber	oi ca	rs per	ıane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj AM



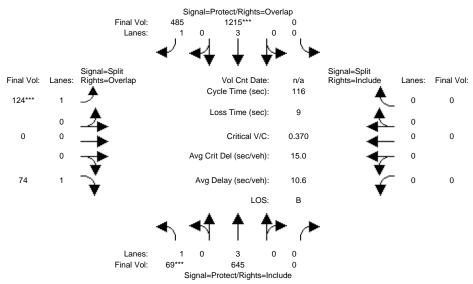
Approach:				South Bound L - T - R					und				
Movement:		- T ·						- T			- T	- R	
	7		0		10	10		0	10	0	0	0	
Y+R:		4.0	4.0		4.0			4.0	4.0			4.0	
Volume Module	e:						•						
Base Vol:	63	534	0	0	1067	419	117	0	73	0	0	0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	63	534	0	0	1067	419	117	0	73	0	0	0	
Added Vol:	0	6	0	0	1	66	7	0	1	0	0	0	
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	69	540	0	0	1068	485	124	0	74	0	0	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	69	540	0	0	1068	485	124	0	74	0	0	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	69	540	0	0	1068	485	124	0	74	0	0	0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	69	540	0	0	1068	485	124	0	74	0	0	0	
Saturation F	low Mo	odule:											
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.95	0.91	1.00	1.00	0.91	0.85	0.95	1.00	0.85	1.00	1.00	1.00	
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	
Final Sat.:			0		5187	1615	1805	0	1615	. 0	0	0	
	1												
Capacity Anal	_												
Vol/Sat:		0.10	0.00	0.00	0.21	0.30	0.07	0.00	0.05	0.00	0.00	0.00	
Crit Moves:	****				****		****						
Green/Cycle:			0.00	0.00		0.81	0.20		0.32		0.00	0.00	
Volume/Cap:	0.34		0.00		0.34	0.37	0.34	0.00	0.15	0.00	0.00	0.00	
Delay/Veh:			0.0		11.3	3.2	40.2	0.0	28.6	0.0	0.0	0.0	
User DelAdj:			1.00	1.00		1.00	1.00		1.00	1.00		1.00	
AdjDel/Veh:			0.0	0.0		3.2	40.2	0.0	28.6	0.0	0.0	0.0	
LOS by Move:			A	A		A	D	A	C	A	A	A	
HCM2kAvgQ:			0	0	7	5	4	-	2	0	0	0	
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd AM



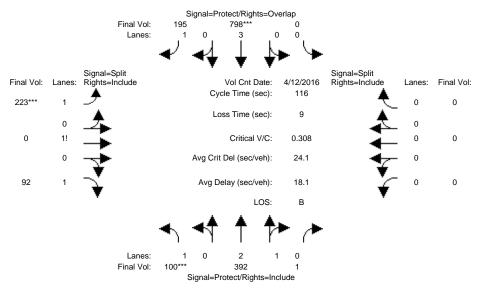
Approach:				South Bound L - T - R				ast Bo					
Movement:		- T -						- T			- T	- R	
Min. Green:	7		0		 10	10		0	10	0	0	0	
Y+R:	4.0		4.0		4.0			4.0	4.0			4.0	
Volume Module	e :		•			•							
Base Vol:	63	639	0	0	1214	419	117	0	73	0	0	0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	63	639	0	0	1214	419	117	0	73	0	0	0	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	63	639	0	0	1214	419	117	0	73	0	0	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	63	639	0	0	1214	419	117	0	73	0	0	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	63	639	0	0	1214	419	117	0	73	0	0	0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	63	639	0	0	1214	419	117	0	73	0	0	0	
Saturation F	low Mo	odule:											
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.95	0.91	1.00	1.00	0.91	0.85	0.95	1.00	0.85	1.00	1.00	1.00	
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	
Final Sat.:			0		5187	1615	1805	0	1615	0	0	0	
	1												
Capacity Ana													
Vol/Sat:		0.12	0.00	0.00	0.23	0.26		0.00	0.05	0.00	0.00	0.00	
Crit Moves:	****				****		****						
Green/Cycle:			0.00	0.00		0.83		0.00	0.28		0.00	0.00	
Volume/Cap:			0.00	0.00	0.36	0.31		0.00	0.16	0.00	0.00	0.00	
Delay/Veh:			0.0	0.0	9.5	2.5	42.5	0.0	32.1	0.0	0.0	0.0	
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00	
AdjDel/Veh:			0.0	0.0	9.5	2.5	42.5	0.0	32.1	0.0	0.0	0.0	
LOS by Move:			A	A		A	D	A	С	A	A	A	
	2		0	0	7	4	4	0	2	0	0	0	
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj AM



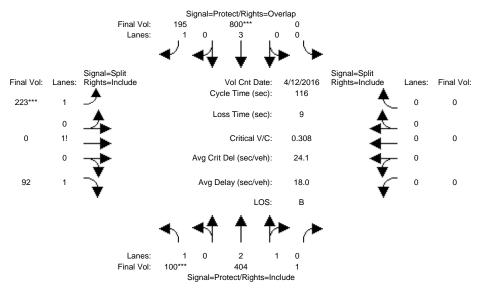
Approach:	Noi	rth Bo	und	Soi	ut.h Bo	und	Ea	ast Bo	und	West Bound			
Movement:		- T				- R		- T			- T	- R	
Min. Green:	7	10	0	0	10	10	10	0	10	0	0	0	
Y+R:	4.0		4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Volume Module													
Base Vol:	63	639	0		1214	419	117	0	73	0	0	0	
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Initial Bse:		639	0		1214	419	117	0	73	0	0	0	
Added Vol:	6	6	0	0	1	66	7	0	1	0	0	0	
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:			0		1215	485	124	0	74	0	0	0	
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00	
	69	645	0		1215	485	124	0	74	0	0	0	
	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:			0		1215	485	124	0	74	0	0	0	
PCE Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00	
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00	
FinalVolume:			0		1215	485	124		74	. 0	0	0	
	I												
Saturation F													
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900	
-	0.95		1.00		0.91	0.85		1.00	0.85		1.00	1.00	
Lanes:	1.00		0.00		3.00	1.00		0.00	1.00		0.00	0.00	
Final Sat.:			0		5187	1615	1805	0	1615	0	0	0	
	1												
Capacity Anal	_			0 00	0 00	0 20	0 07	0 00	0 05	0 00	0 00	0 00	
	0.04	0.12	0.00	0.00	0.23	0.30	U.U/ ****	0.00	0.05	0.00	0.00	0.00	
CIIC MOVED.		0 74	0 00	0 00		0 00		0 00	0 00	0 00	0 00	0 00	
Green/Cycle:					0.63	0.82		0.00	0.29		0.00	0.00	
Volume/Cap:			0.00		0.37	0.37		0.00	0.16		0.00	0.00	
Delay/Veh:			0.0		10.3	2.9	42.0	0.0	30.9	0.0	0.0	0.0	
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00	
AdjDel/Veh:				0.0		2.9	42.0	0.0	30.9	0.0		0.0	
LOS by Move:			A	A		A	D	A	C	A		A	
HCM2kAvgQ:	2		0	0	7	4	1	•	2	0	0	0	
Note: Queue	report	Lea IS	ine n	umper	or ca	rs per	ıane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



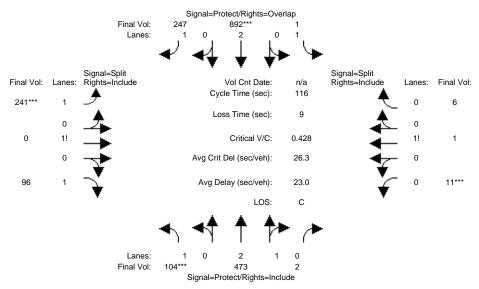
Approach:	No	rth Boı	und	Sou	uth Bo	ound	Ea	ast Bo	und	We	est Bo	und
Movement:	L .		- R		- T			- T		. L -	- T	- R
Min Croon:	 7		10	0		10	10		10	0	0	0
Min. Green:								0			-	-
Y+R:	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0
Volume Module				1			1					
Base Vol:	100	392	Date.	12 A ₁	198 عر	195	223	. 00 AM	92	0	0	0
	1.00		1.00	-	1.00	1.00		1.00	1.00	-	1.00	1.00
Initial Bse:		392	1	0	798	195	223	0	92	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			1	0	798	195	223	0	92	0	0	0
User Adj:		1.00	1.00	1.00		1.00		1.00	1.00	-	1.00	1.00
PHF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Volume:	100	392	1	0	798	195	223	0	92	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	392	1	0	798	195	223	0	92	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	100	392	1	0	798	195	223	0	92	0	0	0
Saturation Fl	Low Mo	odule:				•						·
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	1.00	0.91	0.85	0.92	1.00	0.92	1.00	1.00	1.00
Lanes:		2.99	0.01	0.00	3.00	1.00	1.71	0.00	1.29	0.00	0.00	0.00
Final Sat.:			13		5187	1615	2997	0	2267	. 0	0	0
			I									
Capacity Anal												
Vol/Sat:		0.08	0.08	0.00	0.15	0.12		0.00	0.04	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:			0.68		0.50	0.74		0.00	0.24		0.00	0.00
Volume/Cap:			0.11	0.00		0.16		0.00	0.17		0.00	0.00
Delay/Veh:			6.4		17.2	4.4	36.2	0.0	34.8	0.0	0.0	0.0
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:				0.0		4.4	36.2	0.0	34.8	0.0	0.0	0.0
LOS by Move:			A	A		A	D	A	C	A	A	A
HCM2kAvgQ:	3	2	2	0	6	2	1	0	2	0	0	0
Note: Queue 1	repor	tea is	the n	umber	OI Ca	ars per	⊥ane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj AM



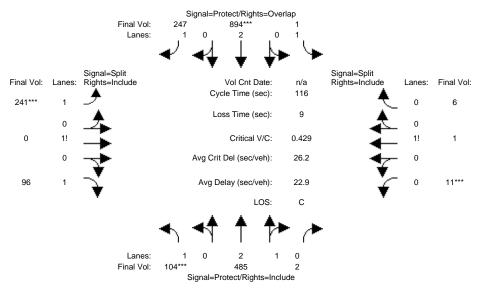
Approach:	No	rth Bo	und	Sou	ath Bo	und	Ea	ast Bo	und	Wes	st Bo	und
Movement:		- T				- R		- T		L -		
Min. Green:		10		0		10		0	10	0	0	0
Y+R:		4.0	4.0		4.0			4.0		4.0		4.0
Volume Module										1		1
Base Vol:	100	392	1	0	798	195	223	0	92	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1	00	1.00
Initial Bse:	100	392	1	0	798	195	223	0	92	0	0	0
Added Vol:	0	12	0	0	2	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	100	404	1	0	800	195	223	0	92	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1	.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1	.00	1.00
PHF Volume:	100	404	1	0	800	195	223	0	92	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	100	404	1	0	800	195	223	0	92	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1	00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1	00	1.00
FinalVolume:						195	223		92	0	0	0
	1											
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900	1900 1		1900
Adjustment:			0.91	1.00		0.85		1.00	0.92	1.00 1		1.00
Lanes:		2.99	0.01		3.00	1.00		0.00	1.29	0.00		0.00
Final Sat.:			13		5187	1615	2997		2267	-	0	0
	1											
Capacity Ana				0 00	0 1 5	0 10			0 0 4	0 00 0		0 00
Vol/Sat:		0.08	0.08	0.00	0.15	0.12	0.07 ****	0.00	0.04	0.00).00	0.00
Crit Moves:	****	0 60	0 60	0 00		0 54			0 04	0 00 0		0 00
Green/Cycle:			0.68		0.50	0.74		0.00	0.24	0.00 0		0.00
Volume/Cap:			0.11	0.00		0.16		0.00	0.17	0.00 0		0.00
Delay/Veh:				0.0		4.4	36.2	0.0	34.8	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00	36.2		1.00	1.00 1		1.00
AdjDel/Veh:			6.4	0.0 A		4.4 A	36.2 D	0.0	34.8 C	0.0	0.0	0.0
LOS by Move:	Д 3		A 2	A 0	в 6	A 2	Д 4		2	A 0	A 0	A
HCM2kAvgQ:				-			_	-	2	U	U	0
Note: Queue	repor	rea is	the n	uilber	OT CS	ırs per	тапе	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd AM



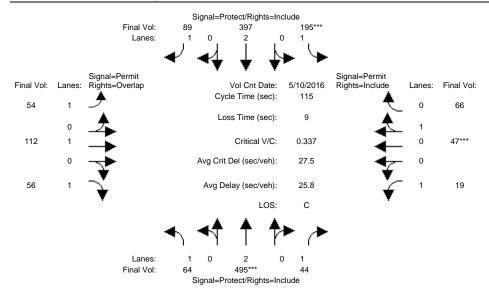
Approach:						und		ast Bo		₩e	est Bo	und
Movement:		- T -			- T			- T			- T	
Min. Green:	· 7		10		10	10		10	10	10		10
Y+R:		4.0	4.0		4.0			4.0	4.0			4.0
1 TK •												
Volume Module			ı	I		ļ	l		I	I		ļ
Base Vol:	104	473	2	1	892	247	241	0	96	11	1	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	104	473	2	1	892	247	241	0	96	11	1	6
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		473	2	1	892	247	241	0	96	11	1	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	104	473	2	1	892	247	241	0	96	11	1	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	104	473	2	1	892	247	241	0	96	11	1	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	104	473	2	1	892	247	241	0	96	11	1	6
Saturation Fl	Low Mo	odule:	·	•		•	•			•		·
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	0.95	0.95	0.85	0.92	1.00	0.92	0.93	0.93	0.93
Lanes:	1.00	2.99	0.01	1.00	2.00	1.00	1.72	0.00	1.28	0.61	0.06	0.33
Final Sat.:	1805	5160	22	1805	3610	1615	3009	0	2255	1076	98	587
			I									
Capacity Anal												
Vol/Sat:		0.09	0.09	0.00	0.25	0.15	0.08	0.00	0.04		0.01	0.01
Crit Moves:	****				****		****			****		
Green/Cycle:			0.40	0.26	0.54	0.71	0.17	0.00	0.17		0.09	0.09
Volume/Cap:	0.46	0.23	0.23	0.00	0.46	0.22	0.46	0.00	0.24	0.12	0.12	0.12
Delay/Veh:	48.6	23.1	23.1	31.5	16.7	5.8	43.5	0.0	41.4	49.3	49.3	49.3
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:			23.1		16.7	5.8	43.5	0.0	41.4		49.3	49.3
LOS by Move:			C	С	В	A	D	A	D	D	D	D
HCM2kAvgQ:	3		4	0	10	3	5	0	2	1	1	1
Note: Queue 1	report	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj AM



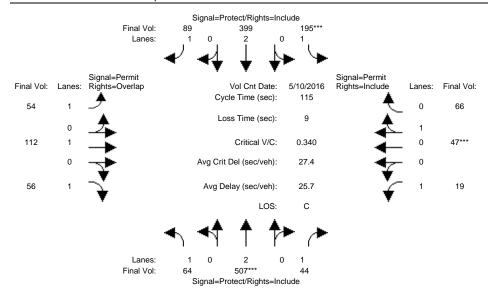
Approach:										W∈	est Bo	und
Movement:			- R			- R			- R		- Т	
		 10		7				10		10		10
Y+R:		4.0			4.0			4.0			4.0	4.0
Volume Modul	e:											
Base Vol:	104		2	1		247	241	0	96	11	1	6
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:			2	1	892	247	241	0	96	11	1	6
Added Vol:			0	0	2	0	0	0	0	0	0	0
PasserByVol:			0	0		0	0	0	0	0	0	0
Initial Fut:			2	1		247	241	0	96	11	1	6
User Adj:		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00
PHF Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
PHF Volume:			2	1	894	247	241	0	96	11	1	6
Reduct Vol:			0	0		0	0	0	0	0	0	0
Reduced Vol:				1		247	241	0	96	11	1	6
PCE Adj:	1.00	1.00		1.00		1.00			1.00	1.00		1.00
MLF Adj:				1.00		1.00		1.00	1.00	1.00		1.00
FinalVolume:						247		-	96	. 11	1	6
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900	1900		1900
Adjustment:			0.91	0.95		0.85		1.00	0.92	0.93		0.93
		2.99	0.01		2.00	1.00		0.00	1.28	0.61		0.33
Final Sat.:					3610	1615	3009		2255		98	587
Capacity Ana					0 05	0 1 5	0 00		0 0 4	0 01	0 01	0 01
Vol/Sat:		0.09	0.09	0.00	0.25	0.15	0.08 ****	0.00	0.04		0.01	0.01
Crit Moves:	****									****		
Green/Cycle:			0.40		0.54	0.71		0.00	0.17	0.09		0.09
Volume/Cap:			0.23	0.00		0.22		0.00	0.25	0.12		0.12
Delay/Veh:			22.8	31.9		5.8	43.5	0.0	41.4	49.3		49.3
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			22.8	31.9		5.8	43.5	0.0	41.4	49.3		49.3
LOS by Move:			C	C			D		D	D	D	D
	3		4	0		_	5		2	1	1	1
Note: Queue	repor	ted is	the n	umber	of ca	ars per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



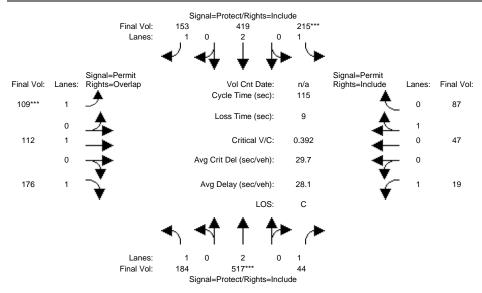
Street Name:									Mapl			
Approach:	No:	rth Bo	und	Soi	uth Bo	und	Εä	ast Bo	und	We	est Bo	und
Movement:											- T	
		10			10					10		
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module					ay 201	6 <<						
Base Vol:	64		44	195	397	89	54		56	19		66
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:			44	195	397	89	54	112	56	19	47	66
Added Vol:				0	0	0	0	-	0	0	0	0
PasserByVol:			0	0	0	0	0	0	0	0		0
Initial Fut:	64	495	44	195	397	89	54	112	56	19	47	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	64	495	44	195	397	89	54	112	56	19	47	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	495	44	195	397	89	54	112	56	19	47	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	495	44	195	397	89	54	112	56	19	47	66
Saturation Fl	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.58	1.00	0.85	0.59	0.91	0.91
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.42	0.58
Final Sat.:	1805	3610	1615	1805	3610	1615	1106	1900	1615		721	1012
Capacity Anal				'		'	'		'	1		'
	_			0.11	0.11	0.06	0.05	0.06	0.03	0.02	0.07	0.07
				****							****	
Green/Cycle:	0.26	0.41	0.41	0.32	0.47	0.47	0.19	0.19	0.45	0.19	0.19	0.19
Volume/Cap:			0.07	0.34	0.23	0.12		0.30	0.08	0.09	0.34	0.34
Delay/Veh:			20.8		18.3	17.2		40.2	17.9		40.6	40.6
User DelAdj:				1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:				30.1		17.2		40.2	17.9		40.6	40.6
LOS by Move:			C	C	В	В	D		В	D		D
HCM2kAvgQ:	2	6	1	5	4	2	2	_	1	1		4
Note: Queue r									_	_	-	-
Note: Queue I	EPOI	ceu is	CITE II	unber	OI Ca	TP ber	Tane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj AM



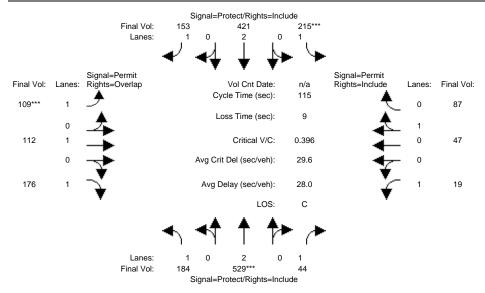
Street Name:		Ve	eteran	s Blvo	d				Mapl	e St		
Approach:	No	rth Bo	und	Sot	uth Bo	und	Εá	ast Bo	und	We	est Bo	und
Movement:	L ·	- T ·	- R	L -	- T	- R	$_{\rm L}$.	- T	- R	ь.	- T	- R
 Min. Green:		10							10	10		
Y+R:	4.0			4.0				4.0		4.0		4.0
Volume Module	: >>	Count	Date:	10 Ma	ay 201	.6 <<						
Base Vol:	64	495	44	195	397	89	54	112	56	19	47	66
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	64	495	44	195	397	89	54	112	56	19	47	66
Added Vol:		12	0	0	2	0	0	0	0	0	0	0
Reassigned :			0	0	0	0	0	0	0	0	0	0
Initial Fut:	64	507	44	195	399	89	54	112	56	19	47	66
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	64	507	44	195	399	89	54	112	56	19	47	66
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	64	507	44	195	399	89	54	112	56	19	47	66
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	64	507	44	195	399	89	54	112	56	19	47	66
Saturation Fl	Low Mo	odule:							·			
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.58	1.00	0.85	0.58	0.91	0.91
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.42	0.58
Final Sat.:	1805	3610	1615	1805	3610	1615	1104	1900	1615	1108	721	1012
Capacity Anal	lysis	Module	e:						·			
Vol/Sat:	0.04	0.14	0.03	0.11	0.11	0.06	0.05	0.06	0.03	0.02	0.07	0.07
Crit Moves:		****		****							****	
Green/Cycle:	0.26	0.41	0.41	0.32	0.47	0.47	0.19	0.19	0.45	0.19	0.19	0.19
Volume/Cap:	0.14	0.34	0.07	0.34	0.23	0.12	0.26	0.31	0.08	0.09	0.34	0.34
Delay/Veh:	32.8	23.2	20.4	30.4	18.2	17.1	40.1	40.4	18.0	38.4	40.8	40.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.8	23.2	20.4	30.4	18.2	17.1	40.1	40.4	18.0	38.4	40.8	40.8
LOS by Move:	С	C	C	С	В	В	D	D	В	D	D	D
HCM2kAvgQ:	2	6	1	5	4	2	2	4	1	1	4	4
Note: Queue r	repor	ted is	the n	umber	of ca	ırs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd AM



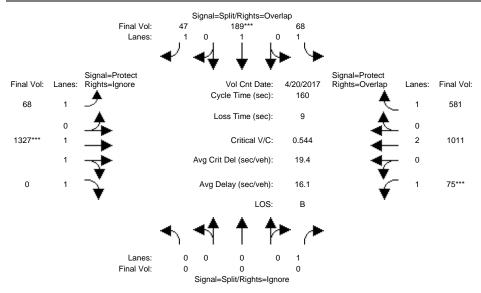
Street Name: Approach:	No	V rth Bo	eteran	s Blvo	d ith Bo	und	T:	act Bo	Mapl	e St	agt Bo	und
Movement:						- R					- T	
										•		
Min. Green:		10						10		10		
Y+R:		4.0			4.0			4.0	4.0	4.0		4.0
Volume Module												
Base Vol:	184	517	44	215	419	153	109	112	176	19	47	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	184	517	44	215	419	153	109	112	176	19	47	87
Added Vol:			0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	184	517	44	215	419	153	109	112	176	19	47	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	184	517	44	215	419	153	109	112	176	19	47	87
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	517	44	215	419	153	109	112	176	19	47	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	517	44	215	419	153	109	112	176	19	47	87
Saturation F	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.58	1.00	0.85	0.62	0.90	0.90
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.35	0.65
Final Sat.:	1805	3610	1615	1805	3610	1615	1096	1900	1615	1174	602	1114
Capacity Ana	lysis	Modul	e:	•		·	•			•		
Vol/Sat:	0.10	0.14	0.03	0.12	0.12	0.09	0.10	0.06	0.11	0.02	0.08	0.08
Crit Moves:		***		****			****					
Green/Cycle:	0.31	0.36	0.36	0.30	0.36	0.36	0.25	0.25	0.57	0.25	0.25	0.25
Volume/Cap:	0.33	0.39	0.07	0.39	0.33	0.27	0.39	0.23	0.19	0.06	0.31	0.31
Delay/Veh:	30.6	27.3	23.9	32.1	27.1	26.6	36.5	34.3	12.3	32.7	35.2	35.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.6	27.3	23.9	32.1	27.1	26.6	36.5	34.3	12.3	32.7	35.2	35.2
LOS by Move:	С	С	С	C	С	С	D	С	В	С	D	D
HCM2kAvgQ:	5	7	1	6	5	4	4	3	3	1	4	4
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj AM



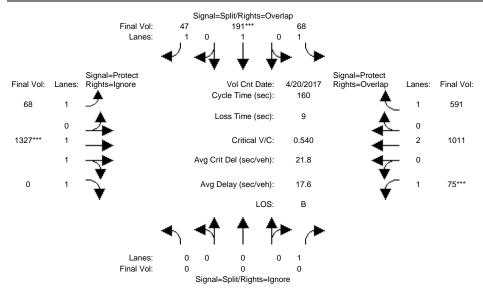
Street Name: Approach:	No	V rth Bo	eteran	s Blvo	d ith Bo	und	F:	act Bo	Mapl	e St	act Bo	und
Movement:						- R					- T	
Min. Green:		10								10		
Y+R:		4.0			4.0			4.0		4.0		4.0
Volume Module												
Base Vol:	184	517	44	215	419	153	109	112	176	19	47	87
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	184	517	44	215	419	153	109	112	176	19	47	87
Added Vol:			0	0	2	0	0	0	0	0	0	0
PasserByVol:			0	0	0	0	0	0	0	0	0	0
Initial Fut:	184	529	44	215	421	153	109	112	176	19	47	87
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	184	529	44	215	421	153	109	112	176	19	47	87
	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:	184	529	44	215	421	153	109	112	176	19	47	87
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	184	529	44	215	421	153	109	112	176	19	47	87
Saturation F	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.58	1.00	0.85	0.62	0.90	0.90
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.35	0.65
Final Sat.:			1615		3610	1615		1900	1615	1172	602	1114
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	0.10	0.15	0.03	0.12	0.12	0.09	0.10	0.06	0.11	0.02	0.08	0.08
Crit Moves:		****		****			****					
Green/Cycle:	0.31	0.37	0.37	0.30	0.36	0.36	0.25	0.25	0.56	0.25	0.25	0.25
Volume/Cap:	0.33	0.40	0.07	0.40	0.33	0.26	0.40	0.23	0.19	0.06	0.31	0.31
Delay/Veh:	30.6	27.0	23.5	32.4	27.0	26.4	36.7	34.5	12.4	32.9	35.4	35.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	30.6	27.0	23.5	32.4	27.0	26.4	36.7	34.5	12.4	32.9	35.4	35.4
LOS by Move:	С	С	С	C	С	С	D	С	В	C	D	D
HCM2kAvgQ:	5	7	1	6	5	4	4	3	3	1	4	4
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



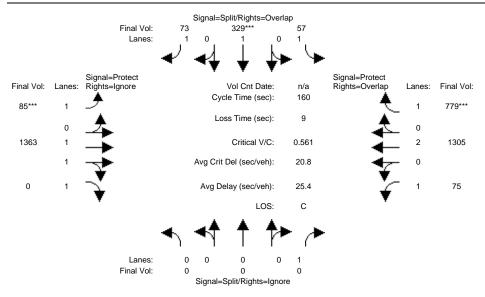
Street Name: Approach:			Woodsi	de Rd Soi	ıth Bo	und	Vet	terans	Bl (U	S101 S We	B Ram st Bo	_
Movement:	L ·	- T ·	- R	L -	- T	- R	L ·	- T	- R	L -	Т	- R
 Min. Green:		0	0					10		7		10
Y+R: 		4.0			4.0	4.0	4.0	4.0	4.0		4.0	4.0
Volume Module							I		I	I		I
Base Vol:	0	0	514	68	189	47	68	1327	0	75	1011	581
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		0	514	68	189	47	68	1327	0	75	1011	581
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	514	68	189	47	68	1327	0	75	1011	581
User Adj:		1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	68	189	47	68	1327	0	75	1011	581
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	68	189	47	68	1327	0	75	1011	581
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	0	0	68	189	47	68	1327	0		1011	581
Saturation Fl												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.85	1.00	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Lanes:	0.00	0.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	0	0	1900	1615	1900	1615	1805	3610	1805	1805	3610	1615
Capacity Anal	ysis	Module	e:									
Vol/Sat:				0.04	0.10	0.03	0.04	0.37	0.00	0.04	0.28	0.36
Crit Moves:					***			***		***		
Green/Cycle:	0.00	0.00	0.00	0.18	0.18	0.29	0.10	0.68	0.00	0.08	0.65	0.83
Volume/Cap:	0.00	0.00	0.00	0.23	0.54	0.10	0.37	0.54	0.00	0.54	0.43	0.43
Delay/Veh:	0.0	0.0	0.0	49.2	53.7	36.9	59.9	11.9	0.0	66.7	12.0	3.3
User DelAdj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:			0.0	49.2		36.9	59.9	11.9	0.0	66.7	12.0	3.3
LOS by Move:			А	D	D	D	E	В	А	E	В	A
HCM2kAvqQ:	0		0	2	7	1	3	15	0	4	11	7
Note: Queue r	epor	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj AM



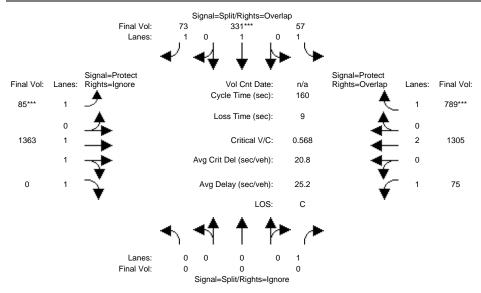
Street Name: Approach:			Woodsi	de Rd Soi	ıth Bo	und	Vet Ea	terans	Bl (U	S101 S We	BB Ram	_
Movement:	L ·	- T ·	- R	L ·	- T	- R	L ·	- T	- R	L -	- T	- R
 Min. Green:		0					7	10	10	7		
Y+R: 		4.0			4.0	4.0	4.0	4.0	4.0		4.0	4.0
Volume Module							I		I	I		ļ
Base Vol:	0	0	514	68	189	47	68	1327	0	75	1011	581
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		0	514	68	189	47	68	1327	0	75	1011	581
Added Vol:	0	0	0	0	2	0	0	0	0	0	0	10
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0		514	68	191	47	68	1327	0	75	1011	591
User Adj:		1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:		0	0	68	191	47	68	1327	0	75	1011	591
Poduat Val:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	68	191	47	68	1327	0	75	1011	591
PCE Adj:			0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	0	0	68	191	47	68	1327	0		1011	591
Saturation Fl												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.85	1.00	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Lanes:	0.00	0.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	0	0	1900	1615	1900	1615	1805	3610	1805	1805	3610	1615
Capacity Anal	ysis	Module	e:									
Vol/Sat:				0.04	0.10	0.03	0.04	0.37	0.00	0.04	0.28	0.37
Crit Moves:					***			***		****		
Green/Cycle:	0.00	0.00	0.00	0.19	0.19	0.28	0.09	0.68	0.00	0.08	0.67	0.85
Volume/Cap:	0.00	0.00	0.00	0.23	0.54	0.11	0.42	0.54	0.00	0.54	0.42	0.43
Delay/Veh:	0.0	0.0	0.0	55.7	60.6	43.3	70.6	13.1	0.0	75.4	12.4	2.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	55.7	60.6	43.3	70.6	13.1	0.0	75.4	12.4	2.9
LOS by Move:			А	E	E	D	E	В	A	E	В	A
	0		0	3	8	2	4	17		4	12	7
Note: Queue r	epor	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd AM



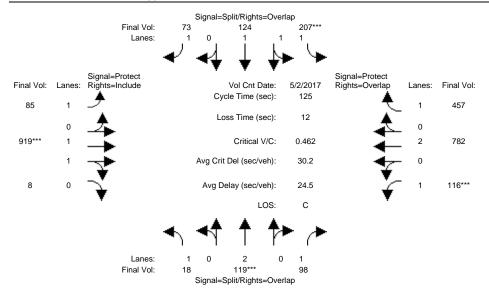
Street Name: Approach:			Woodsi						Bl (U		SB Ram est Bo	-
Movement:	L -	- T ·	- R	L -	- T	- R	L ·	- T	- R	L ·	- T	- R
·		0			10					7		10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Base Vol:	0	0	514	57	329	73	85	1363	46	75	1305	779
Growth Adj: 1	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	514	57	329	73	85	1363	46	75	1305	779
Added Vol:	0	0	0	0	0	0	0	0	0	0	-	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	514	57	329	73	85	1363	46	75	1305	779
User Adj: 1	.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj: 1	.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	57	329	73	85	1363	0	75	1305	779
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	57	329	73	85	1363	0	75	1305	779
PCE Adj: 1	.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj: 1	.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	0	0	57	329	73	85	1363	0	75	1305	779
-												
Saturation Flo	w Mo	odule:	•			•	•			•		
Sat/Lane: 1	900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment: 1	.00	1.00	1.00	0.85	1.00	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Lanes: 0	0.00	0.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	0	0	1900	1615	1900	1615	1805	3610	1805	1805	3610	1615
-												
Capacity Analy	rsis	Module	e:			•	•			•		
Vol/Sat: 0	0.00	0.00	0.00	0.04	0.17	0.05	0.05	0.38	0.00	0.04	0.36	0.48
Crit Moves:					****		****					****
Green/Cycle: 0	0.00	0.00	0.00	0.31	0.31	0.39	0.08	0.57	0.00	0.07	0.55	0.86
Volume/Cap: 0	0.00	0.00	0.00	0.11	0.56	0.12	0.56	0.66	0.00	0.63	0.66	0.56
Delay/Veh:	0.0	0.0	0.0	39.7	47.5	31.0	75.2	24.7	0.0	83.2	26.0	3.6
User DelAdj: 1	.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	39.7	47.5	31.0	75.2	24.7	0.0	83.2	26.0	3.6
LOS by Move:	Δ	Δ	А	D	D	С		С	А		С	A
HCM2kAvgQ:	0	0	0	2	13	2	5	24	0	5	23	11
Note: Queue re			the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj AM



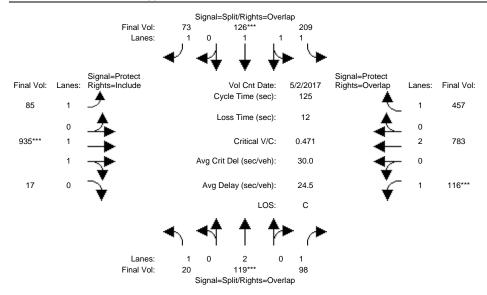
Street Name: Approach:			Woodsi	de Rd Soi	ıth Bo	und	Vet	terans	Bl (U	S101 S	SB Ram est Bo	_
Movement:	L	- T	- R	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R
Min. Green:		0			10			10		7		10
Y+R: 		4.0			4.0			4.0	4.0		4.0	4.0
Volume Module	1		ı	ı		- 1	I		1	Ţ		1
Base Vol:	0	0	514	57	329	73	85	1363	46	75	1305	779
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	514	57	329	73	85	1363	46	75	1305	779
Added Vol:	0	0	0	0	2	0	0	0	0	0	0	10
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	514	57	331	73	85	1363	46	75	1305	789
User Adj:		1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	57	331	73	85	1363	0	75	1305	789
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	57	331	73	85	1363	0	75	1305	789
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	0	0		331	73		1363	0		1305	789
Saturation F			·			·						
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.85	1.00	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Lanes:	0.00	0.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	0	0	1900	1615	1900	1615	1805	3610	1805	1805	3610	1615
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	0.00	0.00	0.00	0.04	0.17	0.05	0.05	0.38	0.00	0.04	0.36	0.49
Crit Moves:					****		****					****
Green/Cycle:	0.00	0.00	0.00	0.31	0.31	0.39	0.08	0.57	0.00	0.07	0.55	0.86
Volume/Cap:	0.00	0.00	0.00	0.11	0.57	0.12	0.57	0.66	0.00	0.63	0.65	0.57
Delay/Veh:	0.0	0.0	0.0	39.9	47.9	31.3	75.6	24.5	0.0	83.0	25.7	3.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	39.9	47.9	31.3	75.6	24.5	0.0	83.0	25.7	3.6
LOS by Move:			A	D	D	С	E	С	A	F	С	A
HCM2kAvgQ:	0		0	2	13	2	5	24	0	5	23	11
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



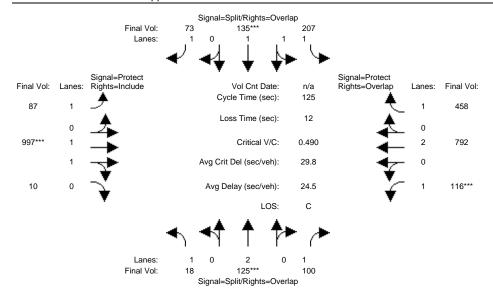
Street Name:		Win	slow/i	nducti	rial				Whippl	e Ave		
Approach:	No:	rth Bo	und	Soı	ath Bo	und	Εá	ast Bo	und	We	est Bo	und
Movement:	L	– T ·	– R	ь -	- T	– R	ь.	- T	- R	L ·	- T	– R
Min. Green:	10	10	10	10	10	10	. 7	10	10	. 7	10	10
Y+R:		4.0				4.0			4.0			
Volume Module	e: >>	Count					45 AM	- 8:4	5 AM			
Base Vol:					124		85		8	116	782	457
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:				207	124	73	85	919	8	116		457
Added Vol:				0		0	0	0		0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	119	98	207	124	73	85	919	8	116	782	457
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	119	98	207	124	73	85	919	8	116	782	457
PHF Volume: Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	119	98	207	124	73	85	919	8	116	782	457
PCE Adj:			1.00	1.00	1.00		1.00	1.00	1.00		1.00	1.00
MLF Adj:					1.00			1.00	1.00		1.00	1.00
FinalVolume:			98			73			8		782	457
Saturation F				1		'	1		'	1		į
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:					0.92			0.95	0.95		0.95	0.85
Lanes:					1.12		1.00	1.98	0.02		2.00	1.00
Final Sat.:					1968				31		3610	
Capacity Ana				1			1		'	1		1
Vol/Sat:	-			0 06	0 06	0 05	0 05	0 26	0.26	0 06	0.22	0.28
Crit Moves:				****	0.00	0.03	0.03	****	0.20	****	0.22	0.20
Green/Cycle:				0 14	0 14	0.27	0 14	0.55	0.55	0 14	0.55	0.68
Volume/Cap:					0.47			0.47	0.47		0.39	0.41
Delay/Veh:					50.4			17.1	17.1		16.4	8.9
User DelAdj:					1.00			1.00	1.00		1.00	1.00
AdjDel/Veh:								17.1	17.1		16.4	8.9
								В		D		
LOS by Move: HCM2kAvgQ:	ע 1	2	ر ت	ر 5	ב	2	ט	11		Д 4		A 8
									ТТ	4	9	O
Note: Queue	repor	rea is	the n	uilber	or ca	rs ber	тапе	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj AM



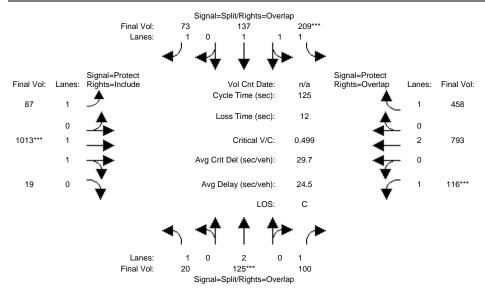
Street Name:									Whippl	e Ave		
Approach:	No:	rth Bo	und	Soi	ith Bo	und	Εá	ast Bo	und	We		und
Movement:											- T	
Min. Green:		10			10		•			7		10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module				_						116	700	457
Base Vol:	18		98	207		73	85		8	116		457
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:			98	207		73	85	919	8	116	782	457
Added Vol:			0	2	2	0	0	16	9	0	1	0
Reassigned :		0	0	0	0	0	0		0	0	0	0
Initial Fut:		119	98	209		73	85		17	116	783	457
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	119	98	209	126	73	85	935	17	116	783	457
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	119	98	209	126	73	85	935	17	116	783	457
		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
FinalVolume:			98	209	126	73	85	935	17	116	783	457
				1								
Saturation Fl			,	1		1	ı		'	1		1
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.92	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Lanes:	1.00	2.00	1.00	1.87	1.13	1.00	1.00	1.96	0.04	1.00	2.00	1.00
Final Sat.:	1805	3610	1615	3277	1976	1615	1805	3535	64	1805	3610	1615
Capacity Anal				'		'	'		,	'		'
		0.03	0.06	0.06	0.06	0.05	0.05	0.26	0.26	0.06	0.22	0.28
Crit Moves:		****			****			****		***		
Green/Cycle:	0.08	0.08	0.21	0.13	0.13	0.27	0.14	0.56	0.56	0.13	0.55	0.68
Volume/Cap:			0.28	0.48		0.16		0.48	0.48		0.39	0.41
Delay/Veh:			41.5	50.6		34.6		17.0	17.0		16.3	9.0
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:				50.6		34.6	49.2		17.0		16.3	9.0
LOS by Move:			41.5	50.0 D	50.0 D	34.0 C	49.2 D		17.0 B	51.5 D	10.3	
HCM2kAvgQ:	р 1		ر 3	ں 5		2	ر 3		11	Д 4		A 8
									ΤŢ	4	9	ď
Note: Queue 1	repor	tea is	ine n	umber	or ca	rs per	Tane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd AM



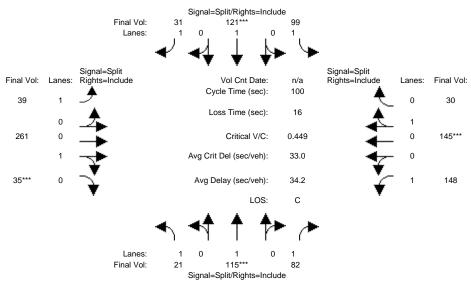
Street Name: Approach:								agt Ro	Whippl		et Bo	uind
Movement:	L ·	- T ·	- R	L -	- T	- R	L -	- T	- R	L -	- T	
Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0		4.0		4.0	4.0		4.0	4.0			4.0
Volume Module			I	I		- 1	I		I	I		1
Base Vol:	18	125	100	207	135	73	87	997	10	116	792	458
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	125	100	207	135	73	87	997	10	116	792	458
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18	125	100	207	135	73	87	997	10	116	792	458
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	18	125	100	207	135	73	87	997	10	116	792	458
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	18	125	100	207	135	73	87	997	10	116	792	458
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	18	125	100	207	135	73	87	997	10	116	792	458
Saturation F	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.92	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Lanes:	1.00	2.00	1.00	1.82	1.18	1.00	1.00	1.98	0.02	1.00	2.00	1.00
Final Sat.:					2076	1615		3571	36	1805	3610	1615
Capacity Ana	lysis	Module	e:									
Vol/Sat:	0.01	0.03	0.06	0.07	0.07	0.05	0.05	0.28	0.28		0.22	0.28
Crit Moves:		****			***			****		****		
Green/Cycle:	0.08	0.08	0.21	0.13	0.13	0.27	0.14	0.56	0.56	0.13	0.55	0.68
Volume/Cap:	0.12	0.43	0.30	0.50	0.50	0.17	0.34	0.50	0.50	0.50	0.40	0.42
Delay/Veh:	53.8	55.8	42.1	51.0	51.0	34.9	49.3	16.7	16.7	52.3	16.2	9.0
User DelAdj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.8	55.8	42.1	51.0	51.0	34.9	49.3	16.7	16.7	52.3	16.2	9.0
LOS by Move:		E	D	D	D	С	D	В	В	D	В	A
HCM2kAvgQ:	1	3	3	5	5	2	3	12	12	4	9	8
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj AM



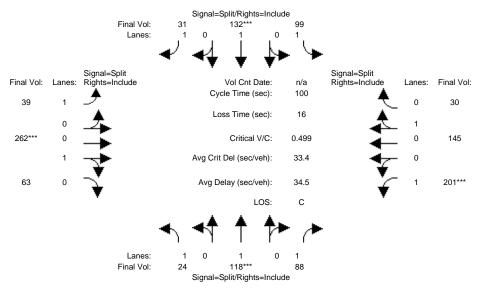
Street Name: Approach:	No:	Win	slow/i	nducti	rial	uind	E:	ast Ro	Whippl	e Ave	est Ro	und
Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R
Min. Green:	10	10	10	10	10	10	7	10	10	. 7	10	10
Y+R:			4.0		4.0			4.0	4.0		4.0	4.0
Volume Module			ı	I		1	I		1	I		1
Base Vol:	18	125	100	207	135	73	87	997	10	116	792	458
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	18	125	100	207	135	73	87	997	10	116	792	458
Added Vol:	2	0	0	2	2	0	0	16	9	0	1	0
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	125	100	209	137	73	87	1013	19	116	793	458
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	20	125	100	209	137	73	87	1013	19	116	793	458
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	20	125	100	209	137	73	87	1013	19	116	793	458
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:		125	100	209		73		1013	19	116	793	458
Saturation F	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.92	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Lanes:	1.00	2.00	1.00	1.81	1.19	1.00	1.00	1.96	0.04	1.00	2.00	1.00
Final Sat.:		3610	1615		2082	1615		3533	66		3610	1615
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	0.01	0.03	0.06	0.07	0.07	0.05	0.05	0.29	0.29		0.22	0.28
Crit Moves:		***		****				****		****		
Green/Cycle:	0.08	0.08	0.21	0.13	0.13	0.27	0.14	0.57	0.57	0.13	0.55	0.68
Volume/Cap:	0.14	0.43	0.30	0.51	0.51	0.17	0.34	0.51	0.51	0.51	0.40	0.42
Delay/Veh:	53.9	55.8	42.4	51.2	51.2	35.0	49.3	16.6	16.6	52.7	16.1	9.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.9	55.8	42.4	51.2	51.2	35.0	49.3	16.6	16.6	52.7	16.1	9.0
LOS by Move:			D	D	D	C	D		В	D	В	A
HCM2kAvgQ:		3	3	5	5		3		12	4	9	8
Note: Queue	repor	ted is	the n	umber	of ca	ırs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



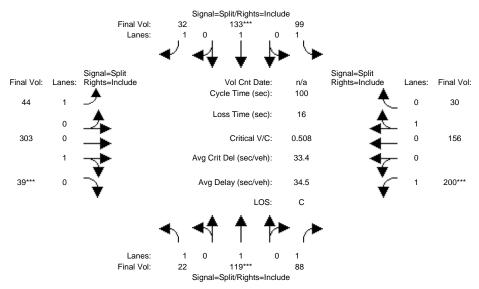
Approach:	No	rth Boi	und	Soı	ıth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T				- R		- T			- T	- R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0		4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:	21		82	99	121	31	39	261	35	148	145	30
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		115	82	99	121	31	39	261	35	148	145	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			82	99	121	31	39	261	35	148	145	30
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:	21	115	82	99	121	31	39	261	35	148	145	30
	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			82	99	121	31	39	261	35	148	145	30
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:		115	82	. 99	121	31	. 39		35	148		30
	ı											
Saturation F			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
-	0.95		0.85	0.95		0.85		0.98	0.98		0.97	0.97
Lanes:	1.00		1.00		1.00	1.00		0.88	0.12		0.83	0.17
Final Sat.:			1615		1900	1615		1645	221		1533	317
	1		- 1									
Capacity Anal			0.05	0 05	0 06	0 02	0 02	0 16	0 16	0 00	0.09	0.09
Vol/Sat:	0.01	0.06 ****	0.05	0.05	0.06	0.02	0.02	0.16	0.16	0.08	****	0.09
Crit Moves:	0 12		0 12	0 14		0 1 4	0 25	0.35		0 01	0.21	0.21
Green/Cycle:			0.13		0.14	0.14			0.35			
Volume/Cap:			0.38 40.5	39.9	0.45	0.14 37.8		0.45 25.4	0.45 25.4		0.45	0.45 35.3
Delay/Veh: User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
_			40.5					25.4			35.3	
AdjDel/Veh: LOS by Move:		41.1 D	40.5 D	39.9 D	40.5 D	37.8 D	Z1.4 C	25.4 C	25.4 C	34.6 C	35.3 D	35.3 D
-	л 1		ط 3	л 3	ם 4	ם 1	1	_	7	4		ر 5
HCM2kAvgQ: Note: Queue 1				_	_	_	_		/	4	5	5
More. Queue 1	repor	Leu IS	the fi	uiiber	or ca	rs ber	тапе	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj AM



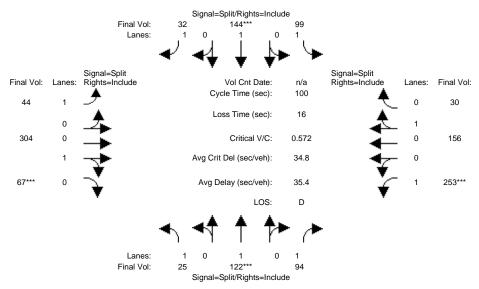
Approach:					uth Bo	und	Ea	ast Bo	und	W∈	est Bo	und
Movement:		- T				- R			- R		- Т	
Min. Green:		10		10				10		10		
Y+R:		4.0				4.0		4.0			4.0	
Volume Modul	e:									•		
Base Vol:	21		82	99		31	39		35	148	145	30
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:			82	99	121	31	39	261	35	148	145	30
Added Vol:	3	3	6	0	11	0	0	1	28	53	0	0
Reassigned:	0		0	0		0	0		0	0	0	0
Initial Fut:		118	88	99		31	39		63	201	145	30
User Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
PHF Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
PHF Volume:			88	99	132	31	39	262	63	201	145	30
Reduct Vol:			0	0		0	0		0	0	0	0
Reduced Vol:			88	99		31	39		63	201	145	30
PCE Adj:	1.00	1.00	1.00		1.00	1.00			1.00	1.00		1.00
MLF Adj:			1.00			1.00			1.00	1.00		1.00
FinalVolume:							39		63		145	30
	1											
Saturation F				1000	1000	1000	1000	1000	1000	1000	1000	1000
	1900		1900		1900	1900		1900	1900	1900		1900
Adjustment:			0.85	0.95		0.85			0.97			0.97
Lanes:			1.00	1.00		1.00			0.19	1.00		0.17
Final Sat.:			1615	1805		1615		110,	358	1805		317
Capacity Ana				1								
Vol/Sat:			0.05	0 05	0.07	0.02	0 02	0.18	0.18	0.11	0 09	0.09
Crit Moves:			0.05	0.03	****	0.02	0.02	****	0.10	****	0.05	0.05
Green/Cycle:			0.12	0.14	0.14	0.14	0.35	0.35	0.35	0.22	0.22	0.22
Volume/Cap:			0.44		0.50	0.14		0.50	0.50	0.50		0.42
Delay/Veh:			42.1	40.2		38.1		26.0	26.0	34.9		34.0
User DelAdj:				1.00		1.00	1.00	1.00	1.00	1.00		1.00
AdjDel/Veh:				40.2		38.1	21.4	26.0	26.0	34.9		34.0
LOS by Move:			D	D			С		С	С	С	С
HCM2kAvgQ:			3	3	4	1	1	8	8	5	4	4
Note: Queue			the n	umber	of ca	ırs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd AM



Approach:		rth Bo						ast Bo		We	est Bo	und
Movement:		- T -			- T			- T			- T	
 Min. Green:	10	10	10	1	10	10	1	10	10	10		10
Y+R:	4.0		4.0		4.0			4.0	4.0			4.0
Volume Module			1	1		ı	1		ı	1		1
Base Vol:	22	119	88	99	133	32	44	303	39	200	156	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	22	119	88	99	133	32	44	303	39	200	156	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	22	119	88	99	133	32	44	303	39	200	156	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:		119	88	99	133	32	44	303	39	200	156	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	22	119	88	99	133	32	44	303	39	200	156	30
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	22	119	88	99	133	32	44	303	39	200	156	30
	I											
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:	0.95	1.00	0.85	0.95	1.00	0.85		0.98	0.98	0.95	0.98	0.98
	1.00		1.00		1.00	1.00		0.89	0.11		0.84	0.16
Final Sat.:			1615		1900	1615		1655	213		1555	299
	1											
Capacity Anal				0 05		0 00		0 10	0 10	0 11	0 10	0 10
Vol/Sat:		0.06	0.05	0.05	0.07	0.02	0.02	0.18	0.18	****	0.10	0.10
0110 110 100	0 10		0 10	0 1 4		0 1 4	0 06	0 06	****		0 00	0 00
Green/Cycle:			0.12		0.14	0.14		0.36	0.36		0.22	0.22
Volume/Cap:			0.44	0.40		0.14		0.51	0.51		0.46	0.46
Delay/Veh:			42.2	40.4		38.2		25.7	25.7		34.8	34.8
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:				40.4		38.2		25.7	25.7		34.8	34.8
LOS by Move:				D		D	C	C	C	D	C	C
HCM2kAvgQ:	1		3	3	4	1	1	_	8	5	5	5
Note: Queue	repor	ted is	the n	umber	oi ca	rs per	lane	•				

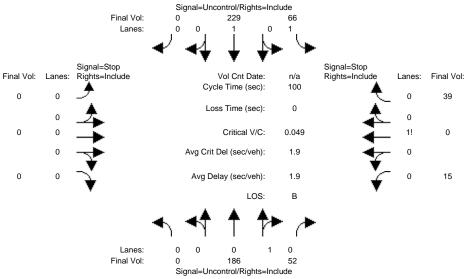
Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj AM



Approach: Nort	ch Bound	Sou	ath Bo	und	Ea	ast Bo	und	W∈	est Bo	und
	T - R		- T			- T			- T	
Min. Green: 10	10 10	1	10	10	1	10	10	1	10	10
			4.0			4.0	4.0			
Volume Module:	ı	1		1	1		1	ı		1
	119 88	99	133	32	44	303	39	200	156	30
Growth Adj: 1.00 1	1.00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse: 22	119 88	99	133	32	44	303	39	200	156	30
	3 6	0	11	0	0	1	28	53	0	0
PasserByVol: 0	0 0	0	0	0	0	0	0	0	0	0
Initial Fut: 25	122 94	99	144	32	44	304	67	253	156	30
User Adj: 1.00 1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj: 1.00 1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	122 94	99	144	32	44	304	67	253	156	30
Reduct Vol: 0	0 0	0	0	0	0	0	0	0	0	0
	122 94	99	144	32	44	304	67	253	156	30
PCE Adj: 1.00 1		1.00		1.00		1.00	1.00	1.00	1.00	1.00
MLF Adj: 1.00 1		1.00		1.00	1.00		1.00	1.00		1.00
FinalVolume: 25			144	32		304	67		156	30
	I									
Saturation Flow Mod										
Sat/Lane: 1900 1		1900		1900	1900		1900	1900		1900
Adjustment: 0.95 1		0.95		0.85		0.97	0.97	0.95		0.98
Lanes: 1.00 1		1.00		1.00		0.82	0.18	1.00		0.16
Final Sat.: 1805 1			1900	1615		1515	334	1805		299
Capacity Analysis M Vol/Sat: 0.01 0		0.05	0 00	0.02	0.02	0 20	0.20	0.14	0 10	0 10
	***	0.05	****	0.02	0.02	0.20	****	****	0.10	0.10
Green/Cycle: 0.11 0		0.13		0.13	0 25	0.35	0.35	0.24	0 24	0.24
Volume/Cap: 0.12 0		0.13		0.15		0.57	0.55	0.57		0.24
Delay/Veh: 40.2 4		41.0		38.7		27.6	27.6	35.0		32.3
User DelAdj: 1.00 1		1.00		1.00	1.00		1.00	1.00		1.00
AdjDel/Veh: 40.2 4		41.0		38.7	21.7		27.6	35.0		32.3
LOS by Move: D		11.0 D	13.5 D	D	Z1.7	27.0 C	27.0 C	23.0 C	72.3 C	72.5 C
_		3	5	1	1			7	_	5
Note: Queue reporte		_			_		_ 3	,	,	3

Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) Existing AM

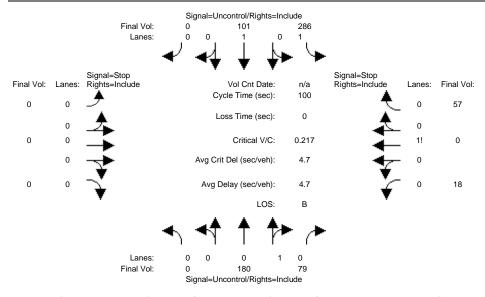
Intersection #9: Winslow & Driveway



			Ü		•							
Approach:	No	rth Bo	ound	Sot	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:	L	- T	- R	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R
Volume Module	e:											
Base Vol:	0	186	52	66	229	0	0	0	0	15	0	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	186	52	66	229	0	0	0	0	15	0	39
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	186	52	66	229	0	0	0	0	15	0	39
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:						0					0	
Critical Gap	Modu	le:										
Critical Gp:												
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Mod	ule:											
Cnflict Vol:	xxxx	xxxx	xxxxx	238	xxxx	xxxxx	XXXX	xxxx	xxxxx	573	573	212
Potent Cap.:	xxxx	xxxx	xxxxx	1341	xxxx	xxxxx	XXXX	xxxx	xxxxx	484	432	833
Move Cap.:	xxxx	xxxx	xxxxx	1341	xxxx	xxxxx	XXXX	xxxx	xxxxx	466	411	833
Volume/Cap:	xxxx	xxxx	XXXX	0.05	xxxx	XXXX	XXXX	xxxx	XXXX	0.03	0.00	0.05
Level Of Ser	vice 1	Module	:									·
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX
Control Del:				7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	684	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.3	XXXXX
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	10.7	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	В	*
ApproachDel:	X	xxxxx		X	xxxxx		x	xxxxx			10.7	
ApproachLOS:		*			*			*			В	
Note: Queue	repor	ted is	s the 1	number	of ca	ars per	r lane					
	_					_						

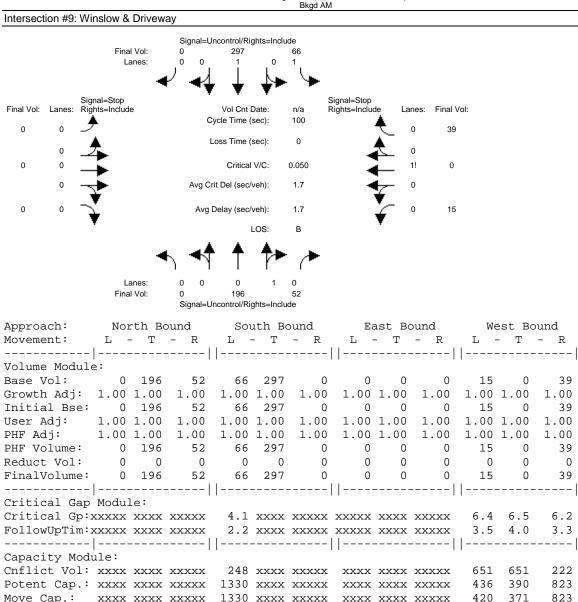
Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing + Proj AM

Intersection #9: Winslow & Driveway



Approach:	No	rth Bo	ound	Sou	uth Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:											- T	- R
							:					
Volume Modul	e:											
Base Vol:	0	186	52	66	229	0	0	0	0	15	0	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	186	52	66	229	0	0	0	0	15	0	39
Added Vol:	0	0	13	92	0	0	0	0	0	3	0	12
Reassigned :	0	-6	14	128	-128	0	0	0	0	0	0	6
Initial Fut:	0	180	79	286	101	0	0	0	0	18	0	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	0	180	79	286	101	0	0	0	0	18	0	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	180	79	286	101	0	0	0	0	18	0	57
Critical Gap	Modu.	le:										
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Mod	ule:											
Cnflict Vol:	xxxx	xxxx	xxxxx	259	xxxx	xxxxx	XXXX	xxxx	xxxxx	893	893	220
Potent Cap.:	xxxx	xxxx	xxxxx	1317	xxxx	xxxxx	XXXX	xxxx	xxxxx	315	283	825
Move Cap.:	xxxx	xxxx	xxxxx	1317	xxxx	xxxxx	XXXX	xxxx	xxxxx	262	222	825
Volume/Cap:	xxxx	xxxx	XXXX	0.22	xxxx	XXXX	XXXX	xxxx	XXXX	0.07	0.00	0.07
Level Of Ser	vice 1	Module	≘:									
2Way95thQ:	xxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX
Control Del:				8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	545	XXXXX
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	XXXXX
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.7	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	В	*
ApproachDel:	x	xxxxx		x	xxxxx		x	xxxxx			12.7	
ApproachLOS:		*			*			*			В	
Note: Queue	report	ted is	s the r	number	of ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative)



651 651 -----| Level Of Service Module: Control Del:xxxxx xxxx xxxxx A * * LOS by Move: * * * * * * LT - LTR - RT Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT Shared LOS: * * * * * * * B

XXXXXX

Note: Queue reported is the number of cars per lane.

XXXXXX

ApproachDel:

ApproachLOS:

XXXXXX

11.0

1.00

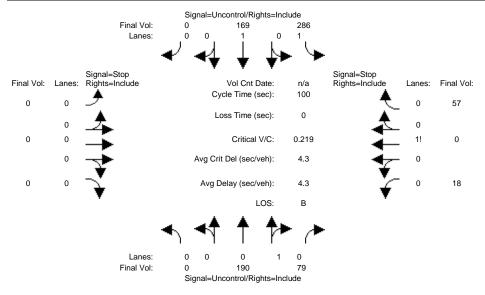
0

6.2

3.3

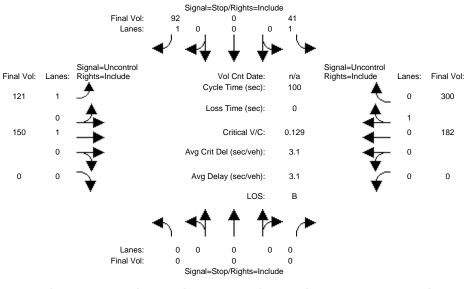
Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Bkgd + Proj AM

Intersection #9: Winslow & Driveway



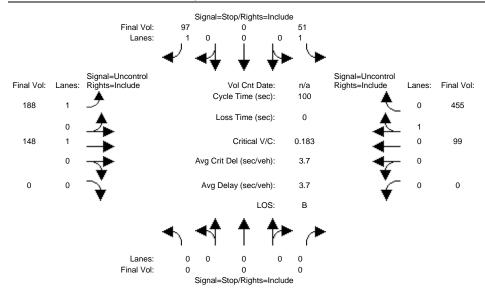
Approach:	No	rth Bo	ound	Sou	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:											- T	- R
Volume Module	: :											
Base Vol:	0		52	66	297	0	0	0	0	15	0	39
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	0	196	52	66	297	0	0	0	0	15	0	39
Added Vol:	0	0	13	92	0	0	0	0	0	3	0	12
Reassigned :	0	-6	14	128	-128	0	0	0	0	0	0	6
Initial Fut:	0	190	79	286	169	0	0	0	0	18	0	57
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	190	79	286	169	0	0	0	0	18	0	57
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	190	79	286	169	0	0	0	0	18	0	57
Critical Gap	Modu.	le:										
Critical Gp:x	xxxx	xxxx	xxxxx	4.1	xxxx	XXXXX	xxxxx	xxxx	XXXXX	6.4	6.5	6.2
FollowUpTim:x	xxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Modu	ıle:											
Cnflict Vol:	xxxx	xxxx	XXXXX	269	xxxx	XXXXX	xxxx	XXXX	XXXXX	971	971	230
Potent Cap.:	xxxx	xxxx	xxxxx	1306	xxxx	xxxxx	XXXX	xxxx	xxxxx	283	255	815
Move Cap.:	xxxx	xxxx	xxxxx	1306	xxxx	xxxxx	xxxx	xxxx	xxxxx	235	199	815
Volume/Cap:	xxxx	xxxx	XXXX	0.22	xxxx	XXXX	xxxx	xxxx	XXXX	0.08	0.00	0.07
Level Of Serv	ice I	Module	e:									
2Way95thQ:	xxxx	xxxx	xxxxx	0.8	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:x	xxxx	xxxx	xxxxx	8.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	512	xxxxx
SharedQueue:x	xxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx
Shrd ConDel:x												XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	В	*
ApproachDel:	x	xxxxx		X	xxxxx		X	xxxx			13.2	
ApproachLOS:		*			*			*			В	
Note: Queue r	report	ted is	s the r	number	of ca	ars pei	r lane					

Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) Existing AM



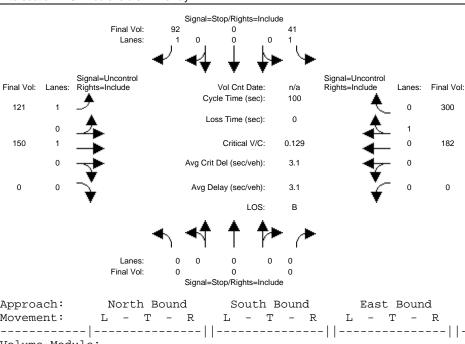
			· ·									
Approach:	No	rth Bo	ound	Sot	uth Bo	ound	Εá	ast Bo	ound	We	est Bo	ound
Movement:	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R	L -	- T	- R
Volume Module	e :					,						
Base Vol:	0	0	0	41	0	92	121	150	0	0	182	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	41	0	92	121	150	0	0	182	300
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	41	0	92	121	150	0	0	182	300
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	41	0	92	121	150	0	0	182	300
Critical Gap	Modu.	le:				,			'			
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:									xxxxx			
Capacity Modu	ˈ.le:			' '		'	1			' '		'
Cnflict Vol:		xxxx	xxxxx	724	xxxx	332	482	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:					xxxx	714			xxxxx		xxxx	xxxxx
Move Cap.:					xxxx		1091	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:						0.13	0.11	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Serv				1 1		'	1			1 1		1
2Way95thO:				0.4	xxxx	0.4	0.4	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:						10.8			xxxxx			
LOS by Move:		*	*	C		В	А		*	*	*	*
-		- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT -	- LTR	- RT
Shared Cap.:												xxxxx
SharedQueue:												
Shrd ConDel:												
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	ν.	xxxxx			12.5		ν.	xxxxx		v	xxxxx	
ApproachLOS:	Λ.	*			12.3 B		Α.	*			*	
Note: Queue	renor		s the r	numher	_	ard nev	- lane					
Mote. Queue I	rebor	ccu Ii	a cire i	TUILDET	OT C	TE DET	. тапе	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing + Proj AM



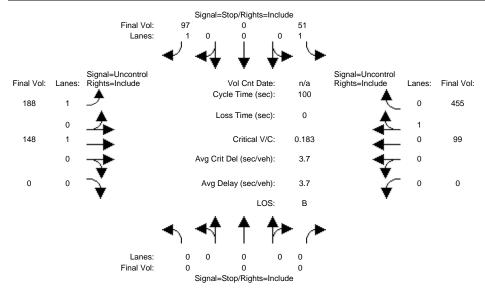
						ound					est Bo	
Movement:												
Volume Modul		•		4.7		0.0	101	1 = 0			100	200
Base Vol:	0	0					121		0			300
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		0	0	41	0	92	121	150	0	0	182	300
Added Vol:	U	0	0	8	0	2	31		0	0	0	72
Reassigned:		0	0	2	0	3	36	-2	0	0	-83	83
Initial Fut:		0	0	51	0	97	188	148	0	0	99	455
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:	0	0	0	51	0	97	188	148	0	0	99	455
Reduct Vol:		•	0	0	0	0	0	-	0	0	0	0
FinalVolume:				51			188		•	0		455
Critical Gap												
Critical Gp:												
FollowUpTim:	XXXXX	XXXX	XXXXX	3.5	XXXX	3.3	2.2	XXXX	XXXXX	XXXXX	XXXX	XXXXX
Capacity Mod												
Cnflict Vol:					xxxx				xxxxx			XXXXX
Potent Cap.:									XXXXX			XXXXX
Move Cap.:									XXXXX			XXXXX
Volume/Cap:						0.13			XXXX			XXXX
Level Of Ser												
2Way95thQ:												
Control Del:						10.8			xxxxx			
LOS by Move:						В			*		*	*
Movement:												
Shared Cap.:												
SharedQueue:	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX
Shrd ConDel:												
Shared LOS:	*	*	*		*	*	*	*	*	*	*	*
ApproachDel:					14.1		X			X		
ApproachLOS:		*			В			*			*	
Note: Queue	repor	ted i	s the r	number	of ca	ars per	lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) Bkgd AM



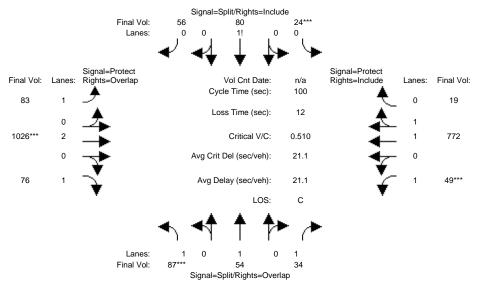
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - T - R L - T - T - R L - T - T - R L - T - T - R L - T - T - R L - T - T
Volume Module: Base Vol: 0 0 0 41 0 92 121 150 0 0 182 300 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Volume Module: Base Vol: 0 0 0 41 0 92 121 150 0 0 182 300 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Volume Module: Base Vol: 0 0 0 41 0 92 121 150 0 0 182 300 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Initial Bse: 0 0 0 41 0 92 121 150 0 0 182 300 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Volume: 0 0 0 41 0 92 121 150 0 0 182 300 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 0 0 41 0 92 121 150 0 0 182 300
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 0 0 41 0 92 121 150 0 0 182 300
FinalVolume: 0 0 0 41 0 92 121 150 0 0 182 300
Critical Gap Module:
Critical Carvery vyry 64 yyry 62 41 yyry vyryy vyryy
Critical Gp.xxxxx xxxx xxxx 0.4 xxxx 0.2 4.1 xxxx xxxxx xxxx xxxx xxxx xxxx
FollowUpTim:xxxxx xxxxx xxxxx 3.5 xxxx 3.3 2.2 xxxx xxxxx xxxxx xxxxx xxxxx
Capacity Module:
Cnflict Vol: xxxx xxxxx xxxxx 724 xxxx 332 482 xxxx xxxxx xxxx xxxx xxxxx
Potent Cap.: xxxx xxxxx xxxxx 396 xxxx 714 1091 xxxx xxxxx xxxx xxxxx xxxxx
Move Cap.: xxxx xxxxx xxxxx 362 xxxx 714 1091 xxxx xxxxx xxxxx xxxxx xxxxx
Volume/Cap: xxxx xxxx xxxx 0.11 xxxx 0.13 0.11 xxxx xxxx xxxx xxxx xxxx
Level Of Service Module:
2Way95thQ: xxxx xxxxx xxxxx 0.4 xxxx 0.4 0.4 xxxx xxxx
Control Del:xxxxx xxxxx xxxxx 16.2 xxxx 10.8 8.7 xxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: * * * C * B A * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
Shared LOS: * * * * * * * * * * * *
ApproachDel: xxxxxx 12.5 xxxxxx xxxxxx
ApproachLOS: * B * *
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Bkgd + Proj AM



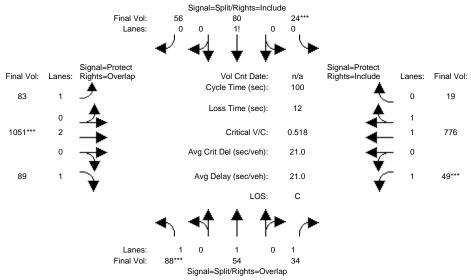
				South Bound			East Bound						
Volume Module													
Base Vol:	0	0				92	121	150	0	0	182	300	
Growth Adj:			1.00		1.00	1.00	1.00		1.00		1.00	1.00	
Initial Bse:	0	0	0	41	0	92	121	150	0	0	182	300	
Added Vol:	0	0	0	8	0	2	31	0	0	0	0	72	
Reassigned :	0	0	0	2	0	3	36	-2	0	0	-83	83	
Initial Fut:	0	0	0	51	0	97	188	148	0	0	99	455	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	0	0	51	0	97	188	148	0	0	99	455	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
FinalVolume:		0	0	~ -	-	97			0	0	99	455	
Critical Gap													
Critical Gp:													
FollowUpTim:										xxxxx			
	•												
Capacity Mod													
Cnflict Vol:									XXXXX		XXXX	XXXXX	
Potent Cap.:									XXXXX		XXXX	XXXXX	
Move Cap.:									XXXXX		XXXX	XXXXX	
Volume/Cap:					XXXX				XXXX		XXXX		
	l .												
Level Of Serv													
2Way95thQ:										XXXX			
Control Del:					XXXX					xxxxx			
LOS by Move:	*	*	*	С	*	В	A	*	*	*	*	*	
Movement:	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT	
Shared Cap.:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX	
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX	
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	
ApproachDel:	X	xxxxx			14.1		XX	xxxx		XX	xxxx		
ApproachLOS:		*			В			*			*		
Note: Queue	report	ted is	s the r	number	of ca	ars per	r lane						

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



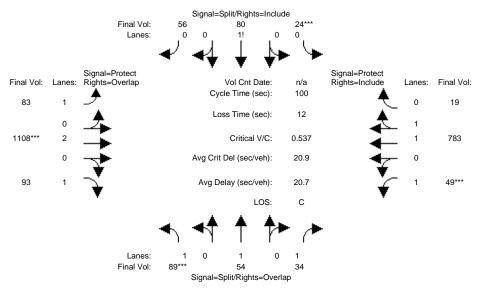
Approach:	No	rth Boi	ınd	501	1+h Bo	und	.	act Po	und	TAT	act Po	und
Movement:		- T			- T			- T			- T	- R
Min. Green:	10		10	1	10	10	7		10	7		10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module	e:											
Base Vol:	87	54	34	24	80	56	83	1026	76	49	772	19
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Initial Bse:		54	34	24	80	56		1026	76	49	772	19
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	87		34	24	80	56		1026	76	49	772	19
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:	87	54	34	24	80	56		1026	76	49	772	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			34	24	80	56		1026	76	49	772	19
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			34	. 24		56		1026	76	. 49		19
	1											
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
-	0.95		0.85	0.95		0.95		0.95	0.85		0.95	0.95
Lanes:		1.00	1.00		0.50	0.35		2.00	1.00		1.95	0.05
Final Sat.:			1615	270	899	629		3610	1615		3509	86
	1		- 1									
Capacity Anal						0 00	0 05		0 05	0 00		0 00
Vol/Sat:		0.03	0.02		0.09	0.09	0.05	0.28	0.05	0.03 ****	0.22	0.22
Crit Moves:	****	0 10	0 15	****	0 1 1	0 1 1	0 15	****	0 64			0 46
Green/Cycle:			0.17		0.17	0.17		0.54	0.64		0.46	0.46
Volume/Cap:			0.12	0.53		0.53		0.53	0.07		0.47	0.47
Delay/Veh:			35.4	39.6		39.6		15.0	6.8		18.7	18.7
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:		42.5	35.4		39.6	39.6		15.0	6.8		18.7	18.7
LOS by Move:			D	D	D	D	D	В	A	D	В	В
HCM2kAvgQ:	3		1	, 5	5	5	2		1	2	9	9
Note: Queue	repor	ted is	the n	umber	oi ca	rs per	ıane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj AM



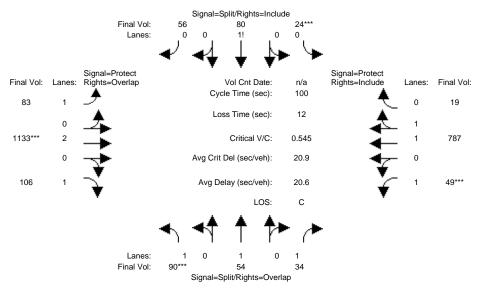
Approach:	No	rth Boi	und	Col	ı+h Po	und	r.	at Bo	und	TuT	at Po	und
Movement:		- T				- R		авс во - Т			- БС - Т	- R
									- K			
Min. Green:	10		10	1	10	10	7		10	7		10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module	e:		·									
Base Vol:	87	54	34	24	80	56	83	1026	76	49	772	19
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Initial Bse:	87	54	34	24	80	56	83	1026	76	49	772	19
Added Vol:	1	0	0	0	0	0	0	25	13	0	4	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	88	54	34	24	80	56	83	1051	89	49	776	19
User Adj:		1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	88	54	34	24	80	56	83	1051	89	49	776	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	88	54	34	24	80	56	83	1051	89	49	776	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	88	54	34	24	80	56		1051	89	49	776	19
	1											
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:	0.95		0.85	0.95		0.95		0.95	0.85		0.95	0.95
Lanes:		1.00	1.00		0.50	0.35		2.00	1.00		1.95	0.05
Final Sat.:			1615		899	629		3610	1615		3510	86
	Į.											
Capacity Ana	-											
Vol/Sat:		0.03	0.02		0.09	0.09	0.05	0.29	0.06		0.22	0.22
Crit Moves:	****			****				****		****		
Green/Cycle:			0.17		0.17	0.17		0.54	0.64		0.47	0.47
Volume/Cap:			0.12		0.54	0.54		0.54	0.09		0.47	0.47
Delay/Veh:			35.4		40.1	40.1		15.0	6.7		18.5	18.5
User DelAdj:			1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:		42.5	35.4	40.1	40.1	40.1	38.8	15.0	6.7	46.4	18.5	18.5
LOS by Move:		D	D	D	D	D	D	В	A	D	В	В
HCM2kAvgQ:	3		1	5	5	5	2		1	2	9	9
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd AM



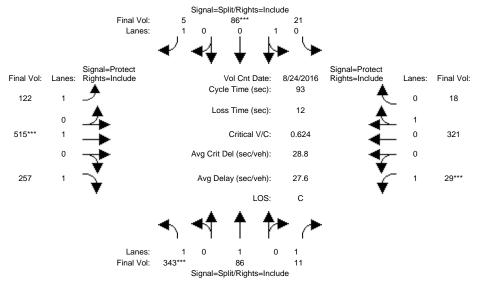
Approach:	No	rth Bo	und					ast Bo	und	West Bound			
Movement:		- T ·						- T		L -		- R	
Min. Green:	10	10	10		10		7		10	7		10	
Y+R:	4.0		4.0		4.0			4.0	4.0			4.0	
Volume Module	e:		·										
Base Vol:	89	54	34	24	80	56	83	1108	93	49	783	19	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	89	54	34	24	80	56	83	1108	93	49	783	19	
Added Vol:	U	0	0	0	0	0	0	0	0	0	0	0	
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	89	54	34	24	80	56	83	1108	93	49	783	19	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	89	54	34	24	80	56	83	1108	93	49	783	19	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	89	54	34	24	80	56	83	1108	93	49	783	19	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	89	54	34	24	80	56	83	1108	93	49	783	19	
Saturation F	low M	odule:											
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.95	1.00	0.85	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.95	0.95	
Lanes:	1.00	1.00	1.00	0.15	0.50	0.35	1.00	2.00	1.00	1.00	1.95	0.05	
Final Sat.:			1615		899	629		3610	1615		3510	85	
	1												
Capacity Ana													
Vol/Sat:		0.03	0.02	0.09	0.09	0.09	0.05	0.31	0.06		0.22	0.22	
Crit Moves:	****			****				****		****			
Green/Cycle:			0.17		0.16	0.16	0.15		0.65		0.47	0.47	
Volume/Cap:			0.12	0.56		0.56	0.31		0.09		0.47	0.47	
Delay/Veh:			35.4		41.2	41.2		14.9	6.5		18.1	18.1	
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00	
AdjDel/Veh:			35.4	41.2		41.2		14.9	6.5		18.1	18.1	
LOS by Move:			D	D	D	D	D	В	A	D	В	В	
HCM2kAvgQ:	3		1	5	5	5	2		1	2	9	9	
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj AM



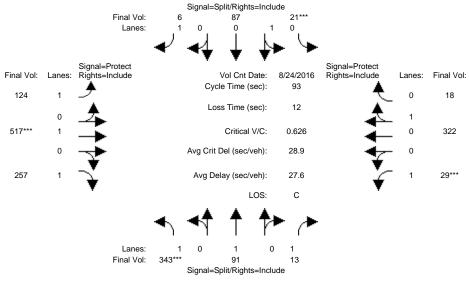
Approach:	No	rth Bo	und					ast Bo	und				
Movement:		- T ·						- T		L -		- R	
Min. Green:	10	10	10		10		7		10	7		10	
Y+R:	4.0		4.0		4.0			4.0				4.0	
Volume Module			'	'		'	'		'	'		'	
Base Vol:	89	54	34	24	80	56	83	1108	93	49	783	19	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	89	54	34	24	80	56	83	1108	93	49	783	19	
Added Vol:	1		0	0	0	0	0	25	13	0	4	0	
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	90	54	34	24	80	56	83	1133	106	49	787	19	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	90	54	34	24	80	56	83	1133	106	49	787	19	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	90	54	34	24	80	56	83	1133	106	49	787	19	
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	90	54	34	24	80	56	83	1133	106	49	787	19	
	1												
Saturation F													
Sat/Lane:	1900	1900	1900	1900	1900	1900		1900	1900		1900	1900	
Adjustment:	0.95	1.00	0.85	0.95	0.95	0.95	0.95	0.95	0.85	0.95	0.95	0.95	
	1.00		1.00		0.50	0.35		2.00	1.00		1.95	0.05	
Final Sat.:			1615		899	629		3610	1615		3511	85	
	1												
Capacity Ana													
Vol/Sat:		0.03	0.02		0.09	0.09	0.05	0.31	0.07		0.22	0.22	
Crit Moves:	****			****				****		****			
Green/Cycle:			0.17		0.16	0.16		0.55	0.65		0.47	0.47	
Volume/Cap:			0.12	0.57		0.57		0.57	0.10		0.47	0.47	
Delay/Veh:			35.4		41.7	41.7		14.9	6.5		18.0	18.0	
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00	
AdjDel/Veh:			35.4	41.7		41.7		14.9	6.5		18.0	18.0	
LOS by Move:			D	D	D	D	D	В	A	D	В	В	
HCM2kAvgQ:	3		1	. 5	5	5	2		1	2	9	9	
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



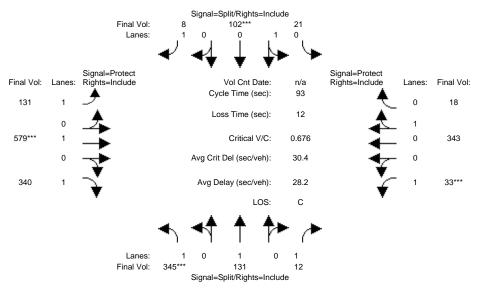
Approach:	No	rth Bo	und	Sou	ıth Bo	und	Ea	ast Bo	und	West Bound			
Movement:		- T ·			- T			- T		L·		- R	
Min Coope			10	1		10	!		10	•	1.0	1	
Min. Green:	10	10		10			4			4	10	10	
Y+R:	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0	
Volume Module	1			1	. 201 19								
Base Vol:	326	82	39	24 A	19 201 82	40	116	489	320	28	305	19	
	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Initial Bse:		82	39	20	82	40	116	489	320	28	305	19	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol:	-		0	0	0	0	0	0	0	0	0	0	
Initial Fut:			39	20	82	40	116	489	320	28	305	19	
User Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
PHF Adj:			0.95	0.95		0.95		0.95	0.95		0.95	0.95	
_	343	86	41	21	86	42	122	515	337	29	321	20	
Reduct Vol:	0	0	30	0	0	37	0	0	80	0	0	2	
Reduced Vol:	343	86	11	21	86	5	122	515	257	29	321	18	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	343	86	11	21	86	5	122	515	257	29	321	18	
Saturation F	low Mo	odule:	·			•							
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.92	0.97	0.51	0.96	0.96	0.82	0.95	1.00	0.81	0.92	0.96	0.95	
Lanes:	1.00	1.00	1.00	0.20	0.80	1.00	1.00	1.00	1.00	1.00	0.95	0.05	
Final Sat.:			965		1462	1562		1900	1531		1725	97	
	1		I										
Capacity Ana													
Vol/Sat:		0.05	0.01	0.06	0.06	0.00	0.07	0.27	0.17		0.19	0.19	
Crit Moves:	****				****			****		****			
Green/Cycle:			0.30	0.11		0.11		0.42	0.42		0.34	0.34	
Volume/Cap:			0.04	0.55		0.03		0.65	0.40		0.55	0.55	
Delay/Veh:			22.9	42.6		37.2		23.5	19.4		26.1	26.1	
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00	
AdjDel/Veh:			22.9	42.6		37.2		23.5	19.4		26.1	26.1	
LOS by Move:			C	D	D	D	D	C	В	D 1	C	C	
HCM2kAvgQ:	8		0	4	4	0	3		5	1	8	8	
Note: Queue	repor	tea is	the n	umper	or ca	rs per	⊥ane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj AM



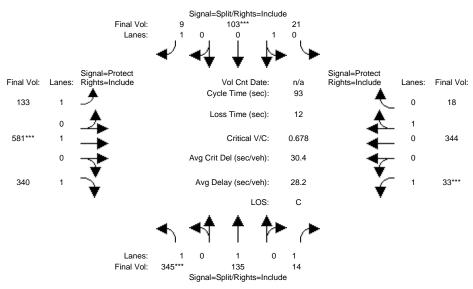
Approach:	No:	rth Bo	und	Sot	ıth Bo	und	Ea	ast Bo	und	₩e	est Bo	und
Movement:		- T				- R		- T			- T	
Min Grant									 10	•		
		10		10			4			4		10
Y+R:		4.0			4.0			4.0	4.0	4.0		4.0
Volume Module									1			
Base Vol:	326	82	39	20	82	40	116	489	320	28	305	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	326	82	39	20	82	40	116	489	320	28	305	19
Added Vol:	0	4	2	0	1	1	2	2	0	0	1	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			41	20	83	41	118	491	320	28	306	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	343	91	43	21	87	43	124	517	337	29	322	20
Reduct Vol:	0	0	30	0	0	37	0	0	80	0	0	2
Reduced Vol:	343	91	13	21	87	6	124	517	257	29	322	18
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:				21			124	517	257	29	322	18
	Į.											
Saturation F												
Sat/Lane:		1900	1900	1900	1900	1900		1900	1900	1900		1900
Adjustment:			0.51	0.96		0.82		1.00	0.81	0.92		0.95
		1.00	1.00	0.19		1.00		1.00	1.00	1.00		0.05
Final Sat.:			965		1466	1562		1900	1531	1745		96
Capacity Ana												
Vol/Sat:		0.05	0.01		0.06	0.00	0.07	0.27	0.17		0.19	0.19
Crit Moves:	****			****				****		****		
Green/Cycle:			0.30		0.11	0.11		0.42	0.42		0.34	0.34
Volume/Cap:			0.05		0.55	0.04		0.65	0.40	0.39		0.55
Delay/Veh:			23.0	42.8		37.3		23.5	19.3	46.7		26.2
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:				42.8		37.3		23.5	19.3	46.7		26.2
LOS by Move:			C	D	D		D		В	D	C	C
HCM2kAvgQ:		2	0	4	_	-	3		5	1	8	8
Note: Queue	repor	tea is	the n	umber	oi ca	ırs per	Iane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd AM



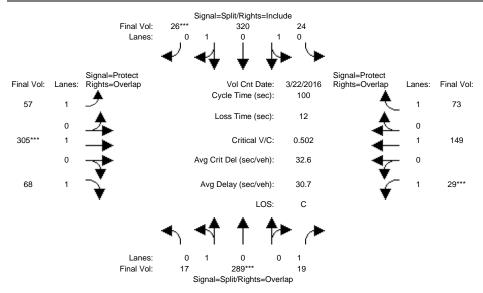
Approach:	No	rth Boi	und					ast Bo	und				
Movement:		- T -						- T			- T		
 Min. Green:	10	10	10		10			10	10	4		10	
Y+R:	4.0		4.0		4.0			4.0				4.0	
Volume Module			'	'		'	'		'	'		'	
Base Vol:	328	124	40	20	97	43	124	550	399	31	326	19	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	328	124	40	20	97	43	124	550	399	31	326	19	
	0	0	0	0	0	0	0	0	0	0	0	0	
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	328	124	40	20	97	43	124	550	399	31	326	19	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
PHF Volume:	345	131	42	21	102	45	131	579	420	33	343	20	
Reduct Vol:	0	0	30	0	0	37	0	0	80	0	0	2	
Reduced Vol:	345		12	21	102	8	131	579	340	33	343	18	
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00	
FinalVolume:			12			8	131		340		343	18	
	Į.												
Saturation F													
Sat/Lane:		1900	1900	1900		1900	1900		1900		1900	1900	
Adjustment:			0.51	0.96		0.82		1.00	0.81		0.96	0.96	
	1.00		1.00		0.83	1.00		1.00	1.00		0.95	0.05	
Final Sat.:			965		1511	1562	1805		1531		1733	91	
	1												
Capacity Ana													
Vol/Sat:		0.07	0.01	0.07	0.07	0.01	0.07	0.30	0.22		0.20	0.20	
Crit Moves:	****				****			****		****			
Green/Cycle:			0.28	0.11		0.11		0.44	0.44		0.35	0.35	
Volume/Cap:			0.04	0.63		0.05	0.56		0.51		0.56	0.56	
Delay/Veh:			24.2	46.1		37.4	41.3		19.6		25.5	25.5	
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00	
AdjDel/Veh:				46.1		37.4	41.3		19.6		25.5	25.5	
LOS by Move:			C	D	D		D	C	В	D		C	
J ~		3	0	. 5	5	-	3		7	2	9	9	
Note: Queue	report	ted is	the n	umber	of ca	rs per	Lane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj AM



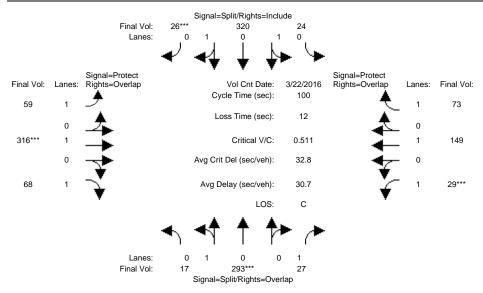
Approach:									und				
Movement:		- T -						- T			- T		
 Min. Green:	10	10	10		10			10	10	4		10	
Y+R:	4.0		4.0		4.0		_	4.0					
Volume Module			'	'		'	'		'	1		'	
Base Vol:	328	124	40	20	97	43	124	550	399	31	326	19	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	328	124	40	20	97	43	124	550	399	31	326	19	
	0	4	2	0	1	1	2	2	0	0	1	0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	328	128	42	20	98	44	126	552	399	31	327	19	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	
PHF Volume:	345	135	44	21	103	46	133	581	420	33	344	20	
Reduct Vol:	0	0	30	0	0	37	0	0	80	0	0	2	
Reduced Vol:	345	135	14	21	103	9	133	581	340	33	344	18	
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:			14		103	9	133		340		344	18	
	Į.												
Saturation F													
Sat/Lane:		1900	1900		1900	1900	1900		1900		1900	1900	
Adjustment:	0.92	0.97	0.51	0.96	0.96	0.82	0.95		0.81	0.92	0.96	0.96	
	1.00		1.00		0.83	1.00		1.00	1.00		0.95	0.05	
Final Sat.:			965		1514	1562	1805		1531		1733	91	
	1												
Capacity Ana													
Vol/Sat:		0.07	0.01	0.07	0.07	0.01	0.07	0.31	0.22		0.20	0.20	
Crit Moves:	****				****			****		****			
Green/Cycle:			0.28	0.11		0.11		0.44	0.44		0.35	0.35	
Volume/Cap:			0.05		0.63	0.06		0.70	0.51		0.57	0.57	
Delay/Veh:			24.3	46.4		37.4	41.2		19.6		25.7	25.7	
User DelAdj:			1.00		1.00	1.00	1.00		1.00		1.00	1.00	
AdjDel/Veh:				46.4		37.4	41.2		19.6		25.7	25.7	
LOS by Move:			C	D			D	С	В	D		C	
		3	-	. 5	5	-	3		7	2	9	9	
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



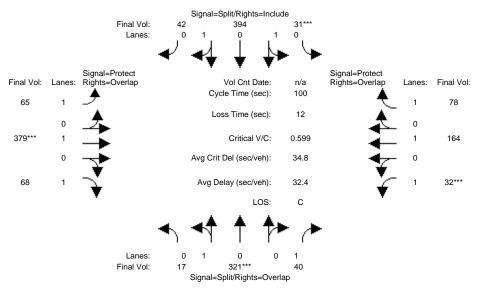
Approach: Movement:	L - T - R			South Bound L - T - R				und – R				
	10				10			10		•	10	10
Y+R:			4.0		4.0			4.0		4.0	4.0	4.0
Volume Module									'	1		
Base Vol:	17	289	19	24	320	26	57	305	68	29	149	73
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	289	19	24	320	26	57	305	68	29	149	73
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	289	19	24	320	26	57	305	68	29	149	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	289	19	24	320	26	57	305	68	29	149	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			19	24	320	26	57	305	68	29	149	73
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	17	289	19	24	320	26	57	305	68	29	149	73
Saturation Fl	Low Mo	odule:										
Sat/Lane:		1900	1900		1900	1900		1900	1900	1900		1900
Adjustment:	1.00	1.00	0.85	0.94	0.94	0.94	0.95	1.00	0.85	0.95	1.00	0.85
		0.94	1.00		1.73	0.14	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:			1615		3082	250		1900	1615	1805		1615
Capacity Anal	-											
Vol/Sat:		0.16	0.01	0.10	0.10	0.10	0.03	0.16	0.04	0.02	0.08	0.05
0110 110 100		****				****		****		****		
Green/Cycle:			0.38	0.20		0.20		0.31	0.61	0.07		0.42
Volume/Cap:			0.03	0.53		0.53		0.53	0.07	0.23		0.11
Delay/Veh:			19.6		36.7	36.7		29.6	7.9	44.9		17.8
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			19.6		36.7	36.7		29.6	7.9	44.9		17.8
LOS by Move:			В	D	D	D	D	С	A	D	C	В
HCM2kAvgQ:			0	5	5	5	2	-	1	1	4	1
Note: Queue 1	repor	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj AM



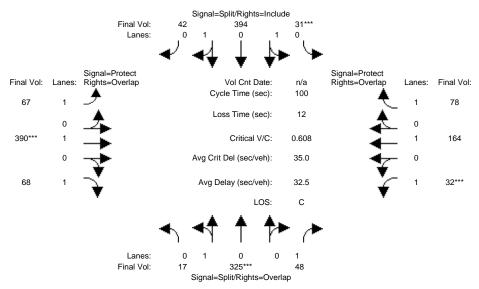
Approach: Movement:	L - T - R			South Bound L - T - R				und – R				
		10			10			10		•	10	10
Y+R:		4.0			4.0			4.0		4.0	4.0	4.0
Volume Module				1			1		'	1		ı
Base Vol:	17		19	24	320	26	57	305	68	29	149	73
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	289	19	24	320	26	57	305	68	29	149	73
Added Vol:	0	4	8	0	0	0	2	11	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	293	27	24	320	26	59	316	68	29	149	73
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	293	27	24	320	26	59	316	68	29	149	73
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			27	24	320	26	59	316	68	29	149	73
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			27		320	26		316	68	29	149	73
Saturation Fl	Low Mo	odule:										
Sat/Lane:		1900	1900		1900	1900		1900	1900	1900		1900
Adjustment:			0.85		0.94	0.94		1.00	0.85	0.95		0.85
		0.95	1.00		1.73	0.14		1.00	1.00	1.00	1.00	1.00
Final Sat.:			1615		3082	250		1900	1615	1805		1615
Capacity Anal	-											
		0.16	0.02	0.10	0.10	0.10	0.03	0.17	0.04	0.02	0.08	0.05
0110 110 100		***				****		****		****		
Green/Cycle:			0.38	0.19		0.19		0.31	0.62	0.07		0.42
Volume/Cap:			0.04		0.54	0.54		0.54	0.07	0.23		0.11
Delay/Veh:			19.9		37.1	37.1		29.5	7.7	44.9		17.8
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			19.9	37.1		37.1		29.5	7.7	44.9		17.8
LOS by Move:			В	D	D	D	D	C	A	D	C	В
HCM2kAvgQ:			1	, 5	5	5	2	-	1	1	4	1
Note: Queue 1	repor	ted is	the n	umber	of ca	rs per	Lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd AM



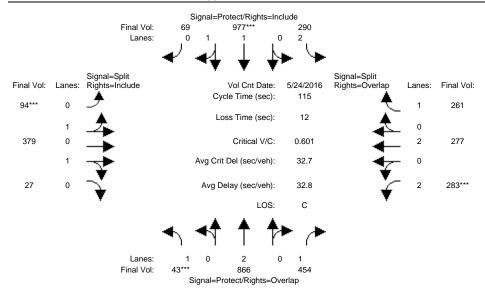
Approach:	No	rth Bo	und		South Bound East Bound			und				
Movement:		- T									- T	
Min. Green:					10			10		•	10	
Y+R:		4.0			4.0			4.0			4.0	
1+K•												
Volume Modul			I	I		I	I		I	I		I
Base Vol:	17	321	40	31	394	42	65	379	68	32	164	78
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	17	321	40	31	394	42	65	379	68	32	164	78
Added Vol:		0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	17	321	40	31	394	42	65	379	68	32	164	78
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	17	321	40	31	394	42	65	379	68	32	164	78
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	17	321	40	31	394	42	65	379	68	32	164	78
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:				31				379	68			78
	1											
Saturation F												
Sat/Lane:			1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.85	0.93		0.93		1.00	0.85	0.95		0.85
Lanes:			1.00	0.13		0.18		1.00	1.00	1.00		1.00
Final Sat.:			1615			319		1900	1615	1805		1615
Capacity Ana				0 10	0 10	0 10	0 04	0 00	0 04	0 00	0 00	0 05
Vol/Sat:			0.02	0.13	0.13	0.13	0.04	0.20	0.04	0.02	0.09	0.05
Crit Moves:			0 25		0 01	0 01	0 16		0 60		0 00	0 44
Green/Cycle:			0.35		0.21	0.21		0.32	0.60		0.23	0.44
Volume/Cap:			0.07		0.63	0.63		0.63	0.07	0.25		0.11 16.7
Delay/Veh:			21.5		37.7	37.7		31.2	8.3		33.2	
User DelAdj: AdjDel/Veh:				1.00		1.00 37.7		1.00	1.00	1.00	33.2	1.00 16.7
LOS by Move:				37.7 D			37.0 D			45.1 D	33.∠ C	16.7 B
HCM2kAvgQ:			_	ע 7			بر 2		A 1	1		в 1
Note: Queue :			_	-					Τ	Т	4	Т
Note: Queue	rebor	Lea IS	che II	unber	OI Ca	ra ber	Tane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj AM



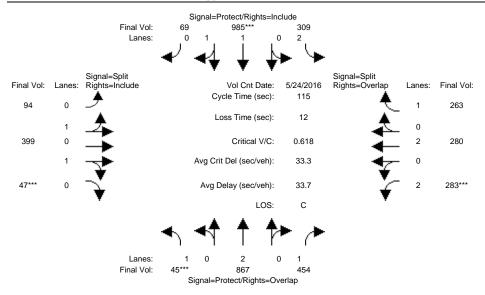
Approach:	No	rth Boı	und	Sou	South Bound L - T - R								
Movement:		- T -									- T		
Min. Green:	10		10		10		7		10	7		10	
Y+R:	4.0		4.0		4.0			4.0	4.0			4.0	
Volume Module	e :		·										
Base Vol:	17	321	40	31	394	42	65	379	68	32	164	78	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	17	321	40	31	394	42	65	379	68	32	164	78	
Added Vol:	0	4	8	0	0	0	2	11	0	0	0	0	
PasserByVol:			0	0	0	0	0	0	0	0	0	0	
Initial Fut:	17	325	48	31	394	42	67	390	68	32	164	78	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	17	325	48	31	394	42	67	390	68	32	164	78	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:			48	31	394	42	67	390	68	32	164	78	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	17	325	48	31	394	42	67	390	68	32	164	78	
Saturation F	low M	odule:											
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	1.00	1.00	0.85	0.93	0.93	0.93	0.95	1.00	0.85	0.95	1.00	0.85	
Lanes:	0.05	0.95	1.00	0.13	1.69	0.18	1.00	1.00	1.00	1.00	1.00	1.00	
Final Sat.:			1615		2997	319	1805		1615		1900	1615	
	1												
Capacity Ana													
Vol/Sat:		0.18	0.03		0.13	0.13	0.04	0.21	0.04		0.09	0.05	
0110 110 100				****				****		****			
Green/Cycle:			0.35		0.21	0.21		0.32	0.60		0.23	0.44	
Volume/Cap:	0.64	0.64	0.08		0.64	0.64		0.64	0.07		0.37	0.11	
Delay/Veh:			21.7		38.2	38.2		31.2	8.2		33.0	16.8	
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00	
AdjDel/Veh:			21.7		38.2	38.2		31.2	8.2		33.0	16.8	
LOS by Move:			C	D	D		D	С	A	D	С	В	
HCM2kAvgQ:	10		1	7	-	-	2		1	1	4	1	
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



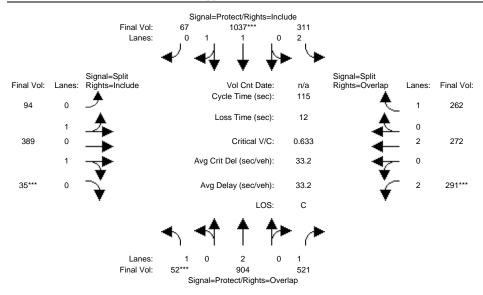
	El Camino Real North Bound Sout						Whipple Av East Bound West Bound					
											est Bo	
Movement:												
Min. Green:		10			 10					•	10	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module					_		0.4	270	0.7	202	077	0.61
Base Vol:	43		454	290	977	69	94		27	283		261
Growth Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
Initial Bse:		866	454	290	977	69	94		27	283	277	261
Added Vol:	0		0	0	0	0	0	-	0	0	0	0
PasserByVol:			0	0		0	0		0	0	0	0
Initial Fut:			454	290		69	94		27	283		261
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	43	866	454	290	977	69	94	379	27	283	277	261
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	43	866	454	290	977	69	94	379	27	283	277	261
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
FinalVolume:			454	290	977	69	94	379	27	283	277	261
Saturation F				1		ļ	1		1	1		1
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.94	0.94	0.93	0.93	0.93	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	2.00	1.87	0.13	0.38	1.51	0.11	2.00	2.00	1.00
Final Sat.:	1805	3610	1615	3502	3338	236	667	2690	192		3610	1615
Capacity Anal	lysis	Modul	e:				•			•		
Vol/Sat:	0.02	0.24	0.28	0.08	0.29	0.29	0.14	0.14	0.14	0.08	0.08	0.16
Crit Moves:	****				***		***			***		
Green/Cycle:	0.06	0.40	0.53	0.14	0.47	0.47	0.23	0.23	0.23	0.13	0.13	0.27
		0.60	0.53		0.62	0.62		0.62	0.62		0.59	0.60
Delay/Veh:			18.3		23.1	23.1		41.3	41.3		48.9	39.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			18.3	48.8		23.1		41.3	41.3		48.9	39.0
LOS by Move:			10.3	70.0 D		23.1 C	TI.3		T1.5	49.7 D		39.0 D
HCM2kAvgQ:	ם 1		10	Б 6	15	15	ط 9		9	ر 5		8
							-		9	5	5	Ó
Note: Queue	repor	rea is	the n	uilber	or ca	rs ber	тапе	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj AM



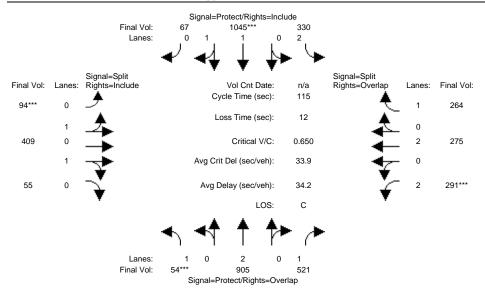
Street Name:		El Camino Real						Whipple Av					
Approach:	No	rth Bo	und	Sou	ıth Bo	und	Εa	ast Bo	und	We	est Bo	und	
Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L ·	- T	- R	
Min. Green:	7	10	10	. 7	10	10	10	10	10	10	10	10	
Y+R:		4.0			4.0				4.0				
Volume Module					_								
Base Vol:					977			379				261	
Growth Adj:				1.00		1.00		1.00	1.00		1.00	1.00	
Initial Bse:	43	866				69	94			283		261	
Added Vol:				19		0	0		20	0		2	
Reassigned :				0	-		0		-	0	-	0	
Initial Fut:	45	867	454	309	985	69	94	399	47	283	280	263	
User Adj:			1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume: Reduct Vol:	45	867	454	309	985	69	94	399	47	283	280	263	
Reduct Vol:	0	0	0	0		0	0	0		0	0	0	
Reduced Vol:	45	867	454	309	985	69	94	399	47	283	280	263	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	45	867	454	309	985	69	94	399	47	283	280	263	
Saturation Fl													
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.95	0.95	0.85	0.92	0.94	0.94	0.93	0.93	0.93	0.92	0.95	0.85	
Lanes:	1.00	2.00	1.00	2.00	1.87	0.13	0.35	1.48	0.17	2.00	2.00	1.00	
Final Sat.:				3502	3340	234	615	2609	307	3502	3610	1615	
Capacity Anal						'	'		'	'		'	
Vol/Sat:	-			0.09	0.29	0.29	0.15	0.15	0.15	0.08	0.08	0.16	
Crit Moves:					***				****	****			
Green/Cycle:		0.39	0.51	0.14	0.47	0.47	0.24	0.24	0.24	0.13	0.13	0.27	
Volume/Cap:			0.55	0.62		0.63		0.63	0.63		0.61	0.61	
_		29.5	19.8		24.1	24.1		40.6	40.6		49.8	39.1	
User DelAdj:				1.00		1.00		1.00	1.00		1.00	1.00	
AdjDel/Veh:				49.0		24.1		40.6	40.6		49.8	39.1	
LOS by Move:				17.0 D			10.0 D			D		D	
HCM2kAvgQ:			10	6	15	15	10			5	5	8	
Note: Queue r									10	3	J	U	
More. Anene I	CPOL	ccu is	CITE II	anner	or ca	To her	Tarre	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd AM



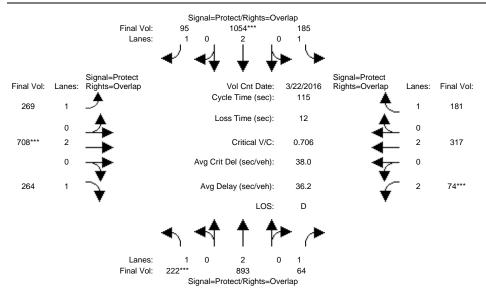
Street Name:	El Camino Real North Bound South Bound						Whipple Av					
Approach:	No:	rth Bo	und	Soi	ıth Bo	ound	Εá	ast Bo	und	₩€	est Bo	und
Movement:							Ь-	- T	- R	L -	- T	- R
Min. Green:		10							10			
Y+R:	4.0		4.0	4.0	4.0	4.0		4.0		4.0		4.0
Volume Module												
Base Vol:		904	521	311	1037	67	94	389	35	291	272	262
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:			521		1037	67	94	389	35	291		262
Added Vol:		0	0	0	0	0	0	0	0	0	0	0
Reassigned:			0	0	-	0	0	0	0	0		0
Initial Fut:		904	521		1037		94		35	291		262
User Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
PHF Volume:			521		1037	67	94	389	35	291	272	262
Reduct Vol:			0	0	0	0	0	0	0	0		0
Reduced Vol:	52		521		1037	67	94	-	35	291		262
PCE Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:				311		67		389	35	291		262
Saturation F				1		ı	ı		1	1		ı
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.94	0.94	0.93	0.93	0.93	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	2.00	1.88	0.12	0.36	1.50	0.14	2.00	2.00	1.00
Final Sat.:	1805	3610	1615	3502	3360	217	643	2660	239	3502	3610	1615
Capacity Ana				•		•				•		
Vol/Sat:	0.03	0.25	0.32	0.09	0.31	0.31	0.15	0.15	0.15	0.08	0.08	0.16
Crit Moves:	****				****				****	****		
Green/Cycle:	0.06	0.40	0.53	0.14	0.48	0.48	0.23	0.23	0.23	0.13	0.13	0.27
Volume/Cap:	0.47	0.63	0.61	0.63	0.64	0.64	0.64	0.64	0.64	0.64	0.58	0.60
Delay/Veh:	55.4	28.7	20.3	49.1	23.4	23.4	42.1	42.1	42.1	50.8	49.1	38.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.4	28.7	20.3	49.1	23.4	23.4	42.1	42.1	42.1	50.8	49.1	38.9
LOS by Move:	E	С	С	D	C	С	D	D	D	D	D	D
HCM2kAvgQ:	2	13	12	6	16	16	10	10	10	5	5	8
Note: Queue		ted is	the n	umber	of ca	ars per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj AM



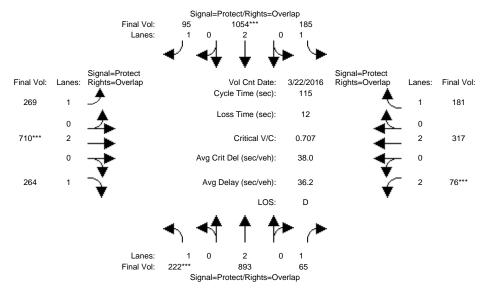
	El Camino Real North Bound South Bound						Whipple Av					
Movement:	L ·	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
		10							10			
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module												
		904	521	211	1037	67	94	389	35	291	272	262
Growth Adj:				1.00				1.00	1.00	1.00		1.00
Initial Bse:			521		1037	67	94	389	35	291		262
Added Vol:	5∠	904								291	3	
PasserByVol:	2	Τ	0 0	19	8	0	0	20	20			2 0
				0		0	0	0	0	0		
Initial Fut:			521		1045		94		55	291		264
User Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:			1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Volume:	54	905	521		1045	67	94	409	55	291	275	264
Reduct Vol:	0	0	0	0	0	0	0	0		0		0
Reduced Vol:	54	905	521	330	1045	67	94	409	55	291	275	264
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:				330		67		409	55	291		264
Saturation F	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.94	0.94	0.93	0.93	0.93	0.92	0.95	0.85
Lanes:			1.00	2.00	1.88	0.12	0.34	1.46	0.20	2.00	2.00	1.00
Final Sat.:	1805	3610	1615				594	2585	348	3502	3610	1615
Capacity Ana									'	'		
Vol/Sat:	0.03	0.25	0.32	0.09	0.31	0.31	0.16	0.16	0.16	0.08	0.08	0.16
Crit Moves:					****		****			***		
Green/Cycle:		0.39	0.51	0.15	0.47	0.47	0.24	0.24	0.24	0.13	0.13	0.27
Volume/Cap:			0.63		0.66	0.66	0.66		0.66		0.61	0.60
Delay/Veh:			21.8		24.4	24.4	41.5		41.5		49.9	39.0
User DelAdj:			1.00	1.00		1.00	1.00		1.00	1.00		1.00
AdjDel/Veh:				49.4		24.4	41.5		41.5	51.7		39.0
LOS by Move:			Z1.0 C				71.5 D			D D		D
HCM2kAvgQ:	2	13	13	7	_	16	10			5		8
Note: Queue									10	5	3	o
Note: Queue .	rebor	teu is	ciie II	unibel	OT CC	rra her	rane.	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



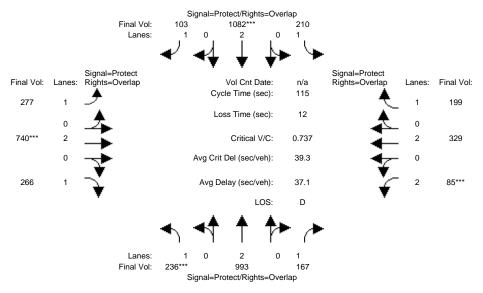
Street Name:		E	l Cami	no Rea	al		Jefferson Ave					
Approach:						und	Εa	ast Bo	und	We	est Bo	und
Movement:	L	– T	– R	$_{\rm L}$.	- T	- R	$_{\rm L}$.	- T	- R	$_{ m L}$.		
Min. Green:	. 7	10	10	7	10	10	7	10	10	. 7	10	10
Y+R:		4.0				4.0			4.0			
								 -				
Volume Module									064		215	1.01
Base Vol:					1054				264			
Growth Adj:								1.00	1.00		1.00	1.00
Initial Bse:				185			269		264	74	317	181
Added Vol:			0				0			0		0
PasserByVol:					0		0	-	0	-	-	0
Initial Fut:				185	1054	95	269	708	264	74	317	181
User Adj:			1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	222	893	64	185	1054	95	269	708	264	74	317	181
Reduct Vol:	U	U	0	0	0	0	0	0	0	0		0
Reduced Vol:	222	893	64	185	1054	95	269	708	264	74	317	181
PCE Adj:	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
FinalVolume:	222	893	64	185	1054	95	269			74	317	181
Saturation F				1			ı		'	1		ı
Sat/Lane:				1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:						0.85		0.95	0.85		0.95	0.85
Lanes:						1.00		2.00	1.00		2.00	
Final Sat.:						1615			1615		3610	
Capacity Anal				I		Į	I		ı	I		ı
Vol/Sat:	-			0 10	0 29	0.06	0 15	0.20	0.16	0 02	0.09	0.11
Crit Moves:		0.25	0.01	0.10	****		0.13	****	0.10	****	0.05	0.11
Green/Cycle:		0 40	0 46	0 17	0 40	0 61	0 21	0.27	0.44	0 06	0.12	0.29
Volume/Cap:					0.73			0.73	0.37		0.72	0.39
Delay/Veh:				48.4		9.5		41.2	22.2		54.3	33.4
User DelAdj:					1.00			1.00	1.00		1.00	1.00
AdjDel/Veh:								41.2	22.2		54.3	
LOS by Move:	ע	12	В 1	D	1 7		D		C			C
HCM2kAvgQ:				, 6		1			6	Τ	6	5
Note: Queue	repor	ted is	the n	umber	oi ca	rs per	⊥ane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj AM



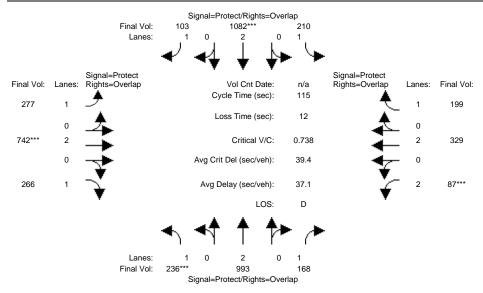
Street Name:				mino Real South Bound			Jefferson Ave East Bound West Bound					
Approach:												
Movement:												- K
Min. Green:		10			10		7			7		10
Y+R:	4.0		4.0		4.0	4.0	4.0		4.0			4.0
Volume Module									'	1		,
Base Vol:	222	893	64	185	1054	95	269	708	264	74	317	181
Growth Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	222		64	185	1054	95	269	708	264	74	317	181
	0	0	1	0	0	0	0	2	0	2	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	222	893	65	185	1054	95	269	710	264	76	317	181
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	222	893	65	185	1054	95	269	710	264	76	317	181
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	222	893	65	185	1054	95	269	710	264	76	317	181
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	222	893	65	185	1054	95	269	710	264	76	317	181
Saturation F	low Mo	odule:	•				•		•	•		·
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1805	3610	1615	1805	3610	1615	1805	3610	1615	3502	3610	1615
Capacity Ana	lysis	Module	e:			•						·
Vol/Sat:	0.12	0.25	0.04	0.10	0.29	0.06	0.15	0.20	0.16	0.02	0.09	0.11
Crit Moves:	****				****			***		****		
Green/Cycle:	0.17	0.40	0.46	0.17	0.40	0.61	0.21	0.27	0.44	0.06	0.12	0.29
Volume/Cap:	0.73	0.62	0.09	0.62	0.73	0.10	0.72	0.73	0.37	0.36	0.72	0.39
Delay/Veh:	54.3	28.3	17.4	48.5	31.4	9.5	49.1	41.2	22.2	52.9	54.3	33.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	54.3	28.3	17.4	48.5	31.4	9.5	49.1	41.2	22.2	52.9	54.3	33.4
LOS by Move:	D	C	В	D	С	A	D	D	С	D	D	С
HCM2kAvgQ:	9	14	1	6	17	1	10	13	6	1	6	5
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd AM



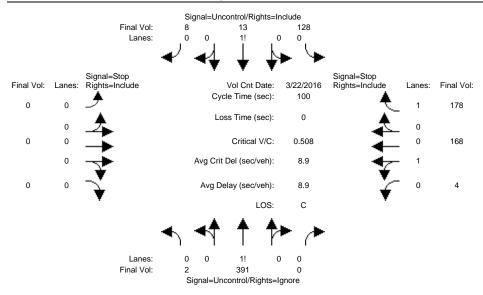
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R - T - R L - T - R L - T - R Min. Green: 7 10 10 7 10 10 7 10 10 7 10 10
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Base Vol: 236 993 167 210 1082 103 277 740 266 85 329 199
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Initial Bse: 236 993 167 210 1082 103 277 740 266 85 329 199
Added Vol: 0 0 0 0 0 0 0 0 0 0 0
Reassigned: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 236 993 167 210 1082 103 277 740 266 85 329 199
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Volume: 236 993 167 210 1082 103 277 740 266 85 329 199
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 236 993 167 210 1082 103 277 740 266 85 329 199
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
FinalVolume: 236 993 167 210 1082 103 277 740 266 85 329 199
Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190
Adjustment: 0.95 0.95 0.85 0.95 0.95 0.85 0.95 0.95 0.85 0.95 0.85
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 2.00 1.00 2.00 2
Final Sat.: 1805 3610 1615 1805 3610 1615 1805 3610 1615 3502 3610 1615
Capacity Analysis Module:
Vol/Sat: 0.13 0.28 0.10 0.12 0.30 0.06 0.15 0.20 0.16 0.02 0.09 0.12
Crit Moves: **** **** ****
Green/Cycle: 0.17 0.40 0.46 0.17 0.39 0.60 0.21 0.27 0.44 0.06 0.12 0.29
Volume/Cap: 0.76 0.69 0.23 0.69 0.76 0.11 0.74 0.76 0.37 0.40 0.74 0.42
Delay/Veh: 55.9 30.3 19.0 51.7 32.6 9.8 50.4 42.2 21.8 53.2 55.2 33.6
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
AdjDel/Veh: 55.9 30.3 19.0 51.7 32.6 9.8 50.4 42.2 21.8 53.2 55.2 33.6
LOS by Move: E C B D C A D D C D E C
HCM2kAvq0: 10 16 4 7 18 1 11 14 6 1 6 5
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj AM



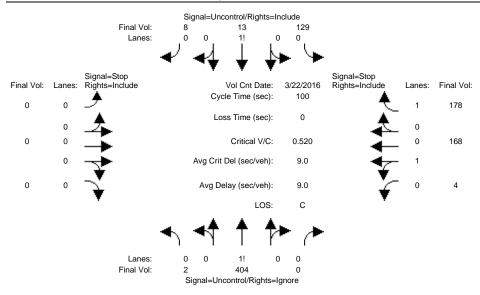
Street Name: Approach:		E: rth Bo		no Rea Sou	South Bound East Bou			efferson Ave ound West Bound				
Movement:	L ·	- T ·	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Min. Green: Y+R:		10		7	10 4.0		7	10 4.0		•	10	10
1+R•												4.0
Volume Module	1			ı		ı	I		ı	1		
Base Vol:	236	993	167	210	1082	103	277	740	266	85	329	199
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	236	993	167	210	1082	103	277	740	266	85	329	199
Added Vol:	0	0	1	0	0	0	0	2	0	2	0	0
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			168		1082	103	277	742	266	87	329	199
User Adj:	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PHF Volume:	236	993	168	210	1082	103	277	742	266	87	329	199
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		993	168	210	1082	103	277	742	266	87	329	199
PCE Adj:	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
MLF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:			168		1082	103	277	742	266	87		199
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.85	0.95		0.85		0.95	0.85		0.95	0.85
Lanes:	1.00		1.00		2.00	1.00		2.00	1.00		2.00	1.00
Final Sat.:		3610	1615		3610	1615		3610	1615		3610	1615
	1											
Capacity Ana	-											
,	0.13	0.28	0.10	0.12	0.30	0.06	0.15	0.21	0.16		0.09	0.12
Crit Moves:	****				****			****		****		
Green/Cycle:			0.46		0.39	0.60		0.27	0.44		0.12	0.29
Volume/Cap:		0.69	0.23	0.69		0.11		0.76	0.37		0.74	0.42
Delay/Veh:		30.3	19.0		32.7	9.8		42.2	21.8		55.1	33.6
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			19.0			9.8		42.2	21.8		55.1	33.6
LOS by Move:		С	В	D	C	A	D	D	С	D	E	C
HCM2kAvgQ:	10	16	4	7	18	1	11	14	6	1	6	5
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing AM



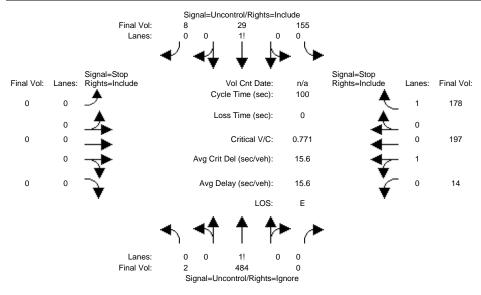
Approach:				Sou	ath Bo	Bound East Bound			ound			
Movement:												
							1 1					
Volume Module								:45				
Base Vol:	2	360	143	118	12	7	-		0	4	155	164
Growth Adj:			1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Initial Bse:			143	118	12	7	0	0	0	4	155	164
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:			0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	360	143	118	12	7	0	0	0	4	155	164
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.00	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:			0	128	13	8	0	0	0	4	168	178
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	2	391	0	128	13	8	0	0	0	4	168	178
Critical Gap I	Modu]	le:										
Critical Gp:	4.1	xxxx	XXXXX	4.1	XXXX	xxxxx	xxxxx	XXXX	XXXXX	6.4	6.5	6.2
FollowUpTim:												3.3
Capacity Modu	le:											
Cnflict Vol:	21	xxxx	XXXXX	391	XXXX	xxxxx	XXXX	XXXX	XXXXX	669	673	391
Potent Cap.: 3	1595	xxxx	XXXXX	1167	XXXX	xxxxx	XXXX	XXXX	XXXXX	423	377	657
Move Cap.:	1595	xxxx	XXXXX	1167	XXXX	xxxxx	XXXX	XXXX	XXXXX	384	332	657
Volume/Cap:	0.00	xxxx	XXXX	0.11	XXXX	XXXX	XXXX	XXXX	XXXX	0.01	0.51	0.27
Level Of Serv	ice N	Module	<u>:</u>									
2Way95thQ:	0.0	xxxx	xxxxx	0.4	xxxx	xxxxx	XXXX	xxxx	XXXXX	XXXX	xxxx	1.1
Control Del:								xxxx	XXXXX	xxxxx	xxxx	12.5
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	В
Movement:	LT -	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX	333	xxxx	XXXXX
SharedQueue:x	xxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	2.8	xxxx	XXXXX
Shrd ConDel:xx	xxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	26.9	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	D	*	*
ApproachDel:	XX	xxxxx		X	xxxxx		X	xxxxx			19.6	
ApproachLOS:		*			*			*			C	
Note: Queue re	eport	ted is	the r	number	of ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing + Proj AM



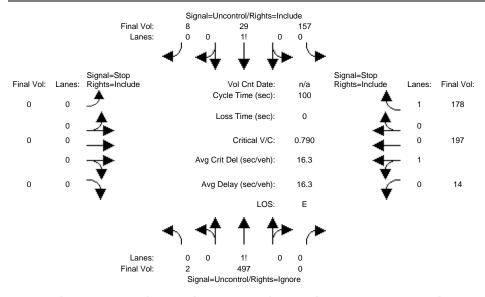
Movement: L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R
Volume Module: >> Count Date: 22 Mar 2016 << 7:45-8:45 Base Vol: 2 360 143 118 12 7 0 0 0 4 155 164 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Base Vol: 2 360 143 118 12 7 0 0 0 0 4 155 164 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Initial Bse: 2 360 143 118 12 7 0 0 0 0 4 155 164 Added Vol: 0 12 0 1 0 0 0 0 0 0 0 0 0 0 0 Reassigned: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 2 372 143 119 12 7 0 0 0 0 4 155 164 User Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.0
Added Vol: 0 12 0 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reassigned: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 2 372 143 119 12 7 0 0 0 0 4 155 164 User Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.0
User Adj: 1.00 1.00 0.00 1.00 1.00 1.00 1.00 1.0
PHF Adj: 0.92 0.92 0.00 0.92 0.92 0.92 0.92 0.92
PHF Volume: 2 404 0 129 13 8 0 0 0 4 168 178 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 2 404 0 129 13 8 0 0 0 0 4 168 178
Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx 4.1 xxxx xxxxx xxxx xxxx
Critical Gap Module: Critical Gp: 4.1 xxxx xxxxx 4.1 xxxx xxxxx xxxxx xxxxx xxxxx 6.4 6.5 6.2 FollowUpTim: 2.2 xxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxxx xxxx 3.5 4.0 3.3
Critical Gp: 4.1 xxxx xxxxx 4.1 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx 6.4 6.5 6.2 FollowUpTim: 2.2 xxxx xxxxx 2.2 xxxx xxxxx xxxx xxx
FollowUpTim: 2.2 xxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxxx xxxx xxxx 3.5 4.0 3.3
Capacity Module: Cnflict Vol: 21 xxxx xxxxx 404 xxxx xxxxx xxxx xxxx xx
Capacity Module: Cnflict Vol: 21 xxxx xxxxx 404 xxxx xxxxx xxxx xxxx xx
Cnflict Vol: 21 xxxx xxxxx 404 xxxx xxxxx xxxx xxxx xx
Potent Cap:: 1595 xxxx xxxxx 1154 xxxx xxxxx xxxx xxxx x
Move Cap.: 1595 xxxx xxxxx 1154 xxxx xxxxx xxxx xxxx x
Volume/Cap: 0.00 xxxx xxxx 0.11 xxxx xxxx xxxx xxxx
Level Of Service Module: 2Way95thQ: 0.0 xxxx xxxxx 0.4 xxxx xxxxx xxxx xxxx
Level Of Service Module: 2Way95thQ: 0.0 xxxx xxxxx 0.4 xxxx xxxxx xxxx xxxx
2Way95thQ: 0.0 xxxx xxxxx 0.4 xxxx xxxxx xxxx xxxx
Control Del: 7.3 xxxx xxxxx 8.5 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
LOS by Move: A * * A * * * * * * B
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
Shared LOS: * * * * * * * * * D * *
ApproachDel: xxxxxx xxxxx xxxxx 20.2
ApproachLOS: * * C
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Bkgd AM



						Bound East Bound							
Movement:													
Volume Module						_	_	_					
Base Vol:		445	145	143	27	7		0	0			164	
Growth Adj:			1.00		1.00	1.00		1.00			1.00	1.00	
Initial Bse:			145	143	27	7	0	0	0	13	181	164	
Added Vol:	0	-	0	0	0	0	0	0	0	0	0	0	
Reassigned:			0	0	0	0	0	0	0	0	0	0	
Initial Fut:		445	145	143	27	7	0	0	0	13	181	164	
User Adj:		1.00	0.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Adj:			0.00		0.92	0.92		0.92	0.92		0.92	0.92	
PHF Volume:			0	155	29	8	0	0	0	14	197	178	
Reduct Vol:		0	0	0	0	0	-	0	0	0	0	0	
FinalVolume:				155			0		0			178	
Critical Gap													
Critical Gp:												6.2	
FollowUpTim:												3.3	
	1												
Capacity Mod	ule:												
Cnflict Vol:										832		484	
Potent Cap.:								XXXX	XXXXX		303	583	
Move Cap.:				1079	xxxx	XXXXX	XXXX	XXXX	XXXXX	298	255	583	
Volume/Cap:						XXXX			XXXX		0.77	0.31	
							:						
Level Of Ser													
2Way95thQ:				0.5	XXXX	XXXXX	XXXX	xxxx	xxxxx	XXXX	XXXX	1.3	
Control Del:									xxxxx		XXXX	13.9	
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	В	
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	
Shared Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX	258	xxxx	XXXXX	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX	6.4	xxxx	XXXXX	
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	60.7	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	*	*	*	F	*	*	
ApproachDel:	X	xxxxx		X	xxxxx		X	xxxxx			39.3		
ApproachLOS:		*			*			*			E		
Note: Queue	repor	ted is	s the r	number	of ca	ars per	r lane						

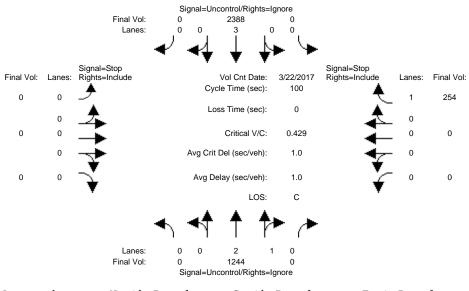
Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Bkgd + Proj AM



Approach:	No	rth Bo	ound	Sou	ath Bo	Bound East Bound			ound				
Movement:													
Volume Modul													
Base Vol:		445	145	143	27	7		0				164	
Growth Adj:			1.00		1.00	1.00		1.00			1.00	1.00	
Initial Bse:			145	143	27	7	0	0	0	13	181	164	
Added Vol:	0		0	1	-	0	0	0	0	0	0	0	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	2	457	145	144	27	7	0	0	0	13	181	164	
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	0.92	0.92	0.00	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	
PHF Volume:		497	0	157	29	8	0	0	0	14	197	178	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
FinalVolume:			0			8			0			178	
							:						
Critical Gap	Modu.	le:											
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2	
FollowUpTim:												3.3	
							:						
Capacity Mod	ule:												
Cnflict Vol:	37	xxxx	xxxxx	497	xxxx	xxxxx	XXXX	xxxx	xxxxx	847	851	497	
Potent Cap.:	1574	xxxx	xxxxx	1067	xxxx	xxxxx	XXXX	xxxx	xxxxx	332	297	573	
Move Cap.:	1574	xxxx	XXXXX	1067	xxxx	XXXXX	XXXX	xxxx	XXXXX	291	249	573	
Volume/Cap:	0.00	xxxx	XXXX	0.15	xxxx	XXXX	XXXX	xxxx	XXXX	0.05	0.79	0.31	
Level Of Ser	vice D	Module	<u> </u>									•	
2Way95thQ:	0.0	xxxx	xxxxx	0.5	xxxx	xxxxx	XXXX	xxxx	XXXXX	XXXX	xxxx	1.3	
Control Del:	7.3	xxxx	xxxxx	9.0	xxxx	xxxxx	xxxxx	xxxx	XXXXX	xxxxx	xxxx	14.1	
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	В	
Movement:	LT ·	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	251	xxxx	xxxxx	
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.7	xxxx	XXXXX	
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	65.0	xxxx	xxxxx	
Shared LOS:	*	*	*	*	*	*	*	*	*	F	*	*	
ApproachDel:	X	xxxxx		XX	xxxxx		X	xxxxx			41.7		
ApproachLOS:		*			*			*			E		
Note: Queue	report	ted is	s the r	number	of ca	ars pei	r lane						

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing AM

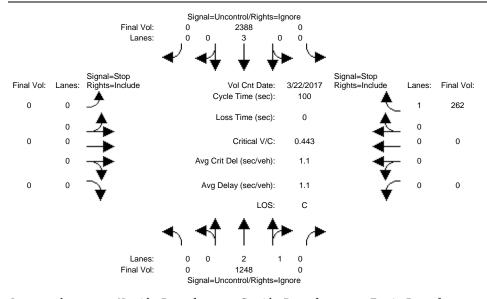
Intersection #17: El Camino Real & Laurel St



Approach:					ath Bo	ound	Ea	ast Bo	ound	und West Bound			
Movement:											- T	- R	
Volume Module						17 <<							
Base Vol:		1244	255		2388	0	0	0	0	0	0	254	
Growth Adj:			1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	
Initial Bse:	0	1244	255	0	2388	0	0	0	0	0	0	254	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	0	1244	255	0	2388	0	0	0	0	0	0	254	
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	1244	0	0	2388	0	0	0	0	0	0	254	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
FinalVolume:	0	1244	0	0	2388	0	0	0	0	0	0	254	
Critical Gap													
Critical Gp:2													
FollowUpTim:2													
Capacity Modu	ıle:												
Cnflict Vol:	XXXX	XXXX	XXXXX	XXXX	XXXX	XXXXX	XXXX	XXXX	XXXXX	XXXX	XXXX	415	
Potent Cap.:	XXXX	XXXX	XXXXX	XXXX	XXXX	XXXXX	XXXX	XXXX	XXXXX	XXXX	XXXX	592	
Move Cap.:				XXXX	XXXX	XXXXX	XXXX	XXXX	XXXXX	XXXX	XXXX	592	
Volume/Cap:						XXXX		XXXX			XXXX	0.43	
	ı						:						
Level Of Serv	vice 1	Module	∋ :										
2Way95thQ:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	2.1	
Control Del:												15.6	
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	C	
Movement:	LT ·	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	
Shared Cap.:	xxxx	XXXX	xxxxx	XXXX	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX	
SharedQueue:	XXXXX	XXXX	xxxxx	xxxxx	XXXX	XXXXX	XXXXX	XXXX	xxxxx	xxxxx	xxxx	XXXXX	
Shrd ConDel:	XXXXX				XXXX	XXXXX	XXXXX	XXXX	xxxxx	xxxxx	xxxx	XXXXX	
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*	
ApproachDel:	X	xxxxx		XX			X				15.6		
ApproachLOS:		*			*			*			С		
Note: Queue 1	repor	ted is	s the r	number	of ca	ars pei	r lane	•					

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing + Proj AM

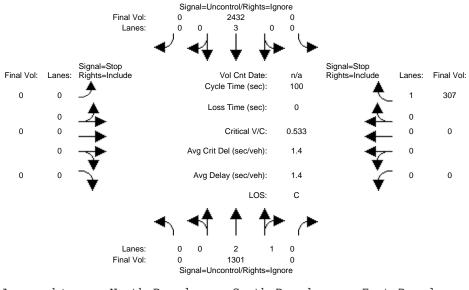
Intersection #17: El Camino Real & Laurel St



Approach:	No	rth Bo	ound					ast Bo	ound			
Movement:									- R		- T	- R
Volume Module	: >>	Count	Date:	22 Ma	ar 201	L7 <<						
Base Vol:	0	1244	255	0	2388	0	0	0	0	0	0	254
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1244	255	0	2388	0	0	0	0	0	0	254
Added Vol:	0	4	0	0	0	0	0	0	0	0	0	8
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1248	255	0	2388	0	0	0	0	0	0	262
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1248	0	0	2388	0	0	0	0	0	0	262
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1248	0	0	2388	0	0	0	0	0	0	262
Critical Gap	Modu:	le:										
Critical Gp:x	xxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9
FollowUpTim:x	XXXX	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	XXXX	3.3
							:					
Capacity Modu	ıle:											
Cnflict Vol:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	XXXX	416
Potent Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	XXXX	591
Move Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	XXXX	591
Volume/Cap:	xxxx	xxxx	XXXX	XXXX	xxxx	XXXX	XXXX	xxxx	XXXX	XXXX	XXXX	0.44
Level Of Serv	rice D	Module	≘:									
2Way95thQ:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	2.3
Control Del:x								xxxx	xxxxx	xxxxx	XXXX	15.8
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	C
Movement:	LT ·	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	XXXX	XXXXX
SharedQueue:x	XXXX	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	XXXX	XXXXX
Shrd ConDel:x	XXXX	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	XXXX	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	X	xxxxx		XX	xxxxx		X	xxxxx			15.8	
ApproachLOS:		*			*			*			C	
Note: Queue r	report	ted is	s the r	number	of ca	ars per	r lane	•				

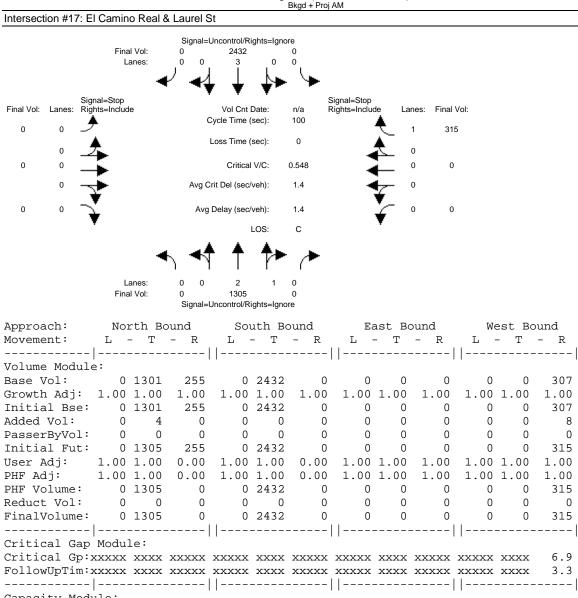
Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Bkgd AM

Intersection #17: El Camino Real & Laurel St



Approach:	No	rth Bo	ound	Sou	South Bound			ast Bo	ound	West Bound		
Movement:											- T	- R
Volume Module	e:											
Base Vol:	0	1301	255	0	2432	0	0	0	0	0	0	307
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1301	255	0	2432	0	0	0	0	0	0	307
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1301	255	0	2432	0	0	0	0	0	0	307
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1301	0	0	2432	0	0	0	0	0	0	307
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:			0		2432	0	-	0	0	0	0	
Critical Gap	Modu.	le:										
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	XXXX	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	XXXX	3.3
Capacity Mod	ule:											
Cnflict Vol:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	434
Potent Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	XXXX	576
Move Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	XXXX	576
Volume/Cap:	xxxx	xxxx	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	0.53
Level Of Ser	vice D	Module	e:									
2Way95thQ:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	XXXX	3.1
Control Del:					xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	XXXX	18.2
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	C
Movement:	LT ·	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	XXXX	XXXXX
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	XXXX	XXXXX
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	X	xxxxx		XX	xxxxx		X	xxxxx			18.2	
ApproachLOS:		*			*			*			С	
Note: Queue	report	ted is	s the r	number	of ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative)



6.9 Capacity Module: -----||-----||------| Level Of Service Module: LT - LTR - RT LT - LTR - RT Movement: Shared LOS: * * ApproachDel: 18.6 xxxxxx XXXXXX XXXXXX ApproachLOS: C Note: Queue reported is the number of cars per lane.

307

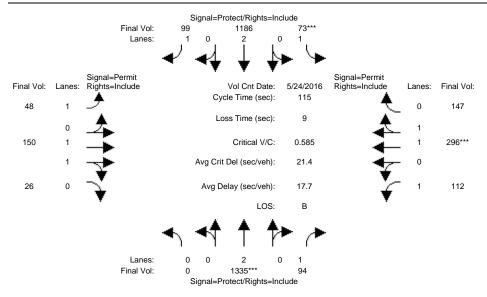
315

0

0

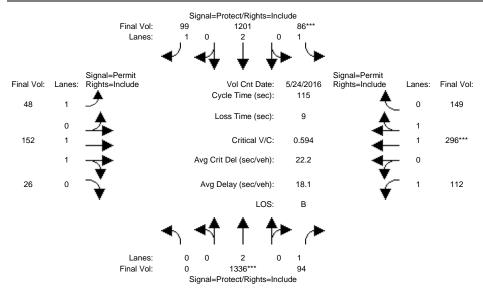
Ω

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



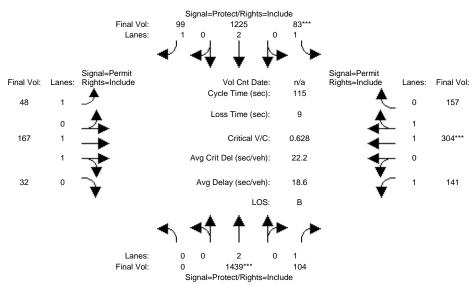
Approach:	Noi	rth Boi	und	Sou	ıth Bo	und	Εa	ast Bo	und	West Bound		
Movement:												
										•		
		10				10					10	
Y+R:		4.0				4.0			4.0		4.0	
Volume Module					_							
Base Vol:		1335	94		1186		48		26	112		147
Growth Adj:					1.00			1.00	1.00		1.00	1.00
Initial Bse:				73		99	48		26	112	296	147
Added Vol:				0	-		0		0	0	0	0
PasserByVol:				0			0			0		0
Initial Fut:				73			48		26	112	296	147
User Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:	0	1335	94		1186	99	48	150	26	112	296	147
Reduct Vol:	0	0	0	0	0	0		0	0	110		0
Reduced Vol:					1186	99	48		26	112		147
PCE Adj: MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
_				1.00		1.00		1.00	1.00	1.00		1.00
FinalVolume:				73			48		26		296	147
 Saturation Fl												
			1900	1000	1900	1900	1000	1900	1900	1000	1900	1900
Adjustment:				0.95		0.85		0.93	0.93		0.90	0.90
Lanes:			1.00		2.00	1.00		1.70	0.30		1.34	0.66
Final Sat.:			1615		3610	1615		3009	522		2291	1138
Capacity Anal				I		I	ļ		I	I		Į
Vol/Sat:				0.04	0.33	0.06	0.09	0.05	0.05	0.10	0.13	0.13
		****		****							***	
Green/Cycle:	0.00	0.63	0.63	0.07	0.70	0.70	0.22	0.22	0.22	0.22	0.22	0.22
Volume/Cap:			0.09	0.59	0.47	0.09		0.23	0.23	0.45	0.59	0.59
Delay/Veh:			8.3	58.9	7.8	5.5		36.9	36.9		41.3	41.3
User DelAdj:				1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:	0.0	12.8	8.3	58.9	7.8	5.5	40.3	36.9	36.9	40.2	41.3	41.3
LOS by Move:				E	A	A	D	D		D	D	D
HCM2kAvgQ:				2			2		3	4		8
Note: Queue r	eport	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj AM



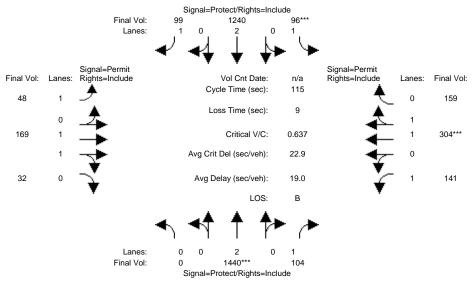
Approach: Movement:	North Bound L - T - R			South Bound L - T - R								
movement.	ш : 											
		10				10					10	
Y+R:		4.0				4.0			4.0		4.0	
Volume Module									'	1		'
			94			99	48		26	112	296	147
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1335	94	73	1186	99	48	150	26	112	296	147
Added Vol:	0	1		13	15	0	0	2	0	0	0	2
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1336	94	86	1201	99	48	152	26	112	296	149
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1336	94		1201	99	48	152	26	112	296	149
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1336	94	86	1201	99	48	152	26	112	296	149
PCE Adj:			1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:				86			48		26		296	149
Saturation Fl												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.85	0.95		0.85		0.93	0.93		0.90	0.90
Lanes:			1.00		2.00	1.00		1.71	0.29	1.00		0.67
Final Sat.:			1615		3610	1615		3015	516	1110		1148
	ļ.											
Capacity Anal	-											
Vol/Sat:			0.06		0.33	0.06	0.09	0.05	0.05	0.10	0.13	0.13
Crit Moves:				****							****	
Green/Cycle:			0.62		0.70	0.70		0.22	0.22		0.22	0.22
Volume/Cap:			0.09	0.59		0.09		0.23	0.23		0.59	0.59
Delay/Veh:			8.7	57.6	7.7	5.4		37.1	37.1		41.7	41.7
User DelAdj:				1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:				57.6		5.4		37.1	37.1		41.7	41.7
LOS by Move: HCM2kAvgQ:	A	В		E		A	D	D	D 3	D		D
			1	3	10	1	2		3	4	8	8
Note: Queue 1	repor	ted is	the n	umber	oi ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd AM



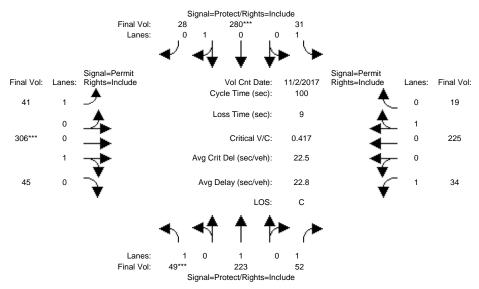
Approach:					South Bound East Bound				und				
Movement:											- T		
Min. Green:		10			10			10			10	10	
Y+R:		4.0			4.0			4.0					
1+K•													
Volume Module			I	I		I	I		ı	I		ļ	
Base Vol:		1439	104	83	1225	99	48	167	32	141	304	157	
Growth Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	0	1439	104	83	1225	99	48	167	32	141	304	157	
Added Vol:		0	0	0	0	0	0	0	0	0	0	0	
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	0	1439	104	83	1225	99	48	167	32	141	304	157	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	1439	104	83	1225	99	48	167	32	141	304	157	
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:		1439	104	83	1225	99	48	167	32	141	304	157	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	0	1439	104	83	1225	99	48	167	32	141	304	157	
Saturation Fl	Low Mo	odule:	·			•							
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	1.00	0.95	0.85	0.95	0.95	0.85	0.27	0.93	0.93	0.56	0.90	0.90	
Lanes:	0.00	2.00	1.00	1.00	2.00	1.00	1.00	1.68	0.32	1.00	1.32	0.68	
Final Sat.:			1615		3610	1615		2957	567		2259	1167	
Capacity Anal													
		0.40	0.06		0.34	0.06	0.09	0.06	0.06	0.13	0.13	0.13	
Crit Moves:		****		****							****		
Green/Cycle:			0.63		0.71	0.71		0.21	0.21		0.21	0.21	
Volume/Cap:			0.10	0.63		0.09		0.26	0.26		0.63	0.63	
Delay/Veh:			8.3	61.1	7.6	5.3		37.8	37.8		42.8	42.8	
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00	
AdjDel/Veh:			8.3	61.1		5.3	42.1		37.8		42.8	42.8	
LOS by Move:							D	D		D		D	
HCM2kAvgQ:			_	3			2		3	6	9	9	
Note: Queue 1	report	ted is	the n	umber	of ca	rs per	lane						

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj AM



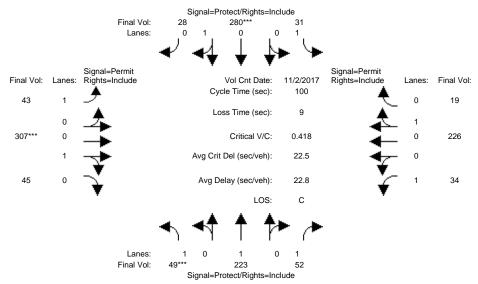
Approach:	No	rth Boı	und	Sou	South Bound East Bound								
Movement:		- T -											
 Min. Green:		10			10			10		10		10	
Y+R:		4.0			4.0			4.0			4.0		
1+K•													
Volume Module			I	I		ı	I		I	I		I	
Base Vol:		1439	104	83	1225	99	48	167	32	141	304	157	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	0	1439	104	83	1225	99	48	167	32	141	304	157	
Added Vol:		1	0	13	15	0	0	2	0	0	0	2	
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	0	1440	104	96	1240	99	48	169	32	141	304	159	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	0	1440	104		1240	99	48	169	32	141	304	159	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	0	1440	104	96	1240	99	48	169	32	141	304	159	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:							48		32		304	159	
Saturation Fl													
		1900	1900		1900	1900		1900	1900		1900	1900	
Adjustment:	1.00	0.95	0.85	0.95	0.95	0.85	0.26	0.93	0.93	0.55	0.90	0.90	
Lanes:			1.00	1.00		1.00		1.68	0.32	1.00		0.69	
Final Sat.:			1615		3610	1615		2962	561	1047		1176	
Capacity Anal				0 05	0 04	0 0 6	0 10	0 06	0 06	0 10	0 1 4	0 14	
		0.40	0.06	0.05 ****	0.34	0.06	0.10	0.06	0.06	0.13	0.14	0.14	
Crit Moves:			0 60		0 51	0 51	0 01	0 01	0 01	0 01		0 01	
Green/Cycle:			0.63		0.71	0.71		0.21	0.21		0.21	0.21	
Volume/Cap:			0.10	0.64		0.09		0.27	0.27		0.64	0.64	
Delay/Veh:			8.6	59.8	7.5	5.2	42.6		38.0		43.2	43.2	
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00	
AdjDel/Veh:			8.6			5.2	42.6		38.0		43.2	43.2	
LOS by Move:					A		D	D	D	D		D	
HCM2kAvgQ:			_	3			2		3	6	9	9	
Note: Queue r	report	ted is	the n	umber	of ca	rs per	Lane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing AM



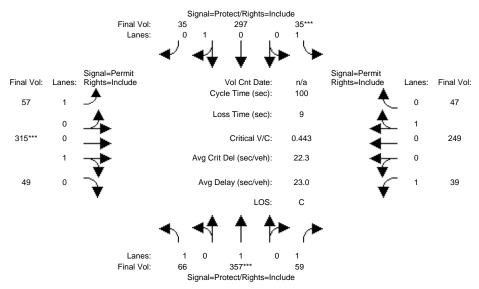
Approach:	No	rth Boi	und	Sou	ath Boi	und	Ea	ast Bo	und			
Movement:		- T ·			- T ·			- T		, L -		- R
 Min. Green:	 7		10	1	10	10	1	 10	10	10		10
Y+R:		4.0	4.0		4.0			4.0	4.0			4.0
1+K•												
Volume Module	1				z 2017							
Base Vol:	49	223	52	31	280	28	41	306	45	34	225	19
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		223	52	31	280	28	41	306	45	34	225	19
Added Vol:		0	0	0	0	0	0	0	0	0	0	0
PasserByVol:				0	0	0	0	0	0	0	0	0
Initial Fut:			52	31	280	28	41		45	34	225	19
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:		223	52	31	280	28	41	306	45	34	225	19
	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:			52	31	280	28	41	306	45	34	225	19
PCE Adi:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			52	31	280	28	41	306	45	34	225	19
Saturation F	low Mo	odule:	'									
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.99	0.99	0.53	0.98	0.98	0.42	0.99	0.99
Lanes:	1.00	1.00	1.00	1.00	0.91	0.09	1.00	0.87	0.13	1.00	0.92	0.08
Final Sat.:	1805	1900	1615	1805	1703	170	998	1625	239	800	1731	146
	1		I									
Capacity Anal	lysis	Module	e:									
Vol/Sat:	0.03	0.12	0.03	0.02	0.16	0.16	0.04	0.19	0.19	0.04	0.13	0.13
Crit Moves:	****				****			****				
Green/Cycle:	0.07	0.29	0.29	0.17	0.39	0.39	0.45	0.45	0.45	0.45	0.45	0.45
Volume/Cap:			0.11	0.10	0.42	0.42	0.09	0.42	0.42	0.09	0.29	0.29
Delay/Veh:	46.4	29.1	26.2	35.0	22.5	22.5	16.0	19.1	19.1	16.0	17.7	17.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
AdjDel/Veh:	46.4	29.1	26.2	35.0	22.5	22.5	16.0	19.1	19.1	16.0	17.7	17.7
LOS by Move:	D		C	C	C	С	В		В	В	В	В
HCM2kAvgQ:	2	6	1	1	7	7	1	7	7	1	5	5
Note: Queue	report	ted is	the n	umber	of car	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj AM



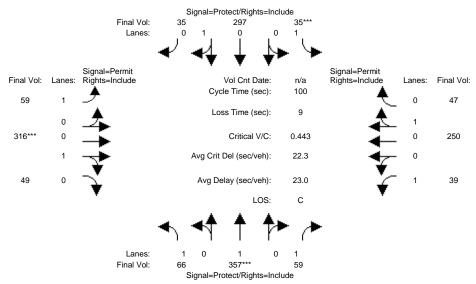
Approach:	No	rth Bo	ınd	Coi	South Bound			East Bound		West Bound		
Movement:		- T			лсп во: - Т ·			авс во - Т			- БС БС - Т	- R
Min. Green:	7		10	1	10	10	1	10	10	10		10
Y+R:	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0
Volume Module	e: >>	Count	Date:	2 Nov	z 2017	<<						
Base Vol:	49	223	52	31	280	28	41	306	45	34	225	19
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Initial Bse:	49	223	52	31	280	28	41	306	45	34	225	19
Added Vol:	0	0	0	0	0	0	2	1	0	0	1	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	49	223	52	31	280	28	43	307	45	34	226	19
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	49	223	52	31	280	28	43	307	45	34	226	19
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	223	52	31	280	28	43	307	45	34	226	19
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	49	223	52	31	280	28	43	307	45	34	226	19
Saturation F	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.99	0.99	0.52	0.98	0.98	0.42	0.99	0.99
Lanes:	1.00	1.00	1.00	1.00	0.91	0.09	1.00	0.87	0.13	1.00	0.92	0.08
Final Sat.:			1615		1703	170		1626	238		1732	146
	1											
Capacity Ana												
Vol/Sat:		0.12	0.03	0.02	0.16	0.16	0.04	0.19	0.19	0.04	0.13	0.13
Crit Moves:	****				****			****				
Green/Cycle:	0.07	0.29	0.29	0.17	0.39	0.39	0.45	0.45	0.45	0.45	0.45	0.45
Volume/Cap:	0.39	0.41	0.11	0.10	0.42	0.42		0.42	0.42	0.09	0.29	0.29
Delay/Veh:	46.4	29.2	26.2	35.0	22.6	22.6	16.0	19.1	19.1	16.0	17.6	17.6
User DelAdj:			1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.4	29.2	26.2	35.0	22.6	22.6	16.0	19.1	19.1	16.0	17.6	17.6
LOS by Move:			C	D	С	С	В	В	В	В	В	В
HCM2kAvgQ:	2		1	1	7	7	1		7	1	5	5
Note: Queue	report	ted is	the n	umber	of car	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd AM



Approach:	No	rth Bo	und	Sou	uth Bo	ound	East Bound L - T - R		und			
Movement:		- T				- R					- T	
 Min. Green:		10		7				10		•	10	10
Y+R:		4.0	4.0		4.0			4.0				
Volume Module			1	1		ı	l		'	1		ı
Base Vol:	66	357	59	35	297	35	57	315	49	39	249	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	66	357	59	35	297	35	57	315	49	39	249	47
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	66	357	59	35	297	35	57	315	49	39	249	47
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	66	357	59	35	297	35	57	315	49	39	249	47
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			59	35	297	35	57	315	49	39	249	47
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	66	357	59	35	297	35	57	315	49	39	249	47
Saturation F	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.98	0.98	0.46	0.98	0.98	0.40	0.98	0.98
Lanes:	1.00	1.00	1.00	1.00	0.89	0.11	1.00	0.87	0.13	1.00	0.84	0.16
Final Sat.:			1615		1673	197		1611	251		1560	294
	1											
Capacity Ana												
	0.04		0.04	0.02	0.18	0.18	0.06	0.20	0.20	0.05	0.16	0.16
Crit Moves:				****				****				
Green/Cycle:			0.41		0.35	0.35		0.43	0.43		0.43	0.43
Volume/Cap:			0.09	0.28		0.51		0.46	0.46		0.37	0.37
Delay/Veh:			18.0	45.3		26.8		20.7	20.7		19.7	19.7
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:				45.3		26.8		20.7	20.7		19.7	19.7
LOS by Move:				D	С	C	В	С	С	В	В	В
	2		1	1	8		1		8	1	6	6
Note: Queue	report	ted is	the n	umber	of ca	ars per	lane	•				

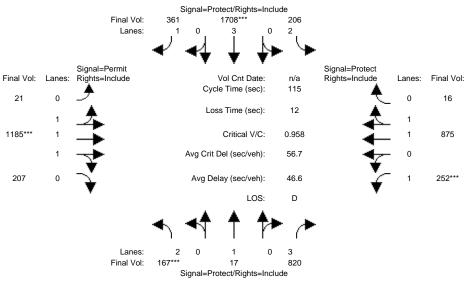
Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj AM



Approach:	No	rth Bo	und	South Bound						West Bound		
Movement:		- T				- R		- T			- T	- R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:		4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0
Volume Module	e :											
Base Vol:	66	357	59	35	297	35	57	315	49	39	249	47
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		357	59	35	297	35	57	315	49	39	249	47
Added Vol:	0	0	0	0	0	0	2	1	0	0	1	0
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			59	35	297	35	59		49	39	250	47
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
	66	357	59	35	297	35	59	316	49	39	250	47
	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:			59	35	297	35	59	316	49	39	250	47
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
FinalVolume:			59		297	35		316	49	39		47
	ı											
Saturation F			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
-	0.95		0.85	0.95		0.98		0.98	0.98		0.98	0.98
Lanes:		1.00	1.00		0.89	0.11		0.87	0.13		0.84	0.16
Final Sat.:			1615		1673	197		1612	250		1561	293
Capacity Anal	1		- 1									
Vol/Sat:		0.19	0.04	0 02	0.18	0.18	0 07	0.20	0.20	0 05	0.16	0.16
Crit Moves:	0.04	****	0.04	****	0.10	0.10	0.07	****	0.20	0.05	0.16	0.10
Green/Cycle:	0 14		0.41		0.35	0.35	0 42	0.43	0.43	0 42	0.43	0.43
Volume/Cap:			0.41	0.07		0.55		0.43	0.43		0.43	0.43
Delay/Veh:			18.1		26.8	26.8		20.7	20.7		19.7	19.7
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			18.1	45.3		26.8		20.7	20.7	17.4		19.7
LOS by Move:			10.1	43.3 D	20.6 C	20.8 C	17.7	20.7 C	20.7 C	17.4	19.7	19.7
HCM2kAvqQ:	2		1	1	8	8	1	_	8	1	6	6
Note: Queue			_	_	-	_	_		0		U	U
More. Arene 1	r GPOT	ccu is	CIIE II	aumet	OI Ca	rs her	Tame	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project AM

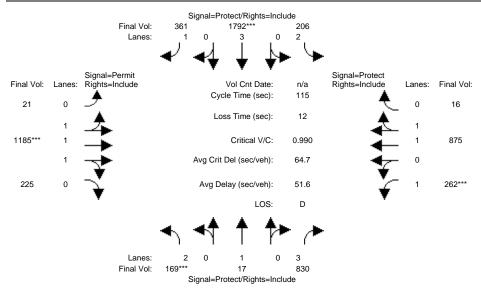
Intersection #1: Veterans BI & Whipple Av



			9	3			Whipple Av					
Street Name:			Vetera		_	_				le Av		_
						und						
Movement:											- T	
Min. Green:						10						
Y+R:						4.0						4.0
Volume Module												
Base Vol:							21		205	249		16
Growth Adj:			1.00			1.00			1.00	1.00		1.00
Initial Bse:				204		357		1173	205	249		16
Added Vol:				0			0		0	0		0
Reassigned:				0			0		0	0		0
Initial Fut:										249		16
User Adj:	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00
PHF Adj: (0.99		0.99	0.99			0.99			0.99
PHF Volume:				206			21		207	252		16
Reduct Vol:				0			0		0	0		0
Reduced Vol:				206					207		875	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00			1.00			1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00			1.00			1.00
FinalVolume:									207			16
-												
Saturation Flo												
Sat/Lane:							1900		1900		1900	1900
Adjustment: (0.89	0.88				0.76		0.91	0.91
Lanes: 2	2.00	1.00	3.00						0.44		1.96	
Final Sat.: 3						1568	65		638			63
-												
Capacity Analy	~											
		0.01	0.20	0.06		0.23	0.32		0.32		0.26	0.26
Crit Moves:	***				***			****		****		
Green/Cycle: (0.06	0.31	0.31	0.10	0.35	0.35	0.33	0.33	0.33	0.15	0.48	0.48
Volume/Cap: (0.80	0.03	0.63	0.63	0.97	0.66	0.97	0.97	0.97	0.97	0.53	0.53
Delay/Veh:	73.4	27.3	34.7	53.8	51.3	34.4	54.4	54.4	54.4	95.5	20.9	20.9
User DelAdj: 1				1.00			1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh: 7							54.4	54.4	54.4	95.5	20.9	20.9
LOS by Move:	E				D	C	D		D	F		С
HCM2kAvgQ:	5	0	10	5	27	11	21	21	21	13	12	12
Note: Queue re	eport	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative AM

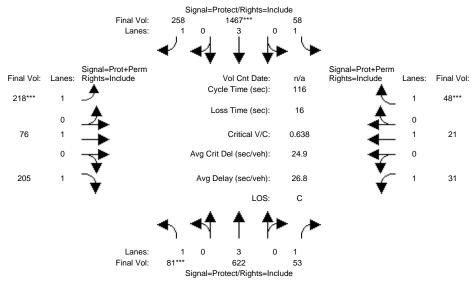
Intersection #1: Veterans BI & Whipple Av



Street Name: Approach:			Vetera	ns Bl	ı+h Do	und	Whipple Av East Bound West Bound					
Movement:						- R					- T	
Min. Green:	7	10	10	7	10	10	10	10	10	7	10	10
Y+R:		4.0			4.0			4.0			4.0	4.0
Volume Modul	1											
Base Vol:		17	812	204	1691	357	21	1173	205	249	866	16
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	165	17	812	204	1691	357	21	1173	205	249	866	16
Added Vol:	2		10	0	83	0	0	0	18	10	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			822	204	1774	357	21	1173	223	259	866	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	169	17	830	206	1792	361	21	1185	225	262	875	16
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:	169	17	830	206	1792	361	21	1185	225	262	875	16
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	169	17	830	206	1792	361	21	1185	225	262	875	16
Saturation F	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.89	0.97	0.73	0.89	0.88	0.83	0.76	0.76	0.76	0.91	0.91	0.91
Lanes:	2.00	1.00	3.00	2.00	3.00	1.00	0.04	2.49	0.47	1.00	1.96	0.04
Final Sat.:					5037			3580	681	1736	3400	63
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	0.05	0.01	0.20	0.06	0.36	0.23	0.33	0.33	0.33	0.15	0.26	0.26
Crit Moves:	****				****			****		****		
Green/Cycle:	0.06	0.32	0.32	0.10	0.35	0.35	0.33	0.33	0.33	0.15	0.48	0.48
Volume/Cap:	0.81	0.03	0.63	0.63	1.00	0.65	1.00	1.00	1.00	1.00	0.54	0.54
Delay/Veh:	74.7	26.9	34.3	53.7	59.1	33.8	63.2	63.2	63.2	105.4	21.3	21.3
User DelAdj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	74.7	26.9	34.3	53.7	59.1	33.8	63.2	63.2	63.2	105.4	21.3	21.3
LOS by Move:			C	D	E	C	E		E	F	C	C
11011211111		0	10	5	30	11	22		22	14	12	12
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project AM

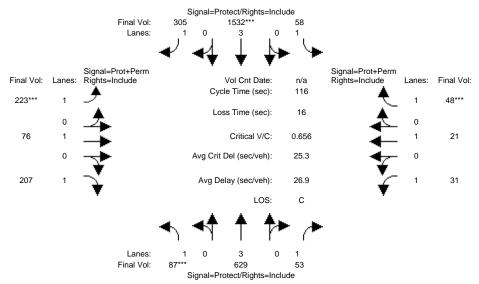
Intersection #2: Veterans & Brewster



Approach:					uth Bo	und							
Movement:					- T					L -		- R	
Min. Green:	7		10	1	10	10	7		10	7		10	
Y+R:		4.0	4.0		4.0			4.0	4.0			4.0	
Volume Module			'	'		'	'		'	'			
Base Vol:	81	622	53	58	1467	258	218	76	205	31	21	48	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	81	622	53	58	1467	258	218	76	205	31	21	48	
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	81	622	53	58	1467	258	218	76	205	31	21	48	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
	81		53	58	1467	258	218	76	205	31	21	48	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:			53	58	1467	258	218	76	205	31	21	48	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:			53			258	218		205	31	21	48	
	1												
Saturation F													
Sat/Lane:		1900	1900		1900	1900	1900		1900		1900	1900	
Adjustment:	0.95	0.91	0.85	0.95	0.91	0.85		1.00	0.85		1.00	0.85	
	1.00		1.00		3.00	1.00		1.00	1.00		1.00	1.00	
Final Sat.:			1615		5187	1615	1805		1615		1900	1615	
	1												
Capacity Ana													
Vol/Sat:		0.12	0.03	0.03	0.28	0.16		0.04	0.13	0.02	0.01	0.03	
Crit Moves:	****				****		****					****	
Green/Cycle:			0.38		0.49	0.49	0.33		0.20		0.09	0.09	
Volume/Cap:			0.09		0.58	0.33	0.41		0.63		0.13	0.34	
Delay/Veh:		25.7	23.3		21.4	18.2		38.9	46.6		49.3	51.4	
User DelAdj:			1.00		1.00	1.00	1.00		1.00		1.00	1.00	
AdjDel/Veh:			23.3		21.4	18.2	30.2		46.6		49.3	51.4	
LOS by Move:			С	D	С	В	C	D	D	D	D	D	
HCM2kAvgQ:	3		. 1	_ 2	14	6	-	2	7	1	1	2	
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative AM

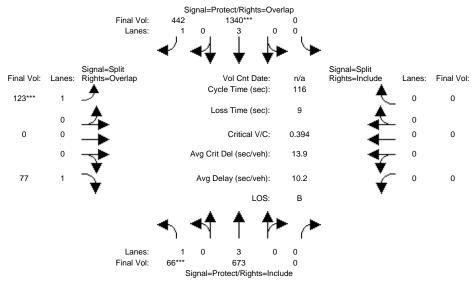
Intersection #2: Veterans & Brewster



Approach:	No	rth Boi	und	Soi				und	West Bound			
Movement:		- T			- T			- T			- T	- R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0
	1											
Volume Module												
Base Vol:	81		53		1467	258	218	76	205	31	21	48
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		622	53		1467	258	218	76	205	31	21	48
Added Vol:	6	7	0	0	65	47	5	0	2	0	0	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	87		53		1532	305	223	76	207	31	21	48
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:	87	629	53		1532	305	223	76	207	31	21	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			53		1532	305	223	76	207	31	21	48
PCE Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:		629	53		1532	305	223	76	207	31	21	48
	Į.											
Saturation F.			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
-	0.95		0.85		0.91	0.85		1.00	0.85		1.00	0.85
Lanes:	1.00		1.00		3.00	1.00		1.00	1.00		1.00	1.00
Final Sat.:			1615		5187	1615		1900	1615		1900	1615
	Į.											
Capacity Anal	-		0.03	0 03	0 20	0 10	0 10	0 04	0 12	0 02	0 01	0.03
Vol/Sat:	****	0.12	0.03	0.03	0.30	0.19	U.⊥∠ ****	0.04	0.13	0.02	0.01	0.03 ****
Crit Moves: Green/Cycle:		0 20	0.38	0 10	0.49	0.49		0.20	0.20	0 10	0.09	0.09
						0.49						0.09
Volume/Cap:		25.4	0.09	39.6	0.60	18.9		0.20 39.1	0.65 47.3		0.13	51.4
Delay/Veh: User DelAdj:			1.00		1.00			1.00			1.00	1.00
_						1.00		39.1	1.00			
AdjDel/Veh: LOS by Move:		25.4 C	23.0 C	39.6 D	21.8 C	18.9 B	30.6 C	39.1 D	47.3 D	39.9 D	49.3 D	51.4 D
-	<u>н</u> 3		1	ں 2	15	в 7	6		ם 7	ם 1	р 1	2
HCM2kAvgQ: Note: Queue 1				_			-	_	/	1	Т	2
More. Queue 1	repor	Leu IS	the n	uiiber	or ca	rs ber	тапе	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project AM

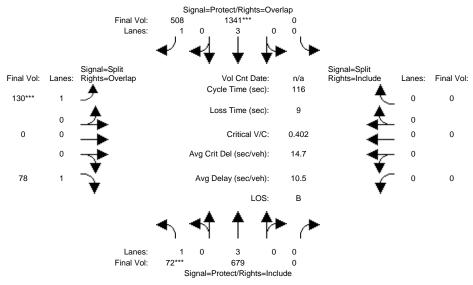
Intersection #3: Veterans & Middlefield



Approach:	No	rth Bo	und	Sou	uth Bo	und	East Bound		und			
Movement:		- T				- R					- T	
	7		0		10			0			0	0
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Volume Modul												
Base Vol:	66		0		1340	442	123		77	0	0	0
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:		673	0		1340	442	123	0	77	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :			0	0	0	0	0		0	0	0	0
Initial Fut:			0		1340	442	123		77	0	0	0
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:		673	0		1340	442	123	0	77	0	0	0
	0		0	0	0	0	0	-	0	0	0	0
Reduced Vol:			0		1340	442	123	0	77	-	0	0
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
FinalVolume:				. 0		442		0		0	-	0
	1											
Saturation F				1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:			1900		1900	1900		1900	1900	1900		1900
Adjustment:			1.00		0.91	0.85		1.00	0.85	1.00		1.00
	1.00		0.00		3.00	1.00		0.00	1.00	0.00		0.00
Final Sat.:					5187	1615	1805	0		0		0
Capacity Ana												
Vol/Sat:	_	0.13		0 00	0.26	0.27	0 07	0.00	0.05	0 00	0.00	0.00
	****	0.13	0.00	0.00	****	0.27	****	0.00	0.05	0.00	0.00	0.00
Green/Cycle:		0 75	0.00	0 00	0.66	0.83	0 17	0.00	0.27	0.00	0 00	0.00
Volume/Cap:			0.00		0.39	0.33		0.00	0.18	0.00		0.00
Delay/Veh:			0.0	0.0	9.3	2.5	43.4		33.0	0.0	0.0	0.0
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdiDel/Veh:						2.5	43.4			0.0		0.0
LOS by Move:				Α			D		C C	Α.		A
HCM2kAvq0:	2		0	0	8	4	4		2	0	0	0
Note: Queue :						_	_		_	ŭ	,	,
~	-					-						

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative AM

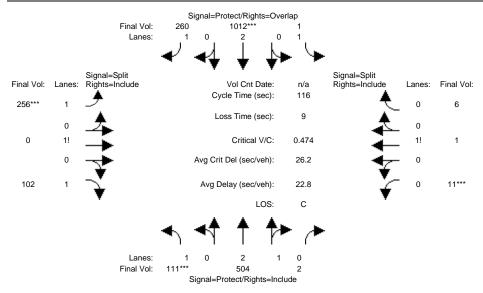
Intersection #3: Veterans & Middlefield



Approach:						und							
Movement:		- T -			- T							- R	
	7		0		10	10		0	10	0	0	0	
Y+R:	4.0		4.0		4.0			4.0	4.0			4.0	
Volume Module	e:						•						
Base Vol:	66	673	0	0	1340	442	123	0	77	0	0	0	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	66	673	0	0	1340	442	123	0	77	0	0	0	
Added Vol:	6	6	0	0	1	66	7	0	1	0	0	0	
Reassigned :		0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	72	679	0	0	1341	508	130	0	78	0	0	0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:	72	679	0	0	1341	508	130	0	78	0	0	0	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:	72	679	0	0	1341	508	130	0	78	0	0	0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	72	679	0	0	1341	508	130	0	78	0	0	0	
Saturation F	low Mo	odule:											
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.95	0.91	1.00	1.00	0.91	0.85	0.95	1.00	0.85	1.00	1.00	1.00	
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	
Final Sat.:			0		5187	1615	1805	0	1615	. 0	0	0	
	1												
Capacity Anal	_												
Vol/Sat:		0.13	0.00	0.00	0.26	0.31	0.07	0.00	0.05	0.00	0.00	0.00	
Crit Moves:	****				****		****						
Green/Cycle:			0.00		0.64	0.82	0.18		0.28		0.00	0.00	
Volume/Cap:	0.40		0.00		0.40	0.38	0.40	0.00	0.17	0.00	0.00	0.00	
Delay/Veh:			0.0		10.0	2.8	42.9	0.0	31.9	0.0	0.0	0.0	
User DelAdj:			1.00		1.00	1.00	1.00		1.00	1.00		1.00	
AdjDel/Veh:			0.0	0.0		2.8	42.9	0.0	31.9	0.0	0.0	0.0	
LOS by Move:			A	A		A	D	A	C	A	A	A	
	2		0	0	8	5	4	-	2	0	0	0	
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project AM

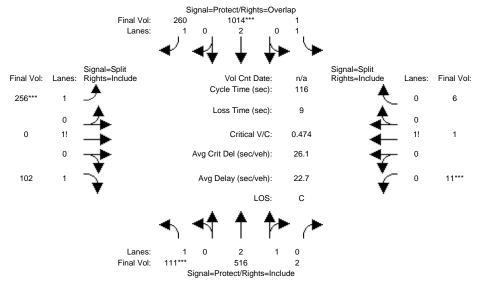
Intersection #4: Veterans & Jefferson



Approach: Movement:	L -	- T	- R	L -	- T	- R	L ·	- T	- R	L -	- Т	- R
Min Grant												
Min. Green: Y+R:		10 4.0				4.0		10	4.0		10 4.0	
1+R·												
Volume Module			I	I		I	I		I	I		I
Base Vol:	111	504	2	1	1012	260	256	0	102	11	1	6
Growth Adj:					1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:			2		1012	260	256	0	102	11	1	6
Added Vol:		0	0	0	0	0	0	0	0	0	0	0
Reassigned :		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		504	2	1	1012	260	256	0	102	11	1	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	111	504	2	1	1012	260	256	0	102	11	1	6
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	111	504	2	1	1012	260	256	0	102	11	1	6
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	111	504	2	1	1012	260	256	0	102	11	1	6
Saturation F	low Mo	odule:										
Sat/Lane:	1900		1900		1900	1900		1900	1900	1900		1900
Adjustment:			0.91	0.95	0.95	0.85	0.92	1.00	0.92	0.93	0.93	0.93
	1.00		0.01	1.00		1.00	1.72	0.00	1.28	0.61		0.33
Final Sat.:			20		3610	1615	3009		2255	1076	98	587
Capacity Ana	_											
Vol/Sat:		0.10	0.10	0.00	0.28	0.16		0.00	0.05		0.01	0.01
Crit Moves:	****				****		****			****		
Green/Cycle:			0.41	0.26		0.72		0.00	0.17	0.09		0.09
Volume/Cap:			0.24	0.00		0.22		0.00	0.27	0.12		0.12
Delay/Veh:			22.1		16.6	5.7	44.7	0.0	42.3	49.3		49.3
User DelAdj:			1.00			1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:				32.1			44.7		42.3	49.3		49.3
LOS by Move:			C		B	A	D		D		D	D
HCM2kAvgQ:			4	0	12		5		3	1	1	1
Note: Queue :	report	_ea is	tne n	umper	or ca	ırs per	⊥ane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative AM

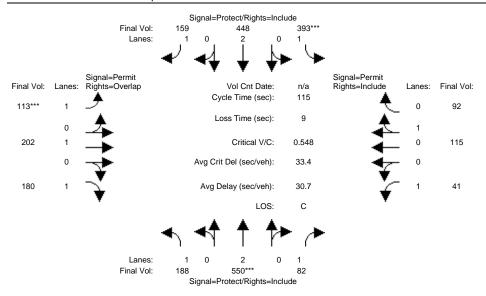
Intersection #4: Veterans & Jefferson



Approach:						und							
Movement:		- T -			- T								
 Min. Green:	7		10		10	10		10	10	10		10	
Y+R:		4.0	4.0		4.0			4.0	4.0			4.0	
Volume Module	: :									•			
Base Vol:	111	504	2	1	1012	260	256	0	102	11	1	6	
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Initial Bse:	111	504	2	1	1012	260	256	0	102	11	1	6	
	0	12	0	0	2	0	0	0	0	0	0	0	
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0	
Initial Fut:	111	516	2	1	1014	260	256	0	102	11	1	6	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PHF Volume:		516	2	1	1014	260	256	0	102	11	1	6	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:			2		1014	260	256	0	102	11	1	6	
PCE Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00	
MLF Adj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00	
FinalVolume:			_			260	256	0	102	. 11	1	6	
Saturation F													
Sat/Lane:		1900	1900	1900		1900	1900		1900		1900	1900	
Adjustment:			0.91		0.95	0.85		1.00	0.92		0.93	0.93	
	1.00		0.01		2.00	1.00	1.72		1.28		0.06	0.33	
Final Sat.:			20		3610	1615	3009	0	2255	1076	98	587	
	1												
Capacity Anal				0 00	0 00	0 16	0 00	0 00	0 05	0 01	0 01	0 01	
Vol/Sat:	U.U6 ****	0.10	0.10	0.00	0.28	0.16	0.09	0.00	0.05	0.UL	0.01	0.01	
Crit Moves:		0 10	0 40	0 05		0 50		0 00	0 10		0 00	0 00	
Green/Cycle:				0.25		0.72	0.17		0.17		0.09	0.09	
Volume/Cap:			0.24	0.00		0.22		0.00	0.27		0.12	0.12	
Delay/Veh:			21.9	32.5		5.7	44.7	0.0	42.3		49.3	49.3	
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00	
AdjDel/Veh:			21.9	32.5		5.7 A	44.7 D	0.0	42.3		49.3 D	49.3	
LOS by Move:	Д 4		C	C			_	A	D 3	D 1	_	D 1	
			4	0	12	3	_		3	1	1	1	
Note: Queue	repor	tea is	the n	umber	or ca	rs per	ıane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project AM

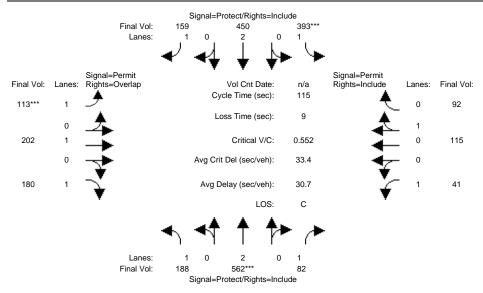
Intersection #5: Veterans / Maple



Street Name:		V	eteran	s Blvo	i				Mapl	e St		
Approach:	No	rth Bo	und	Sou	ath Bo	ound	Εá	ast Bo	und	We	est Bo	und
Movement:	L ·	- T	– R	L -	- T	- R	L -	- T	- R	L -	- T	- R
						10						
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:		EEO	82	393	448	159	113	202	180	41	115	92
Growth Adj:				1.00		1.00		1.00	1.00		1.00	1.00
Initial Bse:		550	82	393	448	159	113		180	41		92
Added Vol:				393	448	159	113	202	180	41	112	
			0	0	-	0	0			0		0 0
Reassigned:					0							
Initial Fut:			82	393			113			41		92
User Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	188	550	82	393	448	159	113	202	180	41	115	92
Reduct Vol:				0	0	0	0		0	0	0	0
Reduced Vol:	188	550	82	393	448	159	113	202	180	41	115	92
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	188	550	82	393	448	159	113	202	180	41	115	92
Saturation F	low Mo	odule:		•		·	•			•		•
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.44	1.00	0.85	0.45	0.93	0.93
Lanes:			1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.56	0.44
Final Sat.:							836		1615	853		788
Capacity Ana				ı		1	1		1	ı		1
Vol/Sat:				0.22	0.12	0.10	0.14	0.11	0.11	0.05	0.12	0.12
Crit Moves:		****		****			***					
Green/Cycle:		0.28	0.28	0.40	0.37	0.37	0.25	0.25	0.55	0.25	0.25	0.25
Volume/Cap:			0.18		0.34	0.27		0.43	0.20		0.47	0.47
Delay/Veh:			31.8		26.5	25.8		37.2	12.9		37.8	37.8
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			31.8			25.8		37.2	12.9		37.8	37.8
LOS by Move:						23.0 C		37.2 D		34.7 C		37.0 D
HCM2kAvgQ:		9	2	10	6		4	6	3	1		7
Note: Queue									3	Τ.	/	/
More. Queue	rebor	teu is	cire n	unber	OT CS	ırs ber	Tame	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative AM

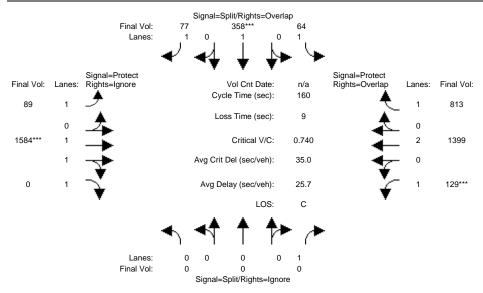
Intersection #5: Veterans / Maple



Street Name: Approach:	No	Verth Do	eteran	s Blvo	d .+b Bo	nd	T. c	at Do	Mapl	e St	at Do	nd
Movement:						– R				L -	SC BO - T	- R
Min. Green:		10			10	10	10	10	10	10	10	
Y+R: 		4.0			4.0				4.0		4.0	4.0
Volume Module												
Base Vol:	188	550	82	393	448	159	113	202	180	41	115	92
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	188	550	82	393	448	159	113	202	180	41	115	92
	0		0	0	2	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	188	562	82	393	450	159	113	202	180	41	115	92
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	188	562	82	393	450	159	113	202	180	41	115	92
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	188	562	82	393	450	159	113	202	180	41	115	92
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	188	562	82	393	450	159	113	202	180	41	115	92
Saturation Fl	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.44	1.00	0.85	0.45	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.56	0.44
Final Sat.:	1805	3610	1615	1805	3610	1615	834	1900	1615	851	985	788
Capacity Anal	lysis	Modul	e:	•			•			•		•
Vol/Sat:	0.10	0.16	0.05	0.22	0.12	0.10	0.14	0.11	0.11	0.05	0.12	0.12
Crit Moves:		****		***			****					
Green/Cycle:	0.31	0.28	0.28	0.39	0.37	0.37	0.25	0.25	0.55	0.25	0.25	0.25
Volume/Cap:	0.34	0.55	0.18	0.55	0.34	0.27	0.55	0.43	0.20	0.20	0.48	0.48
Delay/Veh:	31.1	35.8	31.4	27.9	26.4	25.7	41.1	37.3	13.0	34.9	37.9	37.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.1	35.8	31.4	27.9		25.7	41.1	37.3	13.0	34.9	37.9	37.9
LOS by Move:				С	С	С	D	D	В	С	D	D
		9	2	11	6	4	4	6	3	1	7	7
Note: Queue r	report	ted is		umber	of ca	rs per	lane.					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project AM

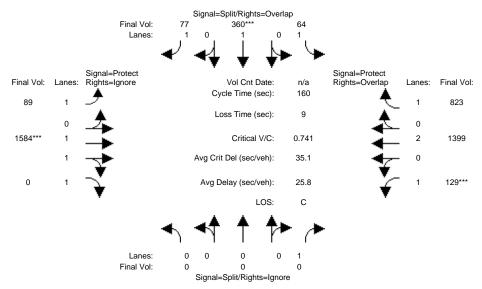
Intersection #6: Woodside Rd & Veterans BI



Street Name: Approach:			Woodsi	de Rd Soi	ıth Bo	und	Vet	terans	Bl (U	S101 S	SB Ram est Bo	_
Movement:	L	- T	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R
Min. Green:		0			10					7		10
Y+R:		4.0			4.0			4.0	4.0		4.0	4.0
Volume Module			1	ı		- 1	I		1	1		1
Base Vol:	0	0	633	64	358	77	89	1584	47	129	1399	813
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	633	64	358	77	89	1584	47	129	1399	813
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	633	64	358	77	89	1584	47	129	1399	813
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	64	358	77	89	1584	0	129	1399	813
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	64	358	77	89	1584	0	129	1399	813
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	0	0		358	77		1584	0		1399	813
Saturation F				•		·	•					
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.85	1.00	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Lanes:	0.00	0.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	0	0	1900	1615	1900	1615	1805	3610	1805	1805	3610	1615
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	0.00	0.00	0.00	0.04	0.19	0.05	0.05	0.44	0.00	0.07	0.39	0.50
Crit Moves:					****			****		****		
Green/Cycle:	0.00	0.00	0.00	0.25	0.25	0.32	0.07	0.59	0.00	0.10	0.62	0.88
Volume/Cap:	0.00	0.00	0.00	0.16	0.74	0.15	0.74	0.74	0.00	0.74	0.62	0.57
Delay/Veh:	0.0	0.0	0.0	46.5	60.8	38.9	95.5	25.1	0.0	85.8	19.1	3.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	46.5	60.8	38.9	95.5	25.1	0.0	85.8	19.1	3.0
LOS by Move:			A	D	E	D	F	С	A	F	В	A
HCM2kAvgQ:	0		0	2	16	3	6	30	0	8	22	10
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative AM

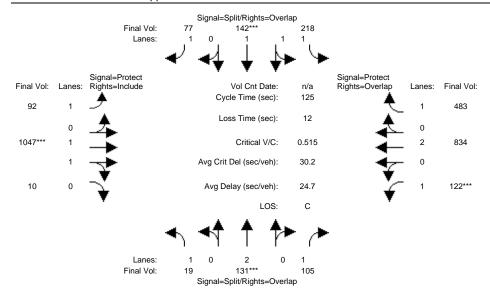
Intersection #6: Woodside Rd & Veterans BI



Street Name: Approach:	No	rth Do	Woodsi	de Rd	ı+h Po	und	Ve	terans	Bl (U	S101 S	SB Ram	ips)
Movement:	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R
Min. Green: Y+R:	0 4.0	0 4.0	0 4.0	10 4.0	10 4.0	10 4.0	7 4.0	10 4.0	10 4.0	7 4.0	10 4.0	10
Volume Module												
Base Vol:	0	0	633	64	358	77	89	1584	47	129	1399	813
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	633	64	358	77	89	1584	47	129	1399	813
Added Vol:	0	0	0	0	2	0	0	0	0	0	0	10
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	633	64	360	77	89	1584	47	129	1399	823
User Adj:		1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	64	360	77	89	1584	0	129	1399	823
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	64	360	77	89	1584	0	129	1399	823
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:		0	0		360	77	89	1584	0	129	1399	823
Saturation F	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.85	1.00	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Lanes:	0.00	0.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	0	0	1900	1615	1900	1615	1805	3610	1805	1805	3610	1615
	1											
Capacity Ana		Modul	e:									
Vol/Sat:	0.00	0.00	0.00	0.04	0.19	0.05	0.05	0.44	0.00		0.39	0.51
Crit Moves:					***			****		****		
Green/Cycle:	0.00	0.00	0.00	0.26	0.26	0.32	0.07	0.59	0.00	0.10	0.62	0.88
Volume/Cap:	0.00	0.00	0.00	0.16	0.74	0.15	0.75	0.74	0.00	0.74	0.62	0.58
Delay/Veh:	0.0	0.0	0.0	46.3	60.7	38.9	97.3	25.2	0.0	86.0	19.1	3.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	46.3	60.7	38.9	97.3	25.2	0.0	86.0	19.1	3.0
LOS by Move:	A		A	D	E	D	F	C	A	F	В	A
HCM2kAvgQ:	0		0	2	16	3	6		0	8	22	10
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project AM

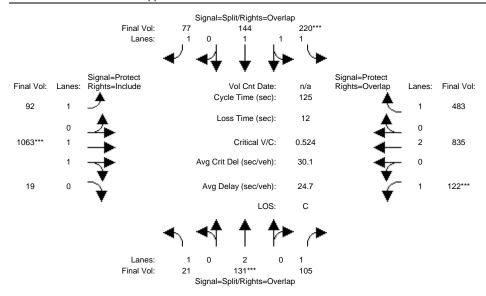
Intersection #7: Winslow/Whipple



Street Name: Approach:							Ea	ast Ro	Whippl		est Bo	und
Movement:	L ·	- T ·	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
		10	10	10	10	10	7	10	10	7	10	10
Y+R:	4.0				4.0			4.0	4.0			4.0
Volume Modul				1			1		I			
Base Vol:	19	131	105	218	142	77	92	1047	10	122	834	483
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Initial Bse:	19	131	105	218	142	77	92	1047	10	122	834	483
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	19	131	105	218	142	77	92	1047	10	122	834	483
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	19	131	105	218	142	77	92	1047	10	122	834	483
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	19	131	105	218	142	77	92	1047	10	122	834	483
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	19	131	105	218	142	77	92	1047	10	122	834	483
Saturation F	low Mo	odule:							•			·
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.92	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Lanes:	1.00	2.00	1.00	1.82	1.18	1.00	1.00	1.98	0.02	1.00	2.00	1.00
Final Sat.:	1805	3610	1615	3184	2074	1615	1805	3572	34	1805	3610	1615
Capacity Ana	lysis	Module	e:						•			·
Vol/Sat:	0.01	0.04	0.07	0.07	0.07	0.05	0.05	0.29	0.29	0.07	0.23	0.30
Crit Moves:		****			****			****		****		
Green/Cycle:	0.08	0.08	0.21	0.13	0.13	0.27	0.14	0.56	0.56	0.13	0.56	0.69
Volume/Cap:	0.13	0.45	0.31	0.52	0.52	0.18	0.38	0.52	0.52	0.52	0.41	0.43
Delay/Veh:	53.9	56.0	42.3	51.3	51.3	35.5	50.2	17.1	17.1	52.9	16.1	8.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.9	56.0	42.3	51.3	51.3	35.5	50.2	17.1	17.1	52.9	16.1	8.9
LOS by Move:	D		D	D	D	D	D	В	В	D	В	А
HCM2kAvgQ:	1	3	4	5	5	2	3	13	13	4	9	8
Note: Queue		ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative AM

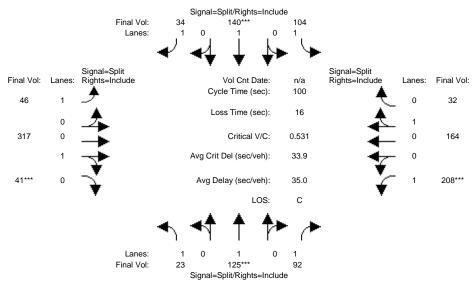
Intersection #7: Winslow/Whipple



Street Name:									Whippl			
Approach:											st Bo	
Movement:												
		10			10					7		
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:		131	105		142	77		1047	10		834	483
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:			105	218	142	77	92	1047	10	122	834	483
Added Vol:			0	2	2	0	0		9	0	1	0
Reassigned :			0	0	0	0	0	0	0	0	0	0
Initial Fut:	21	131	105	220	144	77	92	1063	19	122	835	483
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:			105	220	144	77	92	1063	19	122	835	483
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	131	105	220	144	77	92	1063	19	122	835	483
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			105		144	77		1063	19		835	483
Saturation F			1	ı		į	1		ı	ı		į.
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.92	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Lanes:	1.00	2.00	1.00	1.81	1.19	1.00	1.00	1.96	0.04	1.00	2.00	1.00
Final Sat.:	1805	3610	1615	3178	2080	1615	1805	3536	63	1805	3610	1615
Capacity Ana							'		'	'		'
Vol/Sat:	0.01	0.04	0.07	0.07	0.07	0.05	0.05	0.30	0.30	0.07	0.23	0.30
Crit Moves:		****		****				****		****		
Green/Cycle:	0.08	0.08	0.21	0.13	0.13	0.27	0.14	0.57	0.57	0.13	0.56	0.69
Volume/Cap:	0.15	0.45	0.31	0.53	0.53	0.18	0.38	0.53	0.53	0.53	0.41	0.43
Delay/Veh:			42.5	51.6	51.6	35.6		17.1	17.1	53.4	16.0	8.9
User DelAdj:				1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:				51.6		35.6		17.1	17.1	53.4		8.9
LOS by Move:				D		D		В	В	D	В	A
HCM2kAvgQ:	1	3	4	5	5	2	3			4	9	8
Note: Queue										_		3
i.ccc gacac	- CPCI		5110 11	CI	JI Cu	2	14110	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project AM

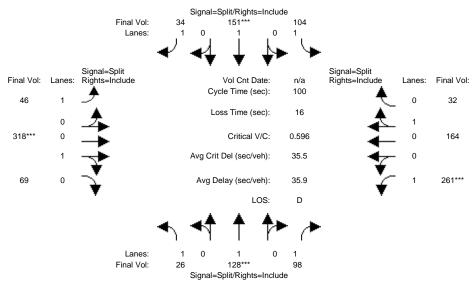
Intersection #8: Winslow & Brewster



Approach:	No	rth Boi	und	Soı	ıth Bo	und	Ea	ast Bo	und	₩e	est Bo	und
Movement:		- T				- R		- T			- T	- R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0		4.0			4.0		4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:	23	125	92	104	140	34	46	317	41	208	164	32
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		125	92	104	140	34	46	317	41	208	164	32
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			92	104	140	34	46		41	208	164	32
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:	23	125	92	104	140	34	46	317	41	208	164	32
	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:			92	104	140	34	46	317	41	208	164	32
PCE Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:		125	92		140	34		317	41	208		32
	Į.											
Saturation F.			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.85	0.95		0.85		0.98	0.98		0.98	0.98
	1.00		1.00		1.00	1.00		0.89	0.11		0.84	0.16
Final Sat.:			1615		1900	1615		1654	214		1552	303
Capacity Anal	1		- 1									
Vol/Sat:		0.07	0.06	0 06	0.07	0.02	0 02	0.19	0.19	0 12	0.11	0.11
	0.01		0.06	0.06	****	0.02	0.03	0.19	****	****	0.11	0.11
Green/Cycle:			0.12	0 14	0.14	0.14	0 26	0.36	0.36		0.22	0.22
Volume/Cap:			0.12		0.14	0.14		0.53	0.53		0.49	0.22
Delay/Veh:				40.5		38.2		26.1	26.1		35.2	35.2
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:					42.1	38.2		26.1	26.1		35.2	35.2
LOS by Move:			42.4 D	40.5 D	42.1 D	30.2 D	Z1.0	20.1 C	20.1 C	30.1 D	33.2 D	33.2 D
HCM2kAvqQ:	1		3	3	5	1	1	_	9		5	5
Note: Queue				_		_	_		9	O	J	J
More. Arene 1	r GPOT	ccu is	CIIE II	aiinet	or ca	ra her	Tame	•				

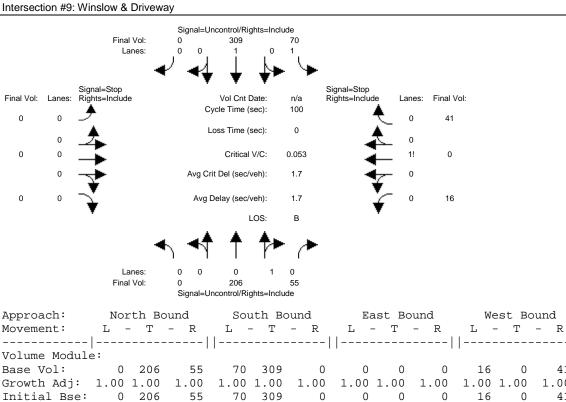
Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative AM

Intersection #8: Winslow & Brewster



Approach:	No	rth Boi	und	Soı	ıth Bo	und	Ea	ast Bo	und	₩e	est Bo	und
Movement:		- T				- R		- T			- T	- R
Min. Green:	10	10	10	10	10	10	10	10	10	10	10	10
Y+R:	4.0		4.0			4.0		4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:	23	125	92	104	140	34	46	317	41	208	164	32
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:		125	92	104	140	34	46	317	41	208	164	32
Added Vol:	3	3	6	0	11	0	0	1	28	53	0	0
Reassigned :		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			98	104		34	46		69	261	164	32
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
	26	128	98	104	151	34	46	318	69	261	164	32
	0		0	0		0	0	0	0	0	0	0
Reduced Vol:			98	104	151	34	46	318	69	261	164	32
PCE Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00			1.00		1.00	1.00	1.00		1.00
FinalVolume:		128	98		151	34		318	69	261		32
	Į.											
Saturation F.			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.85		1.00	0.85		0.97	0.97		0.98	0.98
Lanes:			1.00		1.00	1.00		0.82	0.18	1.00		0.16
Final Sat.:			1615		1900	1615		1519	330	1805		303
	1											
Capacity Ana			e. 0.06	0 06	0 00	0 02	0 03	0 21	0 21	0 14	0 11	0 11
Vol/Sat: Crit Moves:		0.07	0.06	0.06	0.08	0.02	0.03	0.21	0.21	****	0.11	0.11
			O 11	0 12		0 12	0 25	0.35	0.35		0 04	0.24
Green/Cycle:					0.13	0.13 0.16					0.24	
Volume/Cap:			0.54	41.1	0.60	38.7		0.60 28.1	0.60 28.1	35.8	0.44	0.44 32.8
Delay/Veh: User DelAdj:			1.00		1.00	1.00		1.00			1.00	1.00
_								28.1	1.00			32.8
AdjDel/Veh: LOS by Move:		40.7 D	45.U D	41.1 D	44.6 D	38.7 D	21.7 C	28.1 C	28.1 C	35.8 D	3∠.8 C	3⊿.8 C
-	л 1		ں 4	л 3	ں 5	ם 1	1		10	ע 7		5
HCM2kAvgQ: Note: Queue			_	_		_	_		10	/	5	5
note. Queue	repor	Leu IS	the n	uiiber	or ca	rs ber	тапе	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) Cumulative No Project AM

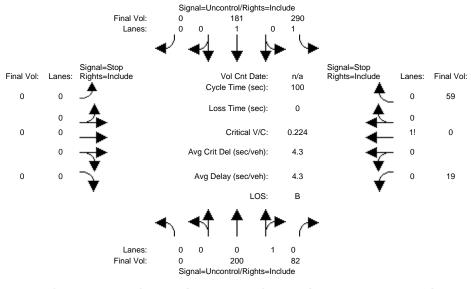


-----||-----||-----| Volume Module: Base Vol: 16 0 41 70 309 0 206 55 Initial Bse: 16 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 0 206 PHF Volume: 55 70 309 0 0 0 0 16 41 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 206 55 70 309 0 0 0 16 41 -----||-----||-----| Critical Gap Module: Critical Gp:xxxxx xxxx xxxxx 4.1 xxxx xxxxx xxxxx xxxxx xxxxx 6.4 6.5 6.2 FollowUpTim:xxxxx xxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxxx xxxxx 3.5 4.0 3.3 Capacity Module: Cnflict Vol: xxxx xxxx xxxxx 261 xxxx xxxxx xxxx xxxx 683 683 418 374 811 -----| Level Of Service Module: Control Del:xxxxx xxxx xxxxx A * * LOS by Move: * * * * * * Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT Shared LOS: * * * * * * * B 11.3 ApproachDel: XXXXXX XXXXXX XXXXXX ApproachLOS: Note: Queue reported is the number of cars per lane.

West Bound

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative AM

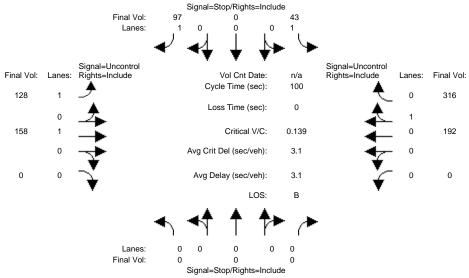
Intersection #9: Winslow & Driveway



Approach:	No	rth Bo	ound	Sou	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:											- T	- R
							:					
Volume Modul	e:											
Base Vol:	0	206	55	70	309	0	0	0	0	16	0	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	206	55	70	309	0	0	0	0	16	0	41
Added Vol:	0	0	13	92	0	0	0	0	0	3	0	12
Reassigned :	0	-6	14	128	-128	0	0	0	0	0	0	6
Initial Fut:	0	200	82	290	181	0	0	0	0	19	0	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	0	200	82	290	181	0	0	0	0	19	0	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:			82	290		0	-	0	0	19	0	59
Critical Gap	Modu.	le:										
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	XXXX	xxxxx	xxxxx	XXXX	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	XXXX	xxxxx	xxxxx	XXXX	xxxxx	3.5	4.0	3.3
Capacity Mod	ule:											
Cnflict Vol:	XXXX	xxxx	xxxxx	282	XXXX	xxxxx	XXXX	XXXX	xxxxx	1002	1002	241
Potent Cap.:	XXXX	xxxx	xxxxx	1292	XXXX	xxxxx	XXXX	XXXX	xxxxx	271	244	803
Move Cap.:	XXXX	xxxx	xxxxx	1292	XXXX	xxxxx	XXXX	XXXX	xxxxx	224	190	803
Volume/Cap:	XXXX	xxxx	XXXX	0.22	XXXX	XXXX	XXXX	XXXX	XXXX	0.08	0.00	0.07
Level Of Ser	vice D	Module	e:									
2Way95thQ:				0.9	XXXX	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	XXXXX
Control Del:				8.6					xxxxx			
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	XXXX	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	xxxxx	XXXX	493	XXXXX
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	0.6	XXXXX
Shrd ConDel:										xxxxx	13.7	
Shared LOS:	*	*	*	*	*	*	*	*	*	*	В	*
ApproachDel:	X	xxxxx		X			X				13.7	
ApproachLOS:		*			*			*			В	
Note: Queue :	report	ted is	s the r	number	of ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) Cumulative No Project AM

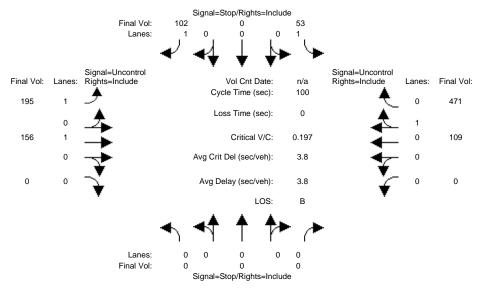
Intersection #10: Middlefield & Driveway



			9									
Approach:	Noi	rth Bo	ound	Soi	ath Bo	ound	Ea	ast Bo	ound	We	st Bo	ound
Movement:	L -	- T	- R	L ·	- T	- R	L ·	- T	- R	L -	· T	- R
Volume Modul	e:											
Base Vol:	0	0	0	43	0	97	128	158	0	0	192	316
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	43	0	97	128	158	0	0	192	316
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	43	0	97	128	158	0	0	192	316
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	43	0	97	128	158	0	0	192	316
Critical Gap	Modu.	le:										
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Mod	ule:											
Cnflict Vol:	xxxx	xxxx	xxxxx	764	xxxx	350	508	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	375	xxxx	698	1067	xxxx	xxxxx	XXXX	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	340	xxxx	698	1067	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.13	xxxx	0.14	0.12	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Ser	vice N	Module	e:									•
2Way95thQ:	xxxx	xxxx	xxxxx	0.4	xxxx	0.5	0.4	xxxx	xxxxx	XXXX	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	17.1	xxxx	11.0	8.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	С	*	В	A	*	*	*	*	*
Movement:	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT -	LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	XXXXX	xxxx	XXXXX
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX
Shared LOS:	*	*	*		*		*	*	*	*	*	*
ApproachDel:	X	xxxxx			12.9		x	xxxxx		xx	xxxx	
ApproachLOS:		*			В			*			*	
Note: Queue	report	ted is	s the r	number	of ca	ars per	r lane					

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative AM

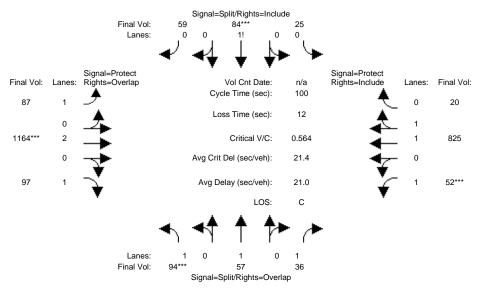
Intersection #10: Middlefield & Driveway



Approach: Movement:	L -	- Т	ound - R	L ·	- Т	- R	L -	- Т	- R	L -	est Bo	
Volume Module				1 1			1 1			1 1		ı
Base Vol:	0	0	0	43	0	97	128	158	0	0	192	316
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	43	0	97	128	158	0	0	192	316
Added Vol:	0	0	0	8	0	2	31	0	0	0	0	72
Reassigned:	0	0	0	2	0	3	36	-2	0	0	-83	83
Initial Fut:	0	0	0	53	0	102	195	156	0	0	109	471
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	53	0	102	195	156	0	0	109	471
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	53	0	102	195	156	0	0	109	471
Critical Gap												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx			xxxx	xxxxx	xxxxx	xxxx	XXXXX
FollowUpTim:									XXXXX			
Capacity Modu	ıle:											
Cnflict Vol:	xxxx	xxxx	xxxxx	891	xxxx	345			xxxxx		xxxx	XXXXX
Potent Cap.:	xxxx	xxxx	XXXXX						xxxxx		xxxx	XXXXX
Move Cap.:				269	XXXX	703			XXXXX		xxxx	XXXXX
Volume/Cap:					XXXX				XXXX		xxxx	
	1											
Level Of Serv												
2Way95thQ:	XXXX	XXXX	XXXXX						XXXXX			
Control Del:					XXXX				XXXXX			
LOS by Move:				С		В	A		*	*	*	*
Movement:								- LTR	- RT	LT -	- LTR	- RT
Shared Cap.:									XXXXX			XXXXX
SharedQueue:												
Shrd ConDel:												
Shared LOS:	*	*	*	*		*	*	*	*	*	*	*
ApproachDel:	X						XX	XXXX		XX	XXXX	
ApproachLOS:		*			В			*			*	
Note: Queue	report	ted is	s the r	number	of ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project AM

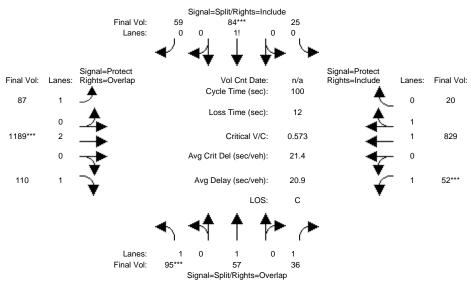
Intersection #11: Arguello & Whipple



Approach:	No	rth Bo	und								est Bo	und
Movement:						- R					- T	
M-1												
Min. Green:				10				10		7		
Y+R: 						4.0		4.0			4.0	
Volume Modul												
Base Vol:	94		36	25	84	59	87	1164	97	52	825	20
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	94	57	36	25	84	59		1164	97	52	825	20
Added Vol:		0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			36	25	84	59	87	1164	97	52	825	20
User Adj:		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	94	57	36	25	84	59	87	1164	97	52	825	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	94	57	36	25	84	59	87	1164	97	52	825	20
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:						1.00			1.00			1.00
FinalVolume:				25					97		825	20
Saturation F				1000	1000	1000	1000	1000	1000	1000	1000	1000
		1900	1900		1900			1900	1900	1900		1900
Adjustment:			0.85	0.95		0.95	0.95		0.85	0.95		0.95
	1.00		1.00	0.15		0.35		2.00	1.00	1.00		0.05
Final Sat.:			1615			631		3610	1615	1805		85
Capacity Ana												
Vol/Sat:	_			0 09	0.09	0.09	0 05	0.32	0.06	0 03	0 24	0.24
	****	0.03	0.02	0.05	****	0.05	0.03	****	0.00	****	0.21	0.21
Green/Cycle:	0.10	0.10	0.17	0.16	0.16	0.16	0.14	0.55	0.65	0.07	0.48	0.48
Volume/Cap:			0.13	0.59		0.59	0.34		0.09	0.41		0.49
Delay/Veh:			35.4	42.1		42.1		15.4	6.5	46.7		18.0
User DelAdj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.4	42.6	35.4	42.1	42.1	42.1			6.5	46.7	18.0	18.0
LOS by Move:	D	D	D	D	D	D	D		A	D	В	В
HCM2kAvgQ:	3	2	1	6	6	6	2	12	1	2	9	9
Note: Queue	repor	ted is	the n	umber	of ca	ars per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative AM

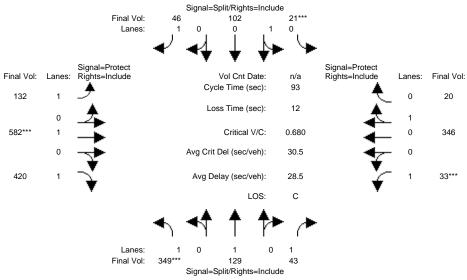
Intersection #11: Arguello & Whipple



Approach:	North Bound				1+h Po	und	.	act Bo	und	TAT	act Po	und
Movement:		- T				- R		- T			- T	- R
									- K			
Min. Green:	10	10	10	1	10	10	7		10	7		10
Y+R:	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0
Volume Module	e:		·			•						
Base Vol:	94	57	36	25	84	59	87	1164	97	52	825	20
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	94	57	36	25	84	59	87	1164	97	52	825	20
Added Vol:	1	0	0	0	0	0	0	25	13	0	4	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	95		36	25	84	59	87	1189	110	52	829	20
User Adj:		1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	95	57	36	25	84	59	87	1189	110	52	829	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	95	57	36	25	84	59	87	1189	110	52	829	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			36	25	84	59	87	1189	110	52	829	20
Saturation F												
Sat/Lane:	1900	1900	1900	1900	1900	1900		1900	1900		1900	1900
Adjustment:	0.95	1.00	0.85	0.95		0.95	0.95	0.95	0.85	0.95	0.95	0.95
Lanes:		1.00	1.00	0.15		0.35		2.00	1.00		1.95	0.05
Final Sat.:			1615		899	631		3610	1615	1805	3511	85
	1											
Capacity Ana	_											
Vol/Sat:		0.03	0.02	0.09	0.09	0.09	0.05	0.33	0.07		0.24	0.24
Crit Moves:	****				****			****		****		
Green/Cycle:			0.17	0.16		0.16		0.55	0.65		0.48	0.48
Volume/Cap:			0.13	0.60		0.60		0.60	0.10		0.49	0.49
Delay/Veh:			35.4	42.6		42.6		15.4	6.5		17.9	17.9
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:	45.6	42.6	35.4	42.6	42.6	42.6	39.4	15.4	6.5	46.7	17.9	17.9
LOS by Move:	D	D	D	D	D	D	D	В	A	D	В	В
HCM2kAvgQ:	4	_	1	6	6	6	2		1	2	9	9
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project AM

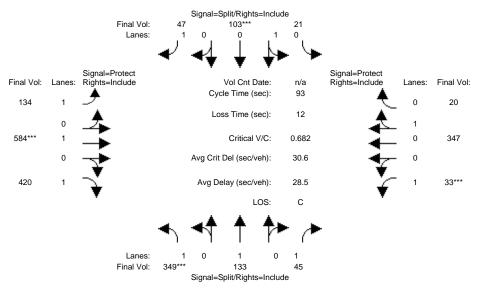
Intersection #12: Middlefield & Jefferson



Approach:					ıth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T -				- R		- T			- T	- R
Min. Green:	10	10	10	10	10	10	4	10	10	4	10	10
Y+R:	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:	349	129	43	21	102	46	132	582	420	33	346	20
_	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		129	43	21	102	46	132	582	420	33	346	20
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
- · · · · · · · · · · · · · · · · · · ·		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			43	21	102	46	132	582	420	33	346	20
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
	349	129	43	21	102	46	132	582	420	33	346	20
	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			43	21	102	46	132	582	420	33	346	20
PCE Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			43	. 21	102	46	132		420	. 33		20
	ı											
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
-	0.92		0.82	0.96		0.82		1.00	0.85		0.96	0.96
Lanes:	1.00		1.00	0.17		1.00		1.00	1.00		0.95	0.05
Final Sat.:			1562		1511	1562		1900	1615		1723	100
	1		- 1									
Capacity Anal				0 00	0 0 0	0 00	0 0 0	0 01	0 06	0 00	0 00	0 00
Vol/Sat:	0.20 ***	0.07	0.03	0.07 ****	0.07	0.03	0.07	0.31	0.26	0.02 ****	0.20	0.20
Crit Moves:		0 00	0 00		0 11	0 11	0 10		0 44		0 25	0 25
Green/Cycle:			0.28		0.11	0.11		0.44	0.44		0.35	0.35
Volume/Cap:			0.10	0.63		0.27		0.70	0.60		0.57	0.57
Delay/Veh:		25.8	24.6	46.0		39.0		24.1	21.4		25.8	25.8
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			24.6	46.0		39.0		24.1	21.4		25.8	25.8
LOS by Move:			C	D	D	D	D	C 1.2	C	D	C	C
HCM2kAvgQ:	9		1	4	4	1	3		9	2	9	9
Note: Queue	repor	Lea IS	the n	unper	or ca	ırs per	ıane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative AM

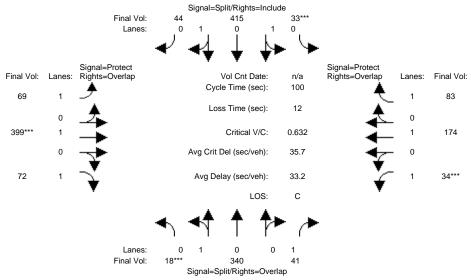
Intersection #12: Middlefield & Jefferson



Approach:	North Bound L - T - R I				ıth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:						- R		- T			- T	
 Min. Green:	10	10	10		10			10	10	4		10
Y+R:	4.0		4.0		4.0		_	4.0				
Volume Module			'	'		'	'		'	'		'
Base Vol:	349	129	43	21	102	46	132	582	420	33	346	20
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	349	129	43	21	102	46	132	582	420	33	346	20
	0	4	2	0	1	1	2	2	0	0	1	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	349	133	45	21	103	47	134	584	420	33	347	20
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	349	133	45	21	103	47	134	584	420	33	347	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	349	133	45	21	103	47	134	584	420	33	347	20
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	349	133	45	21	103	47	134	584	420	33	347	20
Saturation F												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900		1900		1900	1900
Adjustment:	0.92	0.97	0.82	0.96	0.96	0.82		1.00	0.85	0.92	0.96	0.96
Lanes:	1.00	1.00	1.00	0.17	0.83	1.00	1.00	1.00	1.00	1.00	0.95	0.05
Final Sat.:			1562		1514	1562	1805		1615		1723	99
	1											
Capacity Anal	_											
Vol/Sat:		0.07	0.03	0.07	0.07	0.03	0.07	0.31	0.26		0.20	0.20
Crit Moves:	****				****			****		****		
Green/Cycle:			0.28	0.11		0.11		0.44	0.44		0.35	0.35
Volume/Cap:			0.10	0.63		0.28		0.70	0.60		0.57	0.57
Delay/Veh:			24.7	46.3		39.1	41.6		21.4		25.9	25.9
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:			24.7	46.3		39.1	41.6		21.4		25.9	25.9
LOS by Move:			C	D		D	D	С	С	D	-	C
HCM2kAvgQ:		3	1	5	5	1	3		9	2	9	9
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project AM

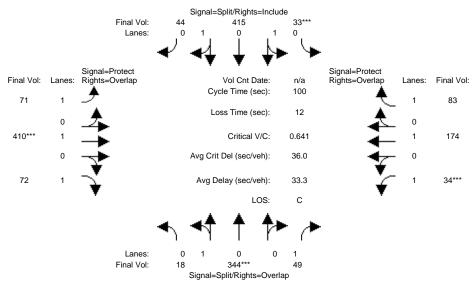
Intersection #13: Middlefield & Main



Approach:	North Bound S				ıth Bo	und	F:	ast Ro	und	₩.	est Ro	und
Movement:		- T				- R		- T			- Т	- R
Min. Green:	10		10	1	10	10	['] 7		10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module	≘:											
Base Vol:	18	340	41	33	415	44	69	399	72	34	174	83
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		340	41	33	415	44	69	399	72	34	174	83
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	18		41	33	415	44	69		72	34	174	83
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:	18	340	41	33	415	44	69	399	72	34	174	83
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			41	33	415	44	69	399	72	34	174	83
PCE Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
FinalVolume:			41			44		399	72		174	83
	1											
Saturation F.												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
-	1.00		0.85		0.93	0.93		1.00	0.85		1.00	0.85
Lanes:		0.95	1.00		1.69	0.18		1.00	1.00		1.00	1.00
Final Sat.:		1801	1615		2996	318		1900	1615		1900	1615
	Į.											
Capacity Anal	-		0.03	0 14	0 14	0 14	0 04	0.21	0 04	0 02	0 00	0 05
Vol/Sat:	U.⊥9 ****	0.19	0.03	****	0.14	0.14	0.04	U.∠⊥ ****	0.04	****	0.09	0.05
Crit Moves: Green/Cycle:		0 20	0.35		0.21	0.21	0 16		0.60		0.23	0.44
						0.21		0.32				0.44
Volume/Cap:			0.07 21.4	38.6	0.66	38.6		0.66	0.07		0.40	16.8
Delay/Veh: User DelAdj:			1.00	1.00		1.00		1.00	8.4		1.00	1.00
_				38.6				32.3				
AdjDel/Veh:		34.6 C	21.4 C	38.6 D	38.0 D	38.6 D	37.2 D	32.3 C	8.4 A	45.Z D	33.5 C	16.8 B
LOS by Move:	11		1	ע 7	ט 7	р 7	ں 2			ם 1	5	в 2
HCM2kAvgQ:			_	-	-	-	_		1	1	5	2
Note: Queue	repor	Leu IS	the fi	uiiber	or ca	rs ber	тапе	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative AM

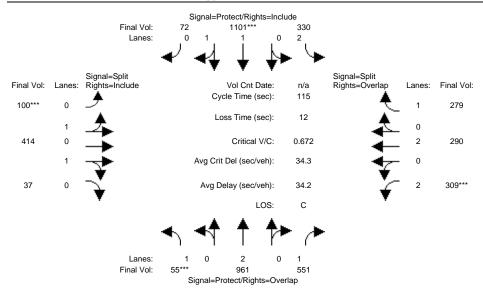
Intersection #13: Middlefield & Main



Approach:	No	rth Po	ınd	501	ı+h Bo	und	₽-	act Bo	und	Wo	at Bo	und
Movement:		- T				- R		авс во - Т			. БС БО • Т	
												I
Min. Green:	1	10		1	10		1	10	10	7		10
Y+R:		4.0			4.0			4.0	4.0		4.0	4.0
Volume Modul	e:											
Base Vol:	18	340	41	33	415	44	69	399	72	34	174	83
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Initial Bse:		340	41	33	415	44	69	399	72	34	174	83
Added Vol:	0		8	0	0	0	2	11	0	0	0	0
Reassigned :			0	0	0	0	0	0	0	0	0	0
Initial Fut:			49	33		44	71	410	72	34	174	83
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
	18		49	33	415	44	71	410	72	34	174	83
	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:			49	33		44	71	410	72	34	174	83
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:			1.00			1.00		1.00	1.00	1.00		1.00
FinalVolume:			49			44		410	72			83
Saturation F												
Sat/Lane:			1900		1900	1900		1900	1900	1900		1900
Adjustment:			0.85	0.93		0.93		1.00	0.85	0.95		0.85
Lanes:		0.95	1.00		1.69	0.18		1.00	1.00	1.00		1.00
Final Sat.:			1615		2996	318		1900	1615	1805		1615
Capacity Ana	-			0 14	0 14	0 14	0 0 4	0 00	0 04	0 00	0 00	0 05
Vol/Sat:			0.03	0.14 ****	0.14	0.14	0.04	0.22	0.04	0.02	0.09	0.05
Crit Moves:			0 25		0 01	0 01	0 16		0 60		0 00	0 44
Green/Cycle:			0.35		0.21	0.21		0.32	0.60	0.07		0.44
Volume/Cap:			0.09		0.67	0.67		0.67	0.07	0.27		0.12
Delay/Veh:			21.6		39.1	39.1		32.4	8.2	45.2		16.9
User DelAdj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			21.6	39.1		39.1		32.4	8.2	45.2		16.9
LOS by Move:			C	D	D	D	D		A	D	C	В
HCM2kAvgQ:	11		1	7	•	7	2		1	1	5	2
Note: Queue	repor	tea is	the n	umper	or ca	rs per	ıane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project AM

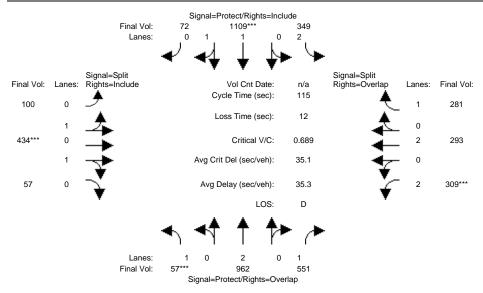
Intersection #14: El Camino Real and Whipple Av



Street Name:										le Av		
Approach:												
Movement:	L .	- T	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
		10							10			
Y+R:		4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Modul												
_		961	551	330	1101	72	100	414	37	309	290	279
Base Vol: Growth Adj:			1.00			1.00		1.00	1.00	1.00		1.00
Initial Bse:		961	551		1101	72	100	414	37	309	290	279
Added Vol:	22	961	221	330		72	100	414	0	309	290 0	279
Reassigned:	0	0		0	0		0	-	0	0	0	0
								0				
Initial Fut:			551			72	100		37	309		279
User Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	55	961	551		1101	72	100	414	37	309	290	279
Reduct Vol:	0	0	0	0	0	0	0	0	0	0		0
Reduced Vol:	55	961	551	330	1101	72	100	414	37	309	290	279
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:				330		72	100		37	309		279
Saturation F	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.94	0.94	0.93	0.93	0.93	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	2.00	1.88	0.12	0.36	1.51	0.13	2.00	2.00	1.00
Final Sat.:	1805	3610	1615	3502	3358	220	643	2661	238	3502	3610	1615
Capacity Ana	lysis	Modul	e:	·		·			•	·		·
Vol/Sat:	0.03	0.27	0.34	0.09	0.33	0.33	0.16	0.16	0.16	0.09	0.08	0.17
Crit Moves:	***				****		****			****		
Green/Cycle:	0.06	0.40	0.53	0.14	0.48	0.48	0.23	0.23	0.23	0.13	0.13	0.27
Volume/Cap:	0.50	0.67	0.65	0.67	0.68	0.68	0.68	0.68	0.68	0.68	0.62	0.64
Delay/Veh:			21.2		24.4	24.4	43.1		43.1		50.1	40.2
User DelAdj:			1.00		1.00	1.00	1.00		1.00	1.00		1.00
AdjDel/Veh:				50.3		24.4	43.1		43.1	52.2		40.2
LOS by Move:			C				D			D		D
HCM2kAvgQ:	2	14	14	7	_	17	10		10	5	5	9
Note: Queue :									10	5	5	
Tiocci Queuc .	- CPOT	ccu ib	C11C 11	. GIIIDCI	O1 C6	TD PCT	_uiic	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative AM

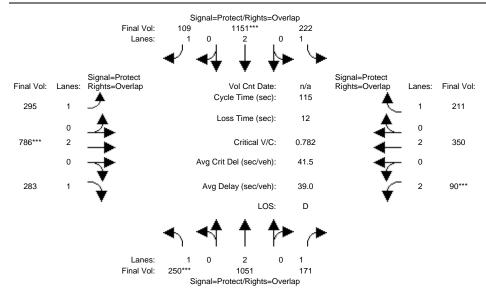
Intersection #14: El Camino Real and Whipple Av



Street Name: Approach:	No	E:	l Cami	no Rea	al	und	τ.	nat Bo	Whipp	le Av	est Bo	und
Movement:	L	- T	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R
Min. Green:		10		7	10	10				10		
Y+R:		4.0			4.0				4.0		4.0	4.0
Volume Module												
Base Vol:	55	961	551	330	1101	72	100	414	37	309	290	279
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	55	961	551	330	1101	72	100	414	37	309	290	279
Added Vol:		1	0	19	8	0	0	20	20	0	3	2
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	57	962	551	349	1109	72	100	434	57	309	293	281
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	57	962	551	349	1109	72	100	434	57	309	293	281
Reduct Vol: Reduced Vol: PCE Adj:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	57	962	551	349	1109	72	100	434	57	309	293	281
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			551		1109	72	100	434	57	309	293	281
Saturation F	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.94	0.94	0.93	0.93	0.93	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	2.00	1.88	0.12	0.34	1.47	0.19	2.00	2.00	1.00
Final Sat.:					3359			2593	341		3610	1615
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	0.03	0.27	0.34	0.10	0.33	0.33	0.17	0.17	0.17	0.09	0.08	0.17
Crit Moves:	****				****			****		****		
Green/Cycle:	0.06	0.39	0.51	0.14	0.47	0.47	0.24	0.24	0.24	0.13	0.13	0.27
Volume/Cap:	0.52	0.69	0.67	0.69	0.70	0.70	0.70	0.70	0.70	0.70	0.65	0.64
Delay/Veh:	56.7	31.0	22.8	50.7	25.4	25.4	42.7	42.7	42.7	53.2	51.0	40.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	56.7	31.0	22.8	50.7	25.4	25.4	42.7	42.7	42.7	53.2	51.0	40.3
LOS by Move:	E	C	C	D	C	С	D	D	D	D	D	D
HCM2kAvgQ:	2	14	14	7	18	18	11	11	11	6	5	9
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project AM

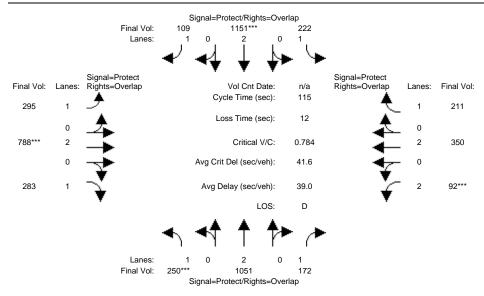
Intersection #15: El Camino Real and Jefferson Ave



Street Name:				efferson A	ve	
Approach: North		outh Bound			West Bo	
Movement: L - T						
Min. Green: 7 1		7 10 10	7 10		 7 10	
Y+R: 4.0 4.		4.0 4.0			0 4.0	4.0
Base Vol: 250 105	171 222	2 1151 109	295 786	283 9	0 350	211
Growth Adj: 1.00 1.0		1.00 1.00	1.00 1.00		0 1.00	1.00
Initial Bse: 250 105		2 1151 109	295 786		0 350	211
Added Vol: 0			0 0	0		0
	0 0		0 0	0	-	0
Initial Fut: 250 105		2 1151 109	295 786		0 350	211
User Adj: 1.00 1.0		1.00 1.00	1.00 1.00		0 1.00	1.00
PHF Adj: 1.00 1.0		1.00 1.00	1.00 1.00		0 1.00	1.00
PHF Volume: 250 105		2 1151 109	295 786		0 350	211
Reduct Vol: 0			0 0	0		0
Reduced Vol: 250 105		2 1151 109			0 350	211
PCE Adj: 1.00 1.0		1.00 1.00	1.00 1.00		0 1.00	1.00
MLF Adj: 1.00 1.0		1.00 1.00	1.00 1.00		0 1.00	1.00
FinalVolume: 250 105		2 1151 109	295 786		0 1.00	211
Saturation Flow Module						
Sat/Lane: 1900 190	1900 1900	1900 1900	1900 1900	1900 190	0 1900	1900
Adjustment: 0.95 0.9	0.85 0.95	0.95 0.85	0.95 0.95	0.85 0.9	2 0.95	0.85
Lanes: 1.00 2.0	1.00 1.00	2.00 1.00	1.00 2.00	1.00 2.0	0 2.00	1.00
Final Sat.: 1805 361	1615 1805	3610 1615	1805 3610		2 3610	1615
Capacity Analysis Mod		'	1			'
Vol/Sat: 0.14 0.2	0.11 0.12	2 0.32 0.07	0.16 0.22	0.18 0.0	3 0.10	0.13
Crit Moves: ****		***	****	* * *	*	
Green/Cycle: 0.17 0.4	0.46 0.17	7 0.39 0.60	0.21 0.27	0.44 0.0	6 0.12	0.29
Volume/Cap: 0.81 0.7	3 0.23 0.73	3 0.81 0.11	0.79 0.81	0.40 0.4	2 0.79	0.45
Delay/Veh: 60.4 31.	19.0 54.2	2 34.5 9.8	53.9 44.4	22.2 53.	4 58.2	33.9
User DelAdj: 1.00 1.0	1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.0	0 1.00	1.00
AdjDel/Veh: 60.4 31.		2 34.5 9.8	53.9 44.4		4 58.2	33.9
LOS by Move: E				С	D E	С
HCM2kAvqQ: 11 1		3 20 2	12 16		2 7	6
Note: Queue reported		of cars per				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative AM

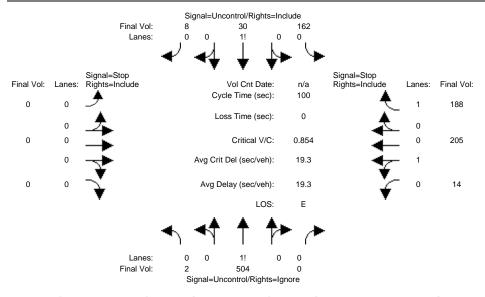
Intersection #15: El Camino Real and Jefferson Ave



Street Name:			l Cami	no Rea	al				effers	on Ave	9	
		rth Bo				und					est Bo	
Movement:												
Min. Green:		10			10						10	
Y+R:		4.0			4.0	4.0	4.0	4.0	4.0			4.0
Volume Module												
		1051	171	222	1151	109	295	786	283	90	350	211
Growth Adj:				1.00		1.00		1.00	1.00		1.00	1.00
Initial Bse:			171		1151	109	295	786	283	90		211
Added Vol:			1	0	1131	109	293	780	203	2	330	0
Reassigned:			0	0	-	0	0		-	0	-	0
Initial Fut:			172		1151	109	295		283	92		211
User Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:			172		1151	109	295	788	283	92	350	211
Reduct Vol:				0		0	0		0	0		0
Reduced Vol:			172			109	295		283	92		211
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			172		1151	109	295		283		350	211
Saturation F												
Sat/Lane:				1900		1900		1900	1900		1900	1900
Adjustment:				0.95		0.85		0.95	0.85		0.95	0.85
		2.00	1.00		2.00	1.00		2.00	1.00		2.00	1.00
Final Sat.:					3610	1615		3610	1615		3610	1615
Capacity Ana												
Vol/Sat:	_	0.29		0 12	0 33	0.07	0 16	0.22	0.18	0 03	0.10	0.13
Crit Moves:	****	0.29	0.11	0.12	****	0.07	0.10	****	0.10	****	0.10	0.13
Green/Cycle:	0.17	0.40	0.46	0.17	0.39	0.60	0.21	0.27	0.44	0.06	0.12	0.29
Volume/Cap:	0.81	0.73	0.23	0.73	0.81	0.11	0.79	0.81	0.40	0.43	0.79	0.45
Delay/Veh:			19.1		34.6	9.8		44.4	22.2		58.1	33.9
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			19.1	54.3		9.8		44.4	22.2		58.1	33.9
LOS by Move:			В	D			D.D		C	D.D		C
HCM2kAvq0:			4	8	20	2	12	_	7	2		6
Note: Queue									,	2	,	9
			2220 11					-				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative No Project AM

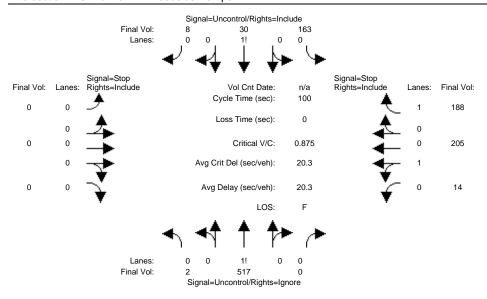
Intersection #16: Main & WB Woodside Ramps



Approach:	No	rth Bo	ound	Sou	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:												
Volume Module												
Base Vol:			153	149	28	7				13		173
Growth Adj:			1.00		1.00	1.00		1.00			1.00	1.00
Initial Bse:			153	149	28	7	0	0	0	13	189	173
Added Vol:	0	-	0	0	0	0	0	0	0	0	0	0
Reassigned :			0	0	0	0	0	0	0	0	0	0
Initial Fut:		464	153	149	28	7	0	0	0	13		173
User Adj:		1.00	0.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.92	0.00		0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:			0	162	30	8	0	0	0	14	205	188
Reduct Vol:		0	0	0	0	0	-		0	0	0	0
FinalVolume:			0			-	0	-	0			188
Critical Gap												
Critical Gp:												6.2
FollowUpTim:												3.3
	1											
Capacity Mod												
Cnflict Vol:											871	504
Potent Cap.:									XXXXX		289	568
Move Cap.:						XXXXX			XXXXX		241	568
Volume/Cap:						XXXX			XXXX		0.85	0.33
	1											
Level Of Ser												
2Way95thQ:											XXXX	
Control Del:									XXXXX			14.5
LOS by Move:						*			*		*	В
Movement:									- RT			
Shared Cap.:												
SharedQueue:	XXXXX	XXXX	xxxxx	XXXXX	XXXX	XXXXX	XXXXX	xxxx	XXXXX			
Shrd ConDel:												XXXXX
Shared LOS:		*					*	*	*	F	*	*
ApproachDel:	X	xxxxx		X			X				49.2	
ApproachLOS:		*			*			*			E	
Note: Queue :	report	ted is	s the r	number	of ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative AM

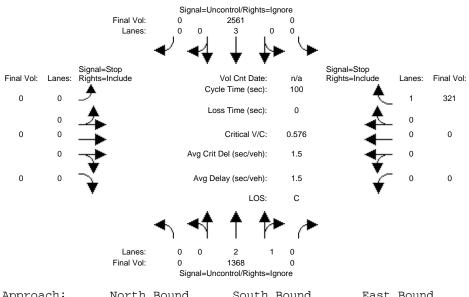
Intersection #16: Main & WB Woodside Ramps



Approach:	No	rth Bo	ound	Sou	uth Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:											- T	- R
Volume Module	e:											
Base Vol:	2	464	153	149	28	7	0	0	0	13	189	173
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	2	464	153	149	28	7	0	0	0	13	189	173
Added Vol:	0	12	0	1	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	2	476	153	150	28	7	0	0	0	13	189	173
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.00	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
	2		0	163	30	8	0	0	0	14	205	188
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	2	517	0	163	30	8	0	0	0	14	205	188
Critical Gap	Modu.	le:										
Critical Gp:	4.1	xxxx	xxxxx	4.1	XXXX	xxxxx	xxxxx	XXXX	XXXXX	6.4	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	XXXX	xxxxx	xxxxx	XXXX	XXXXX	3.5	4.0	3.3
Capacity Mod	ule:											
Cnflict Vol:	38	xxxx	xxxxx	517	XXXX	xxxxx	XXXX	XXXX	XXXXX	882	886	517
Potent Cap.:	1572	xxxx	xxxxx	1048	XXXX	xxxxx	XXXX	XXXX	XXXXX	317	284	558
Move Cap.:	1572	xxxx	xxxxx	1048	XXXX	xxxxx	XXXX	XXXX	XXXXX	275	235	558
Volume/Cap:	0.00	XXXX	XXXX	0.16	XXXX	XXXX	XXXX	xxxx	XXXX	0.05	0.88	0.34
Level Of Serv	vice D	Module	≘:									
2Way95thQ:	0.0	xxxx	xxxxx	0.5	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	1.5
Control Del:				9.1					xxxxx			14.7
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	В
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	XXXXX	237	xxxx	XXXXX
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	XXXX	XXXXX	8.1	xxxx	XXXXX
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	XXXX	XXXXX	84.9	xxxx	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	F	*	*
ApproachDel:	X	xxxxx		X			X	xxxxx			52.5	
ApproachLOS:		*			*			*			F	
Note: Queue	report	ted is	s the r	number	of ca	ars per	r lane					

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative No Project AM

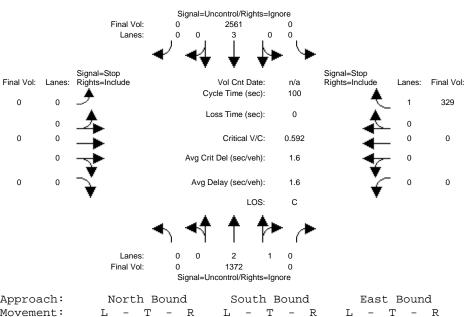
Intersection #17: El Camino Real & Laurel St



Approach:	No	rth Bo	ound	Sou	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:											- T	- R
Volume Module	e:											
Base Vol:	0	1368	269	0	2561	0	0	0	0	0	0	321
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Initial Bse:	0	1368	269	0	2561	0	0	0	0	0	0	321
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1368	269	0	2561	0	0	0	0	0	0	321
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1368	0	0	2561	0	0	0	0	0	0	321
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1368	0	0	2561	0	0	0	0	0	0	321
Critical Gap	Modu.	le:										
Critical Gp:												
FollowUpTim:												
Capacity Mod	ule:											
Cnflict Vol:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	456
Potent Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	557
Move Cap.:	xxxx	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	557
Volume/Cap:	XXXX	XXXX	XXXX	XXXX	xxxx	XXXX	XXXX	XXXX	XXXX	XXXX	xxxx	0.58
Level Of Serv	vice D	Module	≘:									
2Way95thQ:	xxxx	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	3.6
Control Del:				xxxxx	XXXX	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	19.9
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	C
Movement:	LT ·	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT -	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	X	xxxxx		XX	xxxxx		X	xxxxx			19.9	
ApproachLOS:		*			*			*			C	
Note: Queue	report	ted is	s the r	number	of ca	ars pei	lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative AM

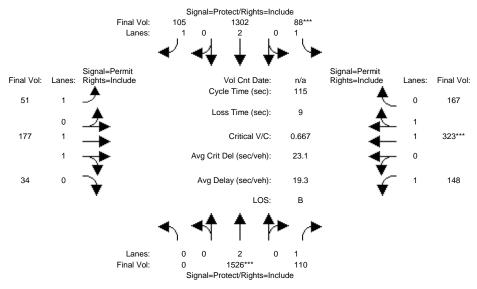
Intersection #17: El Camino Real & Laurel St



Approach:				South Bound			Ea	ast Bo	ound	d West Bound		
Movement:											- T	- R
							:					
Volume Module	e:											
Base Vol:	0	1368	269	0	2561	0	0	0	0	0	0	321
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1368	269	0	2561	0	0	0	0	0	0	321
Added Vol:	0	4	0	0	0	0	0	0	0	0	0	8
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1372	269	0	2561	0	0	0	0	0	0	329
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1372	0	0	2561	0	0	0	0	0	0	329
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:			0		2561	0	-	0	0	0	0	329
Critical Gap	Modu.	le:										
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	XXXX	3.3
							:					
Capacity Mod	ule:											
Cnflict Vol:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	457
Potent Cap.:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	556
Move Cap.:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	556
Volume/Cap:	xxxx	xxxx	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	0.59
Level Of Ser	vice D	Module	e:									
2Way95thQ:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	3.8
Control Del:				xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	20.4
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	C
Movement:	LT ·	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	XXXXX	XXXX	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX
SharedQueue:	xxxxx	xxxx	XXXXX	xxxxx	XXXX	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	X	xxxxx		XX	xxxxx		X	xxxxx			20.4	
ApproachLOS:		*			*			*			С	
Note: Queue	report	ted is	s the r	number	of ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project AM

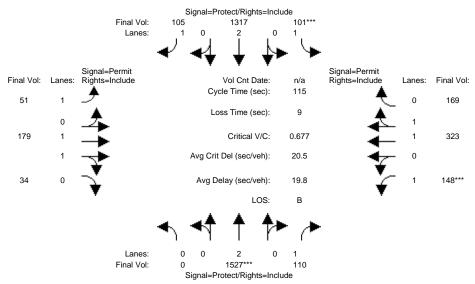
Intersection #18: El Camino Real & Brewster



	L - T - R			South Bound L - T - R						L - T - R		
Min. Green:						10					10	
Y+R:				4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module										'		
		1526	110	88	1302	105	51	177	34	148	323	167
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		1526	110	88	1302	105	51	177	34	148	323	167
Added Vol:	0		0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1526	110	88	1302	105	51	177	34	148	323	167
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1526	110		1302	105	51	177	34	148	323	167
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1526	110		1302	105	51	177	34	148	323	167
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1526	110	88	1302	105	51	177	34	148	323	167
Saturation Fl	Low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	0.85	0.24	0.93	0.93	0.54	0.90	0.90
Lanes:	0.00	2.00	1.00	1.00	2.00	1.00	1.00	1.68	0.32	1.00	1.32	0.68
Final Sat.:	0	3610	1615	1805	3610	1615	454	2956	568	1024	2258	1168
Capacity Anal	lysis	Module	e:									
Vol/Sat:			0.07		0.36	0.07	0.11	0.06	0.06	0.14	0.14	0.14
Crit Moves:		****		***							***	
Green/Cycle:	0.00	0.63	0.63	0.07	0.71	0.71	0.21	0.21	0.21	0.21	0.21	0.21
Volume/Cap:	0.00	0.67	0.11	0.67	0.51	0.09	0.52	0.28	0.28	0.67	0.67	0.67
Delay/Veh:	0.0	14.1	8.3	64.2	7.9	5.3	45.1	37.9	37.9	49.4	43.7	43.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	14.1	8.3	64.2	7.9	5.3	45.1	37.9	37.9	49.4	43.7	43.7
LOS by Move:	A	В	A	E	A	A	D	D	D	D	D	D
LOS by Move: HCM2kAvgQ:	0	18	1	3	11	1	2	3	3	6	9	9
Note: Queue r				umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative AM

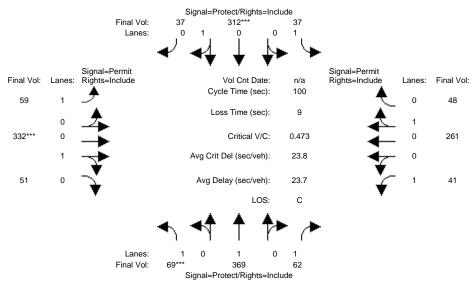
Intersection #18: El Camino Real & Brewster



Movement: L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T R L T T R L T T R L T T R L T T R L T T R L T T R L D 1 0 1	Approach:	No:	rth Bo	und	Soi	uth Bo	und	Ea	ast Bo	und	West Bound			
Min. Green: 0 10 10 7 10 10 10 10 10 10 10 10 10 10 10 10 10														
Y+R:														
Volume Module: Base Vol:	Min. Green:	0	10		7	10						10	10	
Volume Module: Base Vol: 0 1526 110 88 1302 105 51 177 34 148 323 167 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0														
Base Vol: 0 1526 110 88 1302 105 51 177 34 148 323 167 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0														
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0			1506	110	0.0	1200	105	-1	100	2.4	1.40	202	1.60	
Initial Bse: 0 1526 110 88 1302 105 51 177 34 148 323 167 Added Vol: 0 1 0 13 15 0 0 0 2 0 0 0 0 2 Reassigned: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0														
Added Vol: 0 1 0 1 0 13 15 0 0 0 2 0 0 0 0 0 0 0 1 1 1 1 1 1 1 1 1	_													
Reassigned: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0														
Initial Fut: 0 1527 110 101 1317 105 51 179 34 148 323 169 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0												-		
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Reassigned :	0	1505		-	-					-	-	-	
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0														
PHF Volume: 0 1527 110 101 1317 105 51 179 34 148 323 169 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 0 1527 110 101 1317 105 51 179 34 148 323 169 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0														
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	_													
Reduced Vol: 0 1527 110 101 1317 105 51 179 34 148 323 169 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0														
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00						-								
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0														
FinalVolume: 0 1527 110 101 1317 105 51 179 34 148 323 169	PCE Adj:	1.00	1.00											
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190														
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900														
Adjustment: 1.00 0.95 0.85 0.95 0.95 0.85 0.24 0.93 0.93 0.54 0.90 0.90 Lanes: 0.00 2.00 1.00 1.00 2.00 1.00 1.00 1.68 0.32 1.00 1.31 0.69 Final Sat.: 0 3610 1615 1805 3610 1615 450 2961 562 1020 2249 1177					1000	1900	1000	1000	1000	1000	1000	1900	1900	
Lanes: 0.00 2.00 1.00 1.00 2.00 1.00 1.00 1.68 0.32 1.00 1.31 0.69 Final Sat.: 0 3610 1615 1805 3610 1615 450 2961 562 1020 2249 1177														
Final Sat.: 0 3610 1615 1805 3610 1615 450 2961 562 1020 2249 1177	_													
Capacity Analysis Module: Vol/Sat: 0.00 0.42 0.07 0.06 0.36 0.07 0.11 0.06 0.06 0.15 0.14 0.14 Crit Moves: **** **** Green/Cycle: 0.00 0.62 0.62 0.08 0.71 0.71 0.21 0.21 0.21 0.21 0.21 0.21														
Vol/Sat: 0.00 0.42 0.07 0.06 0.36 0.07 0.11 0.06 0.06 0.15 0.14 0.14 Crit Moves: **** **** **** Green/Cycle: 0.00 0.62 0.62 0.08 0.71 0.71 0.21 0.21 0.21 0.21 0.21 0.21					1		1	1		ı	I		ı	
Green/Cycle: 0.00 0.62 0.62 0.08 0.71 0.71 0.21 0.21 0.21 0.21 0.21 0.21		_			0.06	0.36	0.07	0.11	0.06	0.06	0.15	0.14	0.14	
Green/Cycle: 0.00 0.62 0.62 0.08 0.71 0.71 0.21 0.21 0.21 0.21 0.21 0.21	Crit Moves:		***		****						***			
T-1				0.62	0.08	0.71	0.71	0.21	0.21	0.21	0.21	0.21	0.21	
Volume/Cap: 0.00 0.68 0.11 0.68 0.52 0.09 0.53 0.28 0.28 0.68 0.67 0.67	Volume/Cap:	0.00	0.68	0.11	0.68	0.52	0.09	0.53	0.28	0.28	0.68	0.67	0.67	
Delay/Veh: 0.0 14.9 8.7 63.0 7.9 5.3 45.5 38.0 38.0 49.7 43.9 43.9	Delay/Veh:	0.0	14.9	8.7	63.0	7.9	5.3	45.5	38.0	38.0	49.7	43.9	43.9	
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh: 0.0 14.9 8.7 63.0 7.9 5.3 45.5 38.0 38.0 49.7 43.9 43.9	_				63.0	7.9	5.3	45.5	38.0				43.9	
LOS by Move: A B A E A A D D D D D	LOS by Move:	A	В	A	E	A	A	D	D	D	D	D	D	
HCM2kAvgQ: 0 18 2 3 11 1 2 3 3 6 9 9				2	3	11	1	2	3	3	6	9	9	
Note: Queue reported is the number of cars per lane.	Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane						

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project AM

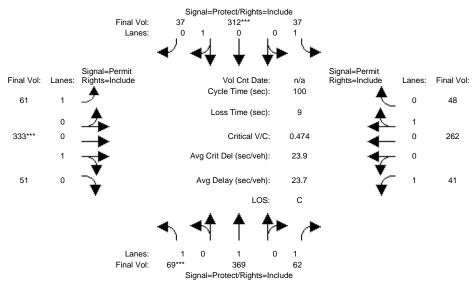
Intersection #19: Marshall St & Jefferson Ave



Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R R L - T - R R L - T - R L - T - R R L - T - R R L - T - R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R R L - T - R L - T - R R L - T - R R L - T - T - R R L - T - T - R R L - T - R R L - T - T - R R L	Approach:	No	rth Bo	und	501	ıth Bo	und	.	act Po	und	West Bound		
Min. Green: 7 10 10 7 10 10 10 10 10 10 10 10 10 10 10 10 10													
Min. Green: 7 10 10 7 10 10 10 10 10 10 10 10 10 10 10 10 YHR: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0													
Volume Module: Base Vol: 69 369 62 37 312 37 59 332 51 41 261 48 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0											1		- 1
Volume Module: Base Vol: 69 369 62 37 312 37 59 332 51 41 261 48 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Base Vol: 69 369 62 37 312 37 59 332 51 41 261 48 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Volume Modul	e:											
Initial Bse: 69 369 62 37 312 37 59 332 51 41 261 48 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Base Vol:	69	369	62			37				41	261	48
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	_										1.00	1.00	
Reassigned: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Initial Bse:	69		62			37	59	332	51	41	261	48
Initial Fut: 69 369 62 37 312 37 59 332 51 41 261 48 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Added Vol:	0	0	0	0	0	0		0	0	0	0	
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0			0	0	0	0	0	0	0	0	0	0	0
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Initial Fut:	69	369	62	37	312	37	59	332	51	41	261	48
PHF Volume: 69 369 62 37 312 37 59 332 51 41 261 48 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reduced Vol: 69 369 62 37 312 37 59 332 51 41 261 48 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Reduced Vol: 69 369 62 37 312 37 59 332 51 41 261 48 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	PHF Volume:	69	369	62	37	312	37	59	332	51	41	261	48
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Reduced Vol:	69	369	62	37	312	37	59	332	51	41	261	48
FinalVolume: 69 369 62 37 312 37 59 332 51 41 261 48				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190	MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190									332	51	41	261	48
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 1900													
Adjustment: 0.95 1.00 0.85 0.95 0.98 0.98 0.45 0.98 0.98 0.38 0.98 0.98 Lanes: 1.00 1.00 1.00 1.00 0.89 0.11 1.00 0.87 0.13 1.00 0.84 0.16 Final Sat.: 1805 1900 1615 1805 1671 198 861 1614 248 728 1568 288	Saturation F	low M	odule:										
Lanes: 1.00 1.00 1.00 1.00 0.89 0.11 1.00 0.87 0.13 1.00 0.84 0.16 Final Sat.: 1805 1900 1615 1805 1671 198 861 1614 248 728 1568 288	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Final Sat.: 1805 1900 1615 1805 1671 198 861 1614 248 728 1568 288	Adjustment:	0.95	1.00	0.85	0.95	0.98	0.98	0.45	0.98	0.98	0.38	0.98	0.98
Capacity Analysis Module: Vol/Sat: 0.04 0.19 0.04 0.02 0.19 0.19 0.07 0.21 0.21 0.06 0.17 0.17 Crit Moves: **** Green/Cycle: 0.08 0.35 0.35 0.13 0.39 0.39 0.43 0.43 0.43 0.43 0.43 0.43 Volume/Cap: 0.47 0.56 0.11 0.16 0.47 0.47 0.16 0.47 0.47 0.13 0.38 0.38 Delay/Veh: 46.3 27.3 22.1 39.3 23.0 23.0 17.4 20.6 20.6 17.1 19.5 19.5 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Lanes:	1.00	1.00	1.00	1.00	0.89	0.11	1.00	0.87	0.13	1.00	0.84	0.16
Capacity Analysis Module: Vol/Sat: 0.04 0.19 0.04 0.02 0.19 0.19 0.07 0.21 0.21 0.06 0.17 0.17 Crit Moves: **** Green/Cycle: 0.08 0.35 0.35 0.13 0.39 0.39 0.43 0.43 0.43 0.43 0.43 0.43 Volume/Cap: 0.47 0.56 0.11 0.16 0.47 0.47 0.16 0.47 0.47 0.13 0.38 0.38 Delay/Veh: 46.3 27.3 22.1 39.3 23.0 23.0 17.4 20.6 20.6 17.1 19.5 19.5 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0									1614	248	728	1568	288
Vol/Sat: 0.04 0.19 0.04 0.02 0.19 0.19 0.19 0.07 0.21 0.21 0.21 0.06 0.17 0.17 Crit Moves: **** **** **** ***** Green/Cycle: 0.08 0.35 0.35 0.13 0.39 0.39 0.43 0.43 0.43 0.43 0.43 0.43 0.43 0.43 0.43 0.43 0.43 0.43 0.43 0.43 0.43													
Crit Moves: **** ***** ***** ***** Green/Cycle: 0.08 0.35 0.35 0.13 0.39 0.39 0.43 0.43 0.43 0.43 0.43 0.43 0.43 0.43 0.43 0.43 0.43 Volume/Cap: 0.47 0.56 0.11 0.16 0.47 0.47 0.47 0.16 0.47 0.47 0.47 0.13 0.38 0.38 Delay/Veh: 46.3 27.3 22.1 39.3 23.0 23.0 17.4 20.6 20.6 17.1 19.5 19.5 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Capacity Ana	lysis	Modul	e:									
Green/Cycle: 0.08 0.35 0.35 0.13 0.39 0.39 0.43 0.43 0.43 0.43 0.43 0.43 Volume/Cap: 0.47 0.56 0.11 0.16 0.47 0.47 0.16 0.47 0.16 0.47 0.47 0.13 0.38 0.38 Delay/Veh: 46.3 27.3 22.1 39.3 23.0 23.0 17.4 20.6 20.6 17.1 19.5 19.5 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0			0.19	0.04	0.02	0.19	0.19	0.07		0.21	0.06	0.17	0.17
Volume/Cap: 0.47 0.56 0.11 0.16 0.47 0.47 0.16 0.47 0.47 0.47 0.13 0.38 0.38 Delay/Veh: 46.3 27.3 22.1 39.3 23.0 23.0 17.4 20.6 20.6 17.1 19.5 19.5 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1	Crit Moves:	****				****			****				
Delay/Veh: 46.3 27.3 22.1 39.3 23.0 23.0 17.4 20.6 20.6 17.1 19.5 19.5 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Green/Cycle:	0.08	0.35	0.35	0.13	0.39	0.39	0.43	0.43	0.43	0.43	0.43	0.43
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Volume/Cap:	0.47	0.56	0.11	0.16	0.47	0.47	0.16	0.47	0.47	0.13	0.38	0.38
AdjDel/Veh: 46.3 27.3 22.1 39.3 23.0 23.0 17.4 20.6 20.6 17.1 19.5 19.5 LOS by Move: D C C D C B C C B B B B HCM2kAvgQ: 3 9 1 1 8 8 1 8 8 1 6 6	Delay/Veh:	46.3	27.3	22.1	39.3	23.0	23.0	17.4	20.6	20.6	17.1	19.5	19.5
LOS by Move: D C C D C C B C B B B B HCM2kAvgQ: 3 9 1 1 8 8 1 8 8 1 6 6	User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
HCM2kAvgQ: 3 9 1 1 8 8 1 8 8 1 6 6	AdjDel/Veh:	46.3	27.3	22.1	39.3	23.0	23.0	17.4	20.6	20.6	17.1	19.5	19.5
	LOS by Move:	D	C	С	D	С	C	В	C	С	В	В	В
Note: Queue reported is the number of cars per lane.	HCM2kAvgQ:	3	9	1	1	8	8	1	8	8	1	6	6
	Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative AM

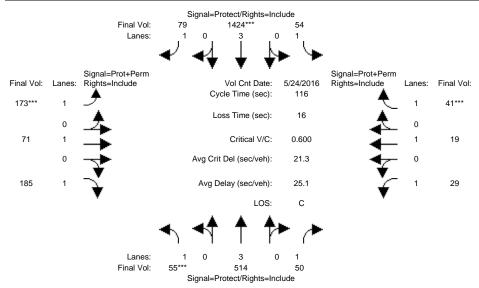
Intersection #19: Marshall St & Jefferson Ave



Approach:	No	rth Boi	und	Soi	ıth Bo	und	East Bound			West Bound		
Movement:		- T				- R		- T			- T	- R
Min. Green:	. 7	10	10	. 7	10	10	10	10	10	10	10	10
Y+R:			4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0
Volume Module	≘:											
Base Vol:	69	369	62	37	312	37	59	332	51	41	261	48
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:		369	62	37	312	37	59	332	51	41	261	48
Added Vol:	0	0	0	0	0	0	2	1	0	0	1	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	69		62	37	312	37	61	333	51	41	262	48
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00
	69	369	62	37	312	37	61	333	51	41	262	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			62	37	312	37	61	333	51	41	262	48
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:		369	62		312	37		333	51	41	262	48
Cotumption E	ı											
Saturation Fi		1900	1900	1000	1900	1900	1000	1900	1900	1900	1000	1900
	0.95		0.85	0.95		0.98		0.98	0.98	0.38		0.98
Lanes:	1.00		1.00		0.89	0.98		0.87	0.38	1.00		0.36
Final Sat.:			1615		1671	198		1615	247		1569	287
Capacity Anal	Į.									1		1
Vol/Sat:	-	0.19	0.04	0 02	0.19	0.19	0 07	0.21	0.21	0 06	0.17	0.17
Crit Moves:	****	0.17	0.01	0.02	****	0.17	0.07	****	0.22	0.00	0.1	0.1.
Green/Cycle:	0.08	0.35	0.35	0.13	0.39	0.39	0.44	0.44	0.44	0.44	0.44	0.44
Volume/Cap:			0.11		0.47	0.47		0.47	0.47	0.13		0.38
Delay/Veh:			22.1		23.1	23.1		20.5	20.5	17.1		19.4
User DelAdj:			1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			22.1	39.4	23.1	23.1		20.5	20.5	17.1		19.4
LOS by Move:		C	C	D	С	С	В	С	С	В	В	В
HCM2kAvgQ:	3	9	1	1	8	8	1	8	8	1	6	6
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj Alt Access AM

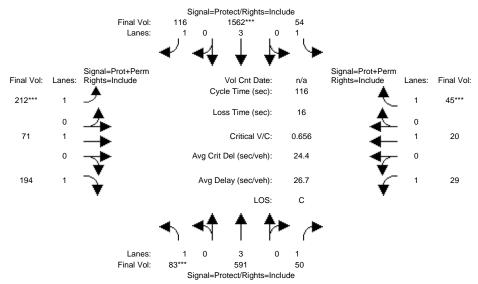
Intersection #2: Veterans & Brewster



Approach:	No:	rth Bo	und	Soı	ıth Bo	und	Ea	ast Bo	und	West Bound			
Movement:		- T				- R		- T			- T		
Min. Green:		10	10		10		7			7		10	
Y+R:		4.0	4.0		4.0			4.0					
Volume Module													
Base Vol:	50	507	50		ay 201 1184	6 << 8 207	168	.00 AM 71	184	29	19	41	
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00	
Initial Bse:		507	50		1184	207	168	71	184	29	19	41	
Added Vol:	5	7	0	0	112	0	5	0	1	0	0	0	
Reassigned:				0	128	-128	0		0	0	0	0	
Initial Fut:			50		1424	79	173		185	29	19	41	
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Volume:	55	514	50		1424	79	173	71	185	29	19	41	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:		514	50	54	1424	79	173	71	185	29	19	41	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:		514				79	173		185	29		41	
Saturation F	low M	odule:											
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900		1900	1900	
Adjustment:			0.85		0.91	0.85		1.00	0.85		1.00	0.85	
Lanes:		3.00	1.00		3.00	1.00		1.00	1.00		1.00	1.00	
Final Sat.:			1615		5187	1615		1900	1615		1900	1615	
	1												
Capacity Ana	_												
Vol/Sat:		0.10	0.03	0.03	0.27	0.05	0.10	0.04	0.11	0.02	0.01	0.03 ****	
Crit Moves:		0 25	0 25	0 00		0 50		0 10	0 10	0 10	0 00		
Green/Cycle:			0.37		0.53	0.53		0.18	0.18		0.09	0.09	
Volume/Cap:			0.08		0.52	0.09		0.21	0.64		0.12	0.29	
Delay/Veh:		25.9	24.0		17.8	13.5		41.0	49.3		49.2	50.9	
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00	
AdjDel/Veh: LOS by Move:			24.0	36.2 D	17.8 B	13.5 B	31.3 C	41.0 D	49.3 D	39.8 D	49.2 D	50.9 D	
HCM2kAvqQ:	3		C 1	ں 2	В 12	в 1	5		Б 6	ם 1	р 1	ر 2	
Note: Queue :			_			_	_	_	O	т.	1	4	
Note: Queue .	rebor	teu is	ciie II	unner	OI Ca	rs ber	Tane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj Alt Access AM

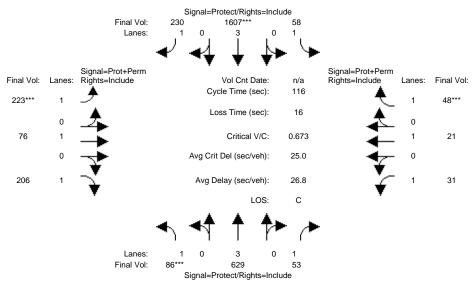
Intersection #2: Veterans & Brewster



Approach:	No	rth Boi	und	Soi	South Bound						West Bound		
Movement:		- T			- T			- T			- T	- R	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10	
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
	1												
Volume Module													
Base Vol:	78	584	50		1322	244	207	71	193	29	20	45	
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Initial Bse:		584	50		1322	244	207	71	193	29	20	45	
Added Vol:	5	7	0	0	112	0	5	0	1	0	0	0	
Reassigned:	0	0	0	0	128	-128	0	0	0	0	0	0	
Initial Fut:	83		50		1562	116	212	71	194	29	20	45	
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	
PHF Volume:	83	591	50		1562	116	212	71	194	29	20	45	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
Reduced Vol:		591	50		1562	116	212	71	194	29	20	45	
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
MLF Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
FinalVolume:			50		1562	116	212	71	194	. 29	20	45	
	1												
Saturation F.			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900	
-	0.95		0.85		0.91	0.85		1.00	0.85		1.00	0.85	
Lanes:	1.00		1.00		3.00	1.00		1.00	1.00		1.00	1.00	
Final Sat.:			1615		5187	1615	1805		1615	1805		1615	
	1												
Capacity Anal	_		0.03	0 03	0 20	0 07	0 10	0 04	0 10	0 02	0 01	0.03	
Vol/Sat:	****	0.11	0.03	0.03	0.30	0.07	U.⊥∠ ****	0.04	0.12	0.02	0.01	0.03 ****	
Crit Moves: Green/Cycle:		0 20	0.38	0 20	0.50	0.50		0.19	0.19	0.18	0 00	0.09	
						0.50						0.09	
Volume/Cap:		0.30 25.3	0.08 23.1	0.15 38.4		15.5		0.20	0.64 48.0		0.12 49.3	51.2	
Delay/Veh: User DelAdj:			1.00		1.00		1.00		1.00		1.00	1.00	
-				38.4		1.00	31.2				49.3		
AdjDel/Veh: LOS by Move:		25.3 C	23.1 C	38.4 D	20.9 C	15.5 B	31.Z	40.0 D	48.0 D	39.7 D	49.3 D	51.2 D	
-	ь 4	_	1	ں 2	15	В 2	6			ם 1	ם 1	2	
HCM2kAvgQ: Note: Queue	_		_	_		_	-		6	1	Т	2	
note. Queue	repor	Leu IS	the fi	uiiber	or ca	rs ber	тапе	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative Alt Access AM

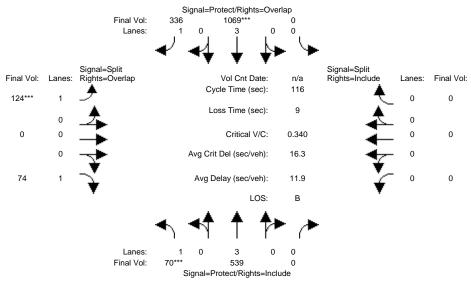
Intersection #2: Veterans & Brewster



Approach:	No	rth Boi	und	Soi	ıth Bo	und				West Bound		
Movement:		- T			- T			- T			- T	- R
Min. Green:	. 7	10	10	. 7	10	10	· 7	10	10	· 7	10	10
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module	≘:											
Base Vol:	81		53		1467	258	218	76	205	31	21	48
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		622	53		1467	258	218	76	205	31	21	48
Added Vol:	5	7	0	0	112	0	5	0	1	0	0	0
Reassigned:	0	0	0	0	28	-28	0	0	0	0	0	0
	86		53		1607	230	223	76	206	31	21	48
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Volume:	86	629	53		1607	230	223	76	206	31	21	48
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			53		1607	230	223	76	206	31	21	48
PCE Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			53		1607	230	223	76	206	31	21	48
Cotumption E	Į.											
Saturation Fi		1900	1900	1000	1900	1900	1000	1900	1900	1000	1900	1900
	0.95		0.85		0.91	0.85		1.00	0.85		1.00	0.85
Lanes:	1.00		1.00		3.00	1.00		1.00	1.00		1.00	1.00
Final Sat.:			1615		5187	1615	1805		1615		1900	1615
Capacity Anal	Į.			I		I	I		I	I		- 1
Vol/Sat:	-	0.12	0.03	0 03	0.31	0.14	0 12	0.04	0.13	0 02	0.01	0.03
Crit Moves:	****	0.12	0.03	0.03	****	0.11	****	0.01	0.15	0.02	0.01	****
Green/Cycle:	0.08	0.38	0.38	0.19	0.50	0.50	0.32	0.19	0.19	0.18	0.09	0.09
Volume/Cap:			0.09		0.62	0.28		0.21	0.66		0.13	0.34
Delay/Veh:		25.1	22.7	39.4		17.1		39.5	48.3		49.3	51.4
User DelAdj:			1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			22.7	39.4		17.1		39.5	48.3		49.3	51.4
LOS by Move:			C	D	С	В	С	D	D	D	D	D
HCM2kAvgQ:	4	6	1	2	15	5	6	2	7	1	1	2
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj Alt Access AM

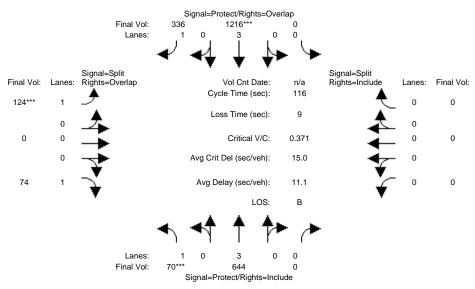
Intersection #3: Veterans & Middlefield



				d South Bound R L - T - R								
Movement:			- R							L - T		
		 10		0				0		0 (
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0 4.0	4.0	
Volume Module				_				_		_	_	
Base Vol:	63		0		1067		117		73	0 (-	
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00 1.00		
Initial Bse:			0		1067	419	117	0	73	0 (
Added Vol:			0	0	2	0	7	0	1	0 (
Reassigned:	0	0	0	0	-	-83	0	0	0	0 (-	
Initial Fut:			0		1069	336	124	0	74	0 (
User Adj:		1.00	1.00	1.00		1.00		1.00	1.00	1.00 1.00		
PHF Adj:			1.00	1.00	1.00	1.00		1.00	1.00	1.00 1.00	1.00	
PHF Volume:			0	0	1069	336	124	0	74	0 (0	
Reduct Vol:	0	0	0	0	0	0	0	0	0	0 (0	
Reduced Vol:			0	0	1069	336	124	0	74	0 (0	
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	
FinalVolume:	70	539	0	0	1069	336	124	0	74	0 (0	
Saturation F	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900 1900	1900	
Adjustment:	0.95	0.91	1.00	1.00	0.91	0.85	0.95	1.00	0.85	1.00 1.00	1.00	
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	1.00	0.00	1.00	0.00 0.00	0.00	
Final Sat.:			0		5187	1615	1805	0	1615	0 (0	
Capacity Ana												
Vol/Sat:	0.04	0.10	0.00	0.00	0.21	0.21		0.00	0.05	0.00 0.00	0.00	
Crit Moves:	****				****		****					
Green/Cycle:			0.00	0.00	0.61	0.81	0.20	0.00	0.32	0.00 0.00	0.00	
Volume/Cap:	0.34	0.14	0.00	0.00	0.34	0.26	0.34	0.00	0.14	0.00 0.00	0.00	
Delay/Veh:	48.3	5.1	0.0	0.0	11.4	2.8	40.2	0.0	28.6	0.0 0.0	0.0	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00	
AdjDel/Veh:	48.3			0.0		2.8	40.2	0.0	28.6	0.0 0.0	0.0	
LOS by Move:	D	A	A	A	В	A	D	A	С	A A	A A	
HCM2kAvgQ:	2	2	0	0	7	3	4	0	2	0 0	0	
Note: Queue	repor	ted is	the n	umber	of ca	ars per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj Alt Access AM

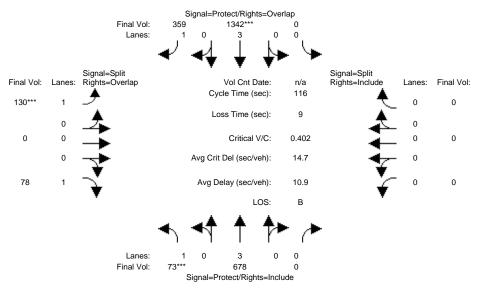
Intersection #3: Veterans & Middlefield



Approach:			h Bound South Bound T - R L - T - R									
Movement:										L -		
		 10		0				0		0		0
Y+R:		4.0			4.0			4.0			1.0	4.0
Volume Modul	e:											
Base Vol:	63		0		1214	419	117		73	0	0	0
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00 1.		1.00
Initial Bse:			0		1214	419	117	0	73	0	0	0
Added Vol:			0	0	2	0	7		1	0	0	0
Reassigned:	0	0	0	0	-	-83	0	0	0	0	0	0
Initial Fut:			0		1216	336	124	0	74	0	0	0
User Adj:		1.00	1.00	1.00		1.00		1.00	1.00	1.00 1.		1.00
PHF Adj:			1.00	1.00		1.00		1.00	1.00	1.00 1.	00	1.00
PHF Volume:	70	644	0	0	1216	336	124	0	74	0	0	0
Reduct Vol:			0	0	-	0	0	-	0	0	0	0
Reduced Vol:			0	0	1216	336	124	0	74	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00		1.00		1.00	1.00			1.00
MLF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.	00	1.00
FinalVolume:			0			336			74	-	-	0
	Į.											
Saturation F												
Sat/Lane:		1900	1900	1900		1900		1900	1900	1900 19		1900
Adjustment:			1.00	1.00		0.85		1.00	0.85	1.00 1.		1.00
		3.00	0.00		3.00	1.00		0.00	1.00	0.00 0.		0.00
Final Sat.:			•		5187	1615	1805		1615	. 0	-	0
Capacity Ana												
Vol/Sat:		0.12	0.00	0.00	0.23	0.21		0.00	0.05	0.00 0.	00	0.00
Crit Moves:	****				****		****					
Green/Cycle:				0.00		0.82		0.00	0.29	0.00 0.		0.00
Volume/Cap:			0.00	0.00		0.25		0.00	0.16	0.00 0.		0.00
Delay/Veh:				0.0		2.5	42.0	0.0	30.8		0.0	0.0
User DelAdj:						1.00		1.00	1.00	1.00 1.		1.00
AdjDel/Veh:						2.5	42.0	0.0	30.8			0.0
LOS by Move:			A				D		С	A		A
HCM2kAvgQ:		2	0	0	-	_	4		2	0	0	0
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative Alt Access AM

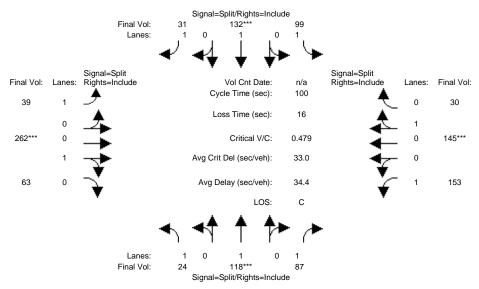
Intersection #3: Veterans & Middlefield



Approach:	No	rth Bo	und	Sou	uth Bo	und	l East Bound						
Movement:		- T				- R		- T			- T		
	7			0				0			0	0	
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	
Volume Modul													
Base Vol:	66		0		1340	442	123		77	0	0	0	
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Initial Bse:			0		1340	442	123	0	77	0	0	0	
Added Vol:			0	0	2		7		1	0	0	0	
Reassigned:			0	0	0	-83	0		0	0	0	0	
Initial Fut:			0		1342	359	130	0	78	0	0	0	
User Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00	
PHF Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00	
PHF Volume:			0		1342	359	130	0	78	0	0	0	
	0		0	0	0	0	0	-	0	0	0	0	
Reduced Vol:			0		1342	359	130	0	78		0	0	
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
MLF Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00	
FinalVolume:				. 0		359	130			0	-	0	
	1												
Saturation F				1000	1000	1000	1000	1000	1000	1000	1000	1000	
Sat/Lane:			1900		1900	1900		1900	1900	1900		1900	
Adjustment:			1.00	1.00		0.85		1.00	0.85	1.00		1.00	
	1.00		0.00		3.00	1.00		0.00	1.00	0.00		0.00	
Final Sat.:					5187	1615	1805	0		0		0	
Capacity Ana													
Vol/Sat:	_	0.13		0 00	0.26	0.22	0 07	0.00	0.05	0 00	0.00	0.00	
	****	0.13	0.00	0.00	****	0.22	****	0.00	0.05	0.00	0.00	0.00	
Green/Cycle:		0 74	0 00	0 00	0.64	0.82		0.00	0.28	0.00	0 00	0.00	
Volume/Cap:			0.00		0.40	0.27		0.00	0.17	0.00		0.00	
Delay/Veh:			0.0		10.1	2.5	43.0	0.0	31.8	0.0	0.0	0.0	
User DelAdj:				1.00		1.00		1.00	1.00	1.00		1.00	
AdjDel/Veh:				0.0		2.5	43.0	0.0		0.0		0.0	
LOS by Move:				Α.			D		C	Α.		A	
HCM2kAvqQ:	2		0	0	8		4		2	0	0	0	
Note: Queue					-		_		_	ŭ	,	3	
~	-					-							

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj Alt Access AM

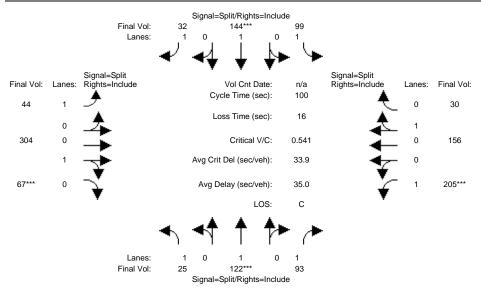
Intersection #8: Winslow & Brewster



Approach:	No	rth Boı	und	Sou	uth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T -				- R		- T			- T	
 Min. Green:	10		10	1	10	10	1	10	10	1	10	10
Y+R:	4.0		4.0		4.0			4.0				
Volume Module			1	ı		ı	1		'	I		1
Base Vol:	21	115	82	99	121	31	39	261	35	148	145	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	21	115	82	99	121	31	39	261	35	148	145	30
Added Vol:			5	0	11	0	0	1	28	5	0	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	24	118	87	99	132	31	39	262	63	153	145	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:			87	99	132	31	39	262	63	153	145	30
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			87	99	132	31	39	262	63	153	145	30
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			87		132	31	39		63		145	30
	1											
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.85	0.95		0.85		0.97	0.97		0.97	0.97
	1.00		1.00		1.00	1.00		0.81	0.19		0.83	0.17
Final Sat.:			1615		1900	1615		1487	358		1533	317
	1											
Capacity Anal				0 05	0 0 0	0 00	0 00	0 10	0 10	0 00	0 00	0 00
Vol/Sat:		0.06	0.05	0.05	0.07	0.02	0.02	0.18	0.18	0.08	0.09	0.09
0110 110 100	0 10		0 10	0 15		0 1 5			0 0 0			0 00
Green/Cycle:			0.13	0.15		0.15		0.37	0.37		0.20	0.20
Volume/Cap:			0.42		0.48	0.13		0.48	0.48		0.48	0.48
Delay/Veh:			41.4	39.6		37.5		24.8	24.8		36.6	36.6
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:				39.6		37.5		24.8	24.8		36.6	36.6
LOS by Move:				D		D 1	C	C	C	D		D
HCM2kAvgQ:	1		_	3	4	1	1	_	8	4	5	5
Note: Queue	repor	tea is	the n	umber	oi ca	rs per	⊥ane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj Alt Access AM

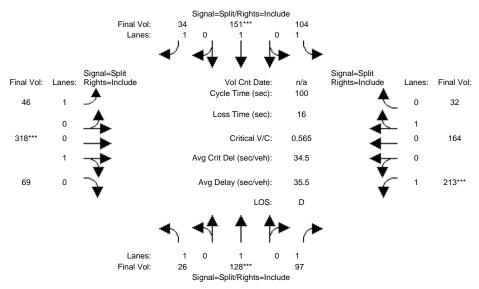
Intersection #8: Winslow & Brewster



Approach: North Bo Movement: L - T	- R L	- T - R	L - T	- R	L - T	- R
Min. Green: 10 10		0 10 10	10 10		10 10	
Y+R: 4.0 4.0		0 4.0 4.0			4.0 4.0	
Volume Module:						
Base Vol: 22 119	88 99	9 133 32	44 303	39	200 156	30
Growth Adj: 1.00 1.00		1.00 1.00	1.00 1.00	1.00	1.00 1.00	1.00
Initial Bse: 22 119	88 99		44 303	39	200 156	30
Added Vol: 3 3	5 (0 1	28	5 0	0
PasserByVol: 0 0	0 (0 0	0	0 0	0
Initial Fut: 25 122	93 99	9 144 32	44 304	67	205 156	30
User Adj: 1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00	1.00 1.00	1.00
PHF Adj: 1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00	1.00 1.00	1.00
PHF Volume: 25 122	93 99	9 144 32	44 304	67	205 156	30
Reduct Vol: 0 0	0 (0 0	0 0	0	0 0	0
Reduced Vol: 25 122	93 99	9 144 32	44 304	67	205 156	30
PCE Adj: 1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00	1.00 1.00	1.00
MLF Adj: 1.00 1.00	1.00 1.00	1.00 1.00	1.00 1.00	1.00	1.00 1.00	1.00
FinalVolume: 25 122		9 144 32	44 304		205 156	30
Saturation Flow Module						
Sat/Lane: 1900 1900		1900 1900	1900 1900	1900	1900 1900	1900
Adjustment: 0.95 1.00		5 1.00 0.85	0.95 0.97	0.97		0.98
Lanes: 1.00 1.00		0 1.00 1.00		0.18	1.00 0.84	0.16
Final Sat.: 1805 1900		5 1900 1615	1805 1515	334	1805 1555	299
	1 1					
Capacity Analysis Modu		- 0 00 0 00	0 00 0 00	0 00	0 11 0 10	0 10
Vol/Sat: 0.01 0.06 Crit Moves: ****	0.06 0.09	5 0.08 0.02	0.02 0.20	0.20	0.11 0.10	0.10
CIIC MOVED.	0 10 0 1		0 25 0 25			0 01
Green/Cycle: 0.12 0.12		4 0.14 0.14	0.37 0.37	0.37	0.21 0.21	0.21
Volume/Cap: 0.12 0.54		9 0.54 0.14 L 42.2 38.0	0.07 0.54 20.3 25.6	0.54 25.6	0.54 0.48 36.8 35.6	35.6
Delay/Veh: 39.6 44.1 User DelAdj: 1.00 1.00		0 1.00 1.00	1.00 1.00	1.00	1.00 1.00	1.00
AdjDel/Veh: 39.6 44.1		1 42.2 38.0	20.3 25.6	25.6	36.8 35.6	35.6
LOS by Move: D D		D D D		25.0 C	D D	33.0 D
HCM2kAvgQ: 1 4		3 5 1		9	6 5	5
Note: Queue reported is			± ,	,	0 3	J

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative Alt Access AM

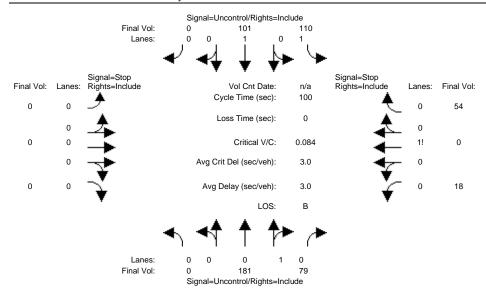
Intersection #8: Winslow & Brewster



Approach:	No	rth Boı	und	Sou	uth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T -				- R		- T			- T	
 Min. Green:	10				10			10		1	10	10
Y+R:		4.0			4.0			4.0				
1+K•												
Volume Module			ı	I		ļ	I		I	I		ļ
Base Vol:	23	125	92	104	140	34	46	317	41	208	164	32
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	23	125	92	104	140	34	46	317	41	208	164	32
Added Vol:			5	0	11	0	0	1	28	5	0	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			97	104	151	34	46	318	69	213	164	32
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	26	128	97	104	151	34	46	318	69	213	164	32
	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	26	128	97	104	151	34	46	318	69	213	164	32
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	26	128	97	104	151	34	46	318	69	213	164	32
Saturation F	low Mo	odule:	·	•		•				•		·
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.97	0.97	0.95	0.98	0.98
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.82	0.18	1.00	0.84	0.16
Final Sat.:			1615		1900	1615		1519	330		1552	303
	1											
Capacity Ana												
		0.07	0.06	0.06	0.08	0.02	0.03	0.21	0.21		0.11	0.11
Crit Moves:					****			****		****		
Green/Cycle:			0.12	0.14		0.14		0.37	0.37		0.21	0.21
Volume/Cap:			0.50	0.41		0.15		0.56	0.56		0.51	0.51
Delay/Veh:			43.4	40.2		38.0		26.1	26.1		36.1	36.1
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:				40.2		38.0		26.1	26.1		36.1	36.1
LOS by Move:				D		D	С	-	С		D	D
HCM2kAvgQ:	1		-	3	_	1	1		10	6	5	5
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing + Proj Alt Access AM

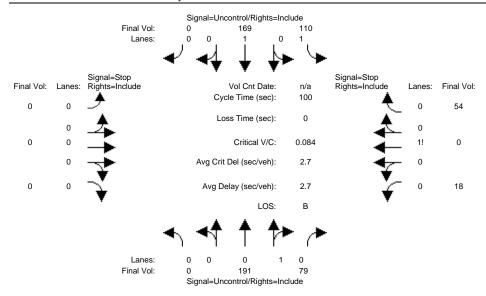
Intersection #9: Winslow & Driveway



Movement: L - T - R L - T - T R L - T - T - R L - T - T - R L - T - T - R L T - T - R L T - T - R L T - T - R L T - T - R L T - T - R L T - T - R L T - T - R L T - T - R L T - T - R L T - T - R L T - T - R L T - T - R L T - T - R L T - T - R L T - T - R L T - T - R L T - T - R L T - T
Volume Module: Base Vol: 0 186 52 66 229 0 0 0 0 15 0 39 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Base Vol: 0 186 52 66 229 0 0 0 0 0 15 0 39 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Initial Bse: 0 186 52 66 229 0 0 0 0 0 15 0 39 Added Vol: 0 0 13 44 0 0 0 0 0 0 0 3 0 10 Reassigned: 0 -5 14 0 -128 0 0 0 0 0 0 0 0 5 Initial Fut: 0 181 79 110 101 0 0 0 0 1.00 1.00 1.00 1.00 1.
Added Vol: 0 0 13 44 0 0 0 0 0 0 3 0 10 Reassigned: 0 -5 14 0 -128 0 0 0 0 0 0 0 0 5 Initial Fut: 0 181 79 110 101 0 0 0 0 18 0 54 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Reassigned: 0 -5 14 0 -128 0 0 0 0 0 0 0 5 Initial Fut: 0 181 79 110 101 0 0 0 0 18 0 54 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Initial Fut: 0 181 79 110 101 0 0 0 0 18 0 54 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Volume: 0 181 79 110 101 0 0 0 0 18 0 54 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 FinalVolume: 0 181 79 110 101 0 0 0 0 18 0 54
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 181 79 110 101 0 0 0 0 18 0 54
Critical Gap Module:
<u>.</u>
Critical Gp:xxxxx xxxxx xxxxx 4.1 xxxx xxxxx xxxxx xxxxx xxxxx 6.4 6.5 6.2
FollowUpTim:xxxxx xxxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxxx xxxxx 3.5 4.0 3.3
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx 260 xxxx xxxxx xxxxx xxxxx xxxxx 542 542 221
Potent Cap.: xxxx xxxx xxxxx 1316 xxxx xxxxx xxxxx xxxxx xxxx
Move Cap.: xxxx xxxx xxxxx 1316 xxxx xxxxx xxxxx xxxx
Volume/Cap: xxxx xxxx xxxx 0.08 xxxx xxxx xxxx xxxx
Level Of Service Module:
2Way95thQ: xxxx xxxxx xxxxx 0.3 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
Control Del:xxxxx xxxxx xxxxx 8.0 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
LOS by Move: * * * A * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxx xxxx
SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
Shared LOS: * * * * * * * * * B *
ApproachDel: xxxxxx xxxxx xxxxx 10.8
ApproachLOS: * * B
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Bkgd + Proj Alt Access AM

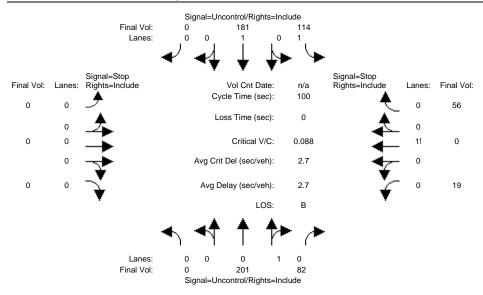
Intersection #9: Winslow & Driveway



Approach:	No	rth Bo	ound	Sou	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:											- T	- R
Volume Modul	e:											
Base Vol:	0	196	52	66	297	0	0	0	0	15	0	39
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	196	52	66	297	0	0	0	0	15	0	39
Added Vol:	0	0	13	44	0	0	0	0	0	3	0	10
Reassigned :	0	-5	14	0	-128	0	0	0	0	0	0	5
Initial Fut:	0	191	79	110	169	0	0	0	0	18	0	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	0	191	79	110	169	0	0	0	0	18	0	54
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	191	79	110	169	0	0	0	0	18	0	54
Critical Gap	Modu.	le:										
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	XXXX	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	XXXX	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Mod	ule:											
Cnflict Vol:	xxxx	xxxx	xxxxx	270	XXXX	xxxxx	XXXX	xxxx	xxxxx	620	620	231
Potent Cap.:	xxxx	xxxx	xxxxx	1305	XXXX	xxxxx	XXXX	xxxx	xxxxx	455	407	814
Move Cap.:	xxxx	xxxx	xxxxx	1305	XXXX	xxxxx	XXXX	xxxx	xxxxx	426	373	814
Volume/Cap:	xxxx	xxxx	XXXX	0.08	XXXX	XXXX	XXXX	xxxx	XXXX	0.04	0.00	0.07
Level Of Ser	vice D	Module	e:									
2Way95thQ:				0.3	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	xxxx	XXXXX
Control Del:				8.0	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	xxxx	XXXXX
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	663	XXXXX
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	XXXXX
Shrd ConDel:	xxxxx	xxxx	xxxxx			xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.1	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	В	*
ApproachDel:	X	xxxxx		X	xxxxx		X	xxxxx			11.1	
ApproachLOS:		*			*			*			В	
Note: Queue	report	ted is	s the r	number	of ca	ars per	lane					

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative Alt Access AM

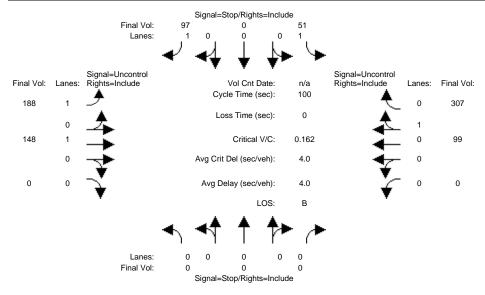
Intersection #9: Winslow & Driveway



Approach:	No	rth Bo	ound	Sou	uth Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:											- T	- R
							:					
Volume Modul	e:											
Base Vol:	0	206	55	70	309	0	0	0	0	16	0	41
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	206	55	70	309	0	0	0	0	16	0	41
Added Vol:	0	0	13	44	0	0	0	0	0	3	0	10
Reassigned :	0	-5	14	0	-128	0	0	0	0	0	0	5
Initial Fut:	0	201	82	114	181	0	0	0	0	19	0	56
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	0	201	82	114	181	0	0	0	0	19	0	56
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	201	82	114	181	0	0	0	0	19	0	56
Critical Gap	Modu.	le:										
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Mod	ule:											
Cnflict Vol:	XXXX	xxxx	xxxxx	283	xxxx	xxxxx	XXXX	xxxx	xxxxx	651	651	242
Potent Cap.:	XXXX	xxxx	xxxxx	1291	xxxx	xxxxx	XXXX	xxxx	xxxxx	436	390	802
Move Cap.:	XXXX	xxxx	xxxxx	1291	xxxx	xxxxx	XXXX	xxxx	xxxxx	407	356	802
Volume/Cap:	XXXX	xxxx	XXXX	0.09	xxxx	XXXX	XXXX	xxxx	XXXX	0.05	0.00	0.07
Level Of Ser	vice D	Module	e:									·
2Way95thQ:	xxxx	xxxx	xxxxx	0.3	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	644	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	11.3	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	В	*
ApproachDel:	x	xxxxx		x	xxxxx		x	xxxxx			11.3	
ApproachLOS:		*			*			*			В	
Note: Queue	report	ted is	s the r	number	of ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing + Proj Alt Access AM

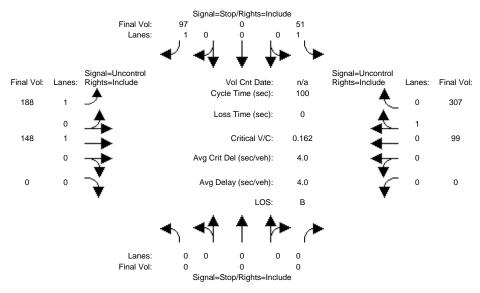
Intersection #10: Middlefield & Driveway



			ound									
Movement:												
Volume Module												
Base Vol:	0	0	0	41	0	92	121	150	0	0	182	300
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	0	0	0	41	0	92	121	150	0	0	182	300
Added Vol:	0	0	0	8	0	2	31	130	0	0	0	300 7
Reassigned:	-	0	0	2	0	3	36	-2	0	0	-83	0
Initial Fut:	0	0	0	51	0	97	188	148	0	0	99	307
User Adi:		1.00	1.00		1.00	1.00	1.00		1.00	-	1.00	1.00
PHF Adi:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
_	0	0	0	51	0	97	188	148	0	0	99	307
Reduct Vol:	0	-	0	0	0	0	0	0	0	0	0	0
FinalVolume:	-	-	0	-	•		188	-	0	0	99	307
			_		-				-			
Critical Gap				1 1			1 1			1 1		1
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	XXXXX
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Mod	ule:											·
Cnflict Vol:	xxxx	xxxx	xxxxx	777	xxxx	253	406	xxxx	xxxxx	xxxx	xxxx	XXXXX
Potent Cap.:	xxxx	xxxx	xxxxx	368	XXXX	791	1164	xxxx	xxxxx	XXXX	xxxx	XXXXX
Move Cap.:	xxxx	xxxx	xxxxx	323	XXXX	791	1164	xxxx	xxxxx	XXXX	xxxx	XXXXX
Volume/Cap:	xxxx	xxxx	xxxx	0.16	xxxx	0.12	0.16	xxxx	xxxx	xxxx	xxxx	XXXX
Level Of Ser	vice 1	Module	e:									
2Way95thQ:	xxxx	xxxx	xxxxx	0.6	XXXX	0.4	0.6	xxxx	xxxxx	XXXX	XXXX	XXXXX
Control Del:				18.2	XXXX	10.2			xxxxx	xxxxx	XXXX	XXXXX
LOS by Move:	*	*	*	С	*	В	A	*	*	*	*	*
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	XXXX	XXXXX
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	XXXX	XXXXX
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	XXXX	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	X	xxxxx			13.0		XX	xxxx		XX	xxxxx	
ApproachLOS:		*			В			*			*	
Note: Queue	repor	ted is	s the r	number	of ca	ars pei	r lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Bkgd + Proj Alt Access AM

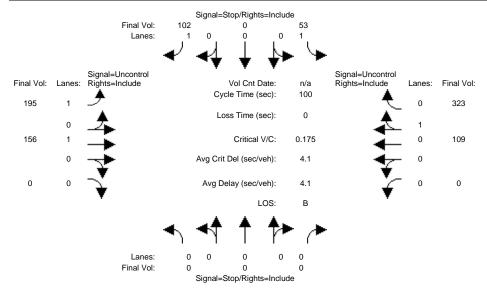
Intersection #10: Middlefield & Driveway



Approach: Movement:	L ·	- Т		L -	- T	- R	L -	- Т	- R	L -	- T	
Volume Module	•			1 1			1 1			1 1		ı
Base Vol:	0	0	0	41	0	92	121	150	0	0	182	300
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	41	0	92	121	150	0	0	182	300
Added Vol:	0	0	0	8	0	2	31	0	0	0	0	7
Reassigned :	0	0	0	2	0	3	36	-2	0	0	-83	0
Initial Fut:	0	0	0	51	0	97	188	148	0	0	99	307
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	51	0	97	188	148	0	0	99	307
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:		0	0			97				0	99	307
Critical Gap												
Critical Gp:												
FollowUpTim:									xxxxx			
	•											
Capacity Modu												
Cnflict Vol:					XXXX	253			xxxxx			XXXXX
Potent Cap.:						791			xxxxx			XXXXX
Move Cap.:				323		791			xxxxx			XXXXX
Volume/Cap:					xxxx				XXXX			XXXX
1 Of G												
Level Of Serv				0 6		0 4	0 6					
2Way95thQ:					XXXX	10.2			XXXXX			
Control Del:: LOS by Move:					xxxx *	10.2 B		xxxx *		*	xxxx *	xxxxx *
_				_								
Movement:												
Shared Cap.:									XXXXX			
SharedQueue:												
Shrd ConDel:: Shared LOS:	* *	xxxx *	*	*		xxxxx *	xxxxx *	XXXX	xxxxx *	xxxxx *	XXXX	XXXXX
ApproachDel:			•	•		•			•			.,
ApproachLOS:	X	* *			13.0 B		X2	XXXXX *		X.2	XXXXX *	
	conomi		tho *	numbor.	_	ara no:	r lana				•	
Note: Queue	rebor	Lea Is	s the I	rumer	OT G	rrs ber	тапе.	•				

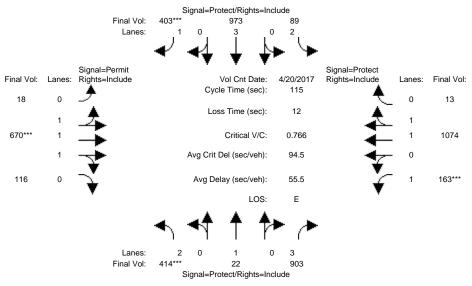
Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative Alt Access AM

Intersection #10: Middlefield & Driveway



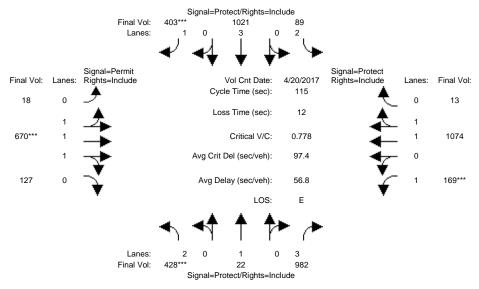
II -						ound						
Movement:												
	•											
Volume Module												
Base Vol:	0	0			0	97	128		0			316
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	0	0	0	43	0	97	128	158	0	0	192	316
Added Vol:	0	0	0	8	0	2	31	0	0	0	0	7
Reassigned:	0	0	0	2	0	3	36	-2	0	0	-83	0
Initial Fut:	0	0	0	53	0	102	195	156	0	0	109	323
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:	1.00		1.00		1.00	1.00	1.00		1.00	1.00		1.00
	0	0	0	53	0	102	195	156	0	0	109	323
	0		0	0	0	0	0	0	0	0	0	0
FinalVolume:			0		0		195		-	0	109	323
Critical Gap												
Critical Gp:												
FollowUpTim:									XXXXX			
Capacity Mod	ule:											
Cnflict Vol:	XXXX	XXXX	XXXXX		XXXX				XXXXX		xxxx	XXXXX
Potent Cap.:									XXXXX		xxxx	XXXXX
Move Cap.:					XXXX		1138	XXXX	XXXXX	XXXX	xxxx	XXXXX
Volume/Cap:						0.13			XXXX			XXXX
	1											
Level Of Serv												
2Way95thQ:									XXXXX			
Control Del:					xxxx				XXXXX			
LOS by Move:	*	*	*	С	*	В	A	*	*	*	*	*
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT -	- LTR	- RT
Shared Cap.:												XXXXX
SharedQueue:	xxxxx	xxxx	xxxxx	XXXXX	xxxx	xxxxx	xxxxx	xxxx	XXXXX	xxxxx	xxxx	XXXXX
Shrd ConDel:	xxxxx									xxxxx		XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	X	xxxxx			13.4		X			XX	XXXX	
ApproachLOS:		*			В			*			*	
Note: Queue	report	ted is	s the r	number	of ca	ars per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing PM



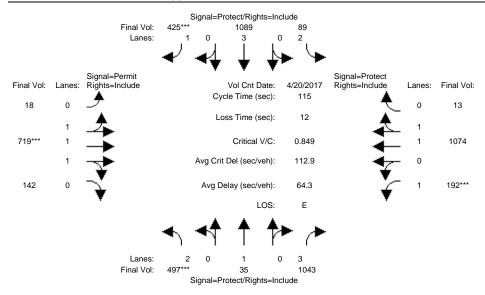
Movement: L - T - R T - T - R <t< th=""><th>Street Name:</th><th>Mo</th><th>wth Do</th><th>Vetera</th><th>ns Bl</th><th>ı+h Do</th><th>nd</th><th>T.</th><th>act D</th><th>Whipp</th><th>ole Av</th><th>at Da</th><th>nd</th></t<>	Street Name:	Mo	wth Do	Vetera	ns Bl	ı+h Do	nd	T.	act D	Whipp	ole Av	at Da	nd
Min. Green:						שם ווטג	ouna D	T.	ast bo	Juiia	T W		
Min. Green: 7 10 10 7 10 10 10 10 7 10 10 Y+R: 4.0 1.0 1.00	Movement.	I г	- 1	- K	Г .	- 1	- R	ы.	- 1	- R	Г .		
Y+R: 4.0 1.00 <th< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>													
Volume Module: >> Count Date: 20 Apr 2017 << Base Vol: 402 21 876 86 944 391 17 650 113 158 1042 13 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Volume Module: >> Count Date: 20 Apr 2017 << Base Vol: 402 21 876 86 944 391 17 650 113 158 1042 13 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Base Vol: 402 21 876 86 944 391 17 650 113 158 1042 13 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0								I I		ļ	I		ı
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0					_			17	650	113	158	1042	13
Initial Bse: 402													
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			0	0		0	0	0	0	0			0
Initial Fut: 402 21 876 86 944 391 17 650 113 158 1042 13	PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
PHF Adj: 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97				876	86	944	391	17	650	113	158	1042	13
PHF Volume: 414 22 903 89 973 403 18 670 116 163 1074 13 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume: 414 22 903 89 973 403 18 670 116 163 1074 13 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	-			903	89	973	403	18	670	116	163	1074	13
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0			0	0	0	0	0	0	0	0	0	0	0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Reduced Vol:	414	22	903	89	973	403	18	670	116	163	1074	13
FinalVolume: 414 22 903 89 973 403 18 670 116 163 1074 13	PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190	MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190	FinalVolume:	414	22	903	89	973	403	18	670	116	163	1074	13
Sat/Lane: 1900													
Adjustment: 0.91 0.99 0.73 0.91 0.90 0.83 0.65 0.65 0.64 0.94 0.94 0.94 Lanes: 2.00 1.00 3.00 2.00 3.00 1.00 0.06 2.50 0.44 1.00 1.98 0.02 Final Sat.: 3467 1881 4144 3467 5135 1568 80 3064 533 1787 3523 44	Saturation F	low M	odule:								'		'
Lanes: 2.00 1.00 3.00 2.00 3.00 1.00 0.06 2.50 0.44 1.00 1.98 0.02 Final Sat.: 3467 1881 4144 3467 5135 1568 80 3064 533 1787 3523 44	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Final Sat.: 3467 1881 4144 3467 5135 1568 80 3064 533 1787 3523 44	Adjustment:	0.91	0.99	0.73	0.91	0.90	0.83	0.65	0.65	0.64	0.94	0.94	0.94
Capacity Analysis Module: Vol/Sat: 0.12 0.01 0.22 0.03 0.19 0.26 0.22 0.22 0.22 0.09 0.30 0.30 Crit Moves: **** Green/Cycle: 0.12 0.30 0.30 0.08 0.26 0.26 0.19 0.19 0.19 0.31 0.51 0.51 Volume/Cap: 0.97 0.04 0.72 0.30 0.72 0.97 1.12 1.12 1.12 0.29 0.60 0.60 Delay/Veh: 85.9 28.4 37.9 50.0 40.3 79.4 119.6 120 119.6 30.0 20.5 20.5 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Lanes:	2.00	1.00	3.00	2.00	3.00	1.00	0.06	2.50	0.44	1.00	1.98	0.02
Capacity Analysis Module: Vol/Sat: 0.12 0.01 0.22 0.03 0.19 0.26 0.22 0.22 0.22 0.09 0.30 0.30 Crit Moves: **** Green/Cycle: 0.12 0.30 0.30 0.08 0.26 0.26 0.19 0.19 0.19 0.31 0.51 0.51 Volume/Cap: 0.97 0.04 0.72 0.30 0.72 0.97 1.12 1.12 1.12 0.29 0.60 0.60 Delay/Veh: 85.9 28.4 37.9 50.0 40.3 79.4 119.6 120 119.6 30.0 20.5 20.5 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Final Sat.:	3467	1881	4144	3467	5135	1568	80	3064	533	1787	3523	44
Vol/Sat: 0.12 0.01 0.22 0.03 0.19 0.26 0.22 0.22 0.22 0.22 0.22 0.22 0.09 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.30 0.30													
Crit Moves: ****	Capacity Ana	lysis	Modul	e:	•						•		
Green/Cycle: 0.12 0.30 0.30 0.08 0.26 0.26 0.19 0.19 0.19 0.31 0.51 0.51 Volume/Cap: 0.97 0.04 0.72 0.30 0.72 0.97 1.12 1.12 1.12 0.29 0.60 0.60 Delay/Veh: 85.9 28.4 37.9 50.0 40.3 79.4 119.6 120 119.6 30.0 20.5 20.5 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Vol/Sat:	0.12	0.01	0.22	0.03	0.19	0.26	0.22	0.22	0.22	0.09	0.30	0.30
Volume/Cap: 0.97 0.04 0.72 0.30 0.72 0.97 1.12 1.12 1.12 1.12 0.29 0.60 0.60 0.60 0.60 0.60 Delay/Veh: 85.9 28.4 37.9 50.0 40.3 79.4 119.6 120 119.6 30.0 20.5 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Crit Moves:	****					****		****		****		
Delay/Veh: 85.9 28.4 37.9 50.0 40.3 79.4 119.6 120 119.6 30.0 20.5 20.5 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Green/Cycle:	0.12	0.30	0.30	0.08	0.26	0.26	0.19	0.19	0.19	0.31	0.51	0.51
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Volume/Cap:	0.97	0.04	0.72	0.30	0.72	0.97	1.12	1.12	1.12	0.29	0.60	0.60
AdjDel/Veh: 85.9 28.4 37.9 50.0 40.3 79.4 119.6 120 119.6 30.0 20.5 20.5 LOS by Move: F C D D D E F F F C C C HCM2kAvgQ: 12 1 12 2 13 19 16 16 16 4 14 14	Delay/Veh:	85.9	28.4	37.9	50.0	40.3	79.4	119.6	120	119.6	30.0	20.5	20.5
LOS by Move: F C D D D E F F F C C C HCM2kAvgQ: 12 1 12 2 13 19 16 16 16 4 14 14	User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
HCM2kAvgQ: 12 1 12 2 13 19 16 16 16 4 14 14	AdjDel/Veh:	85.9	28.4	37.9	50.0	40.3	79.4	119.6	120	119.6	30.0	20.5	20.5
J.	LOS by Move:	F	C	D	D	D	E	F	F	F	С	C	С
	HCM2kAvgQ:	12	1	12	2	13	19	16	16	16	4	14	14
Note: Queue reported is the number of cars per lane.	Note: Queue	repor	ted is	the n	umber	of ca	ırs pei	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM



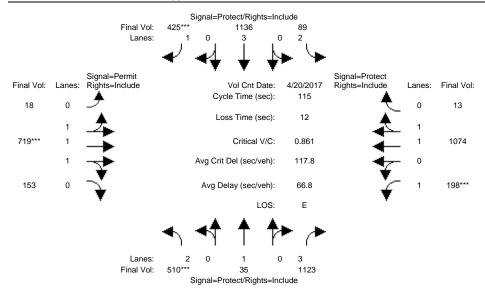
Street Name: Approach:			Vetera:	ns Bl Soi	ıth Bo	und	E.	ast Bo	Whipp ound	le Av We	est Bo	und
Movement:	L ·	- T ·	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R
Min. Green:	7	10	10	. 7	10	10	10	10	10	. 7	10	10
Y+R:	4.0		4.0		4.0			4.0			4.0	4.0
Volume Module							1		'	ı		'
Base Vol:	402	21	876	86	944	391	17	650	113	158	1042	13
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	402	21	876	86	944	391	17	650	113	158	1042	13
Added Vol:	13	0	77	0	46	0	0	0	10	6	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	415	21	953	86	990	391	17	650	123	164	1042	13
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
PHF Volume:	428	22	982	89	1021	403	18	670	127	169	1074	13
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	428	22	982	89	1021	403	18	670	127	169	1074	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	428	22	982	89	1021	403	18	670	127	169	1074	13
Saturation F	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.99	0.73	0.91	0.90	0.83	0.64	0.64	0.64	0.94	0.94	0.94
Lanes:	2.00	1.00	3.00	2.00	3.00	1.00	0.06	2.47	0.47	1.00	1.98	0.02
Final Sat.:	3467	1881	4146	3467	5135	1568	79	3022	572	1787	3523	44
Capacity Ana	lysis	Module	e:									
Vol/Sat:	0.12	0.01	0.24	0.03	0.20	0.26	0.22	0.22	0.22	0.09	0.30	0.30
Crit Moves:	****					****		****		****		
Green/Cycle:	0.13	0.31	0.31	0.08	0.26	0.26	0.19	0.19	0.19	0.31	0.51	0.51
Volume/Cap:	0.98	0.04	0.77	0.32	0.76	0.98	1.14	1.14	1.14	0.30	0.60	0.60
Delay/Veh:	86.8	27.8	38.8	50.7	41.6	81.1	124.9	125	124.9	30.4	20.7	20.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	86.8	27.8	38.8	50.7	41.6	81.1	124.9	125	124.9	30.4	20.7	20.7
LOS by Move:	F	C	D	D	D	F	F	F	F	C	С	C
HCM2kAvgQ:	12	1	14	2	14	19	16	16	16	5	14	14
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd PM



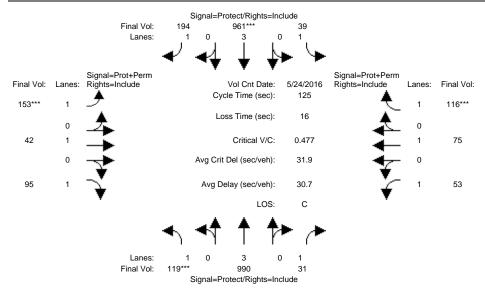
Approach: North Bound South Bound East Bound West Bound Movement: $L - T - R$
<pre>Min. Green: 7 10 10 7 10 10 10 10 10 7 10 10 Y+R:</pre>
Min. Green: 7 10 10 7 10 10 10 10 10 7 10 10 10 7 10 10 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Y+R:
Volume Module: >> Count Date: 20 Apr 2017 << Base Vol: 482 34 1012 86 1056 412 17 697 138 186 1042 13 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Base Vol: 482 34 1012 86 1056 412 17 697 138 186 1042 13 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Initial Bse: 482 34 1012 86 1056 412 17 697 138 186 1042 13 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Reassigned: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 Initial Fut: 482 34 1012 86 1056 412 17 697 138 186 1042 13 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reassigned: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 482 34 1012 86 1056 412 17 697 138 186 1042 13 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Adj: 0.97 0.97 0.97 0.97 0.97 0.97 0.97 0.97
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
FinalVolume: 497 35 1043 89 1089 425 18 719 142 192 1074 13
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190
Adjustment: 0.91 0.99 0.73 0.91 0.90 0.82 0.64 0.64 0.64 0.94 0.94 0.94
Lanes: 2.00 1.00 3.00 2.00 3.00 1.00 0.06 2.45 0.49 1.00 1.98 0.02
Final Sat.: 3467 1881 4148 3467 5135 1567 73 3006 595 1787 3523 44
Capacity Analysis Module:
Vol/Sat: 0.14 0.02 0.25 0.03 0.21 0.27 0.24 0.24 0.24 0.11 0.30 0.30
Crit Moves: ***
Green/Cycle: 0.14 0.32 0.32 0.08 0.26 0.26 0.20 0.20 0.20 0.30 0.49 0.49
Volume/Cap: 1.02 0.06 0.79 0.32 0.82 1.04 1.20 1.20 1.20 0.36 0.62 0.62
Delay/Veh: 96.5 27.1 38.7 50.6 44.0 98.5 146.9 147 146.9 32.0 22.2 22.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
AdjDel/Veh: 96.5 27.1 38.7 50.6 44.0 98.5 146.9 147 146.9 32.0 22.2 22.2
LOS by Move: F C D D D F F F F C C C
HCM2kAvgO: 14 1 14 2 15 22 19 19 18 5 15 15
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj PM



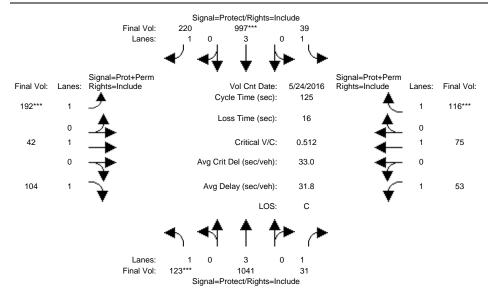
Street Name:										le Av		
Approach:	No:	rth Bo	und	Sot	ath Bo	und	Εá	ast Bo	ound	We	est Bo	ound
Movement:	L ·	- T ·	- R	L -	- T	- R	L·	- T	- R 	L ·	- T	- R
		10				 10				7		10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
 Volume Module												
						412	1 7	607	120	100	1040	1 2
	482		1012	86			17				1042	13
Growth Adj:			1.00			1.00		1.00	1.00		1.00	1.00
Initial Bse:			1012		1056	412	17	697	138		1042	13
Added Vol:			77	0		0	0	0	10	6		0
PasserByVol:				0		0	0		0	0		0
Initial Fut:						412	17				1042	13
User Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			0.97		0.97	0.97		0.97	0.97		0.97	0.97
PHF Volume:	510	35	1123	89	1136	425	18	719	153	198	1074	13
Reduct Vol:			0	0	0	0	0	0	0	0		0
Reduced Vol:	510	35	1123	89	1136	425	18	719	153	198	1074	13
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	510	35	1123	89	1136	425	18	719	153	198	1074	13
Saturation Fl	ow Mo	odule:					'			'		
		1900		1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:				0.91			0.64	0.64	0.64	0.94	0.94	0.94
Lanes:				2.00	3.00	1.00	0.06	2.42	0.52	1.00	1.98	0.02
Final Sat.:						1567			630		3523	44
Capacity Anal				ı		'	ı		1	1		1
Vol/Sat:				0.03	0.22	0.27	0.24	0.24	0.24	0.11	0.30	0.30
Crit Moves:		0.02	0.27	0.05	0.22	****	0.21	****		****	0.50	0.50
Green/Cycle:		0 32	0.32	0 08	0.26	0.26	0.20	0 20	0.20	0 30	0.49	0.49
Volume/Cap:			0.85	0.32		1.04	1.21		1.21		0.62	0.62
Delay/Veh: 1			41.7		45.9				153.7		22.2	22.2
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
AdjDel/Veh: 1				50.6			153.7		153.7		22.2	22.2
LOS by Move:			41.7 D		45.9 D		155.7 F		155.7 F		22.2 C	22.2 C
HCM2kAvgQ:	15		ם 17	Д 2	ט 17	22	19		=	6		15
									19	б	12	ΤD
Note: Queue r	epor	tea is	the n	umper	or ca	ırs per	rane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing PM



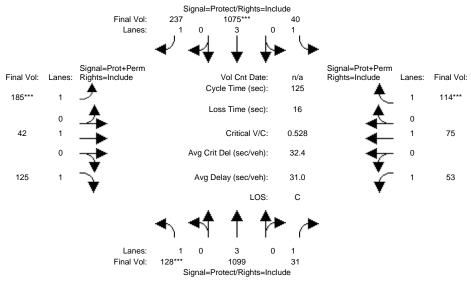
Approach:												
Movement:		- T ·				- R					- T	
		10		7				10			10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0		4.0			4.0	4.0
Volume Module												
Base Vol:	119	990	31	39	961		153	42	95	53	75	116
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:			31	39		194	153	42	95	53	75	116
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:				0	0	0	0		0	0	0	0
Initial Fut:			31	39		194	153		95	53	75	116
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:		990	31	39	961	194	153	42	95	53	75	116
	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:	119	990	31	39	961	194	153	42	95	53	75	116
PCE Adj:			1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:			31			194	153		95	53	75	116
	ı											
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900	1900		1900
Adjustment:			0.85		0.91	0.85		1.00	0.85	0.95		0.85
	1.00		1.00		3.00	1.00		1.00	1.00	1.00		1.00
Final Sat.:			1615		5187	1615		1900	1615	1805		1615
	ı											
Capacity Ana	-											
Vol/Sat:		0.19	0.02	0.02	0.19	0.12		0.02	0.06	0.03	0.04	0.07
Crit Moves:	****				****		****					****
Green/Cycle:			0.42		0.40	0.40		0.20	0.20	0.29		0.15
Volume/Cap:			0.05		0.47	0.30		0.11	0.30	0.11		0.47
Delay/Veh:			21.8		28.1	26.2		41.3	43.4	32.4		49.6
User DelAdj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			21.8	49.6		26.2		41.3	43.4	32.4		49.6
LOS by Move:			С	D	C	С	С		D		D	D
HCM2kAvgQ:	4		1	1	10	5	4	_	3	1	3	5
Note: Queue	repor	ted is	the n	umber	of ca	ırs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM



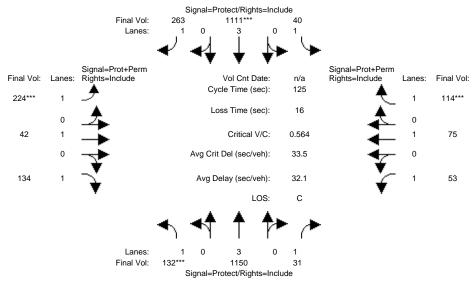
Approach:	No	rth Bo	und	Soi	ith Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T				- R		- T			- T	- R
Min. Green:	7	10	10	7	10	10		10	10	7	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0
							•					
Volume Module					-			:30 PM				
Base Vol:	119	990	31	39	961	194	153	42	95	53	75	116
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		990	31	39	961	194	153	42	95	53	75	116
Added Vol:	4	51	0	0	36	26	39	0	9	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	123	1041	31	39	997	220	192	42	104	53	75	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	123	1041	31	39	997	220	192	42	104	53	75	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	123	1041	31	39	997	220	192	42	104	53	75	116
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			31	39	997	220	192	42	104	53	75	116
	Į.											
Saturation F												
Sat/Lane:		1900	1900	1900		1900		1900	1900		1900	1900
Adjustment:	0.95	0.91	0.85	0.95	0.91	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:		3.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
Final Sat.:		5187	1615		5187	1615		1900	1615		1900	1615
	1											
Capacity Ana	_											
Vol/Sat:		0.20	0.02	0.02	0.19	0.14		0.02	0.06	0.03	0.04	0.07
CIIC HOVED	****				****		****					****
Green/Cycle:			0.40		0.38	0.38		0.21	0.21		0.14	0.14
Volume/Cap:			0.05		0.50	0.36		0.11	0.31		0.28	0.50
Delay/Veh:		27.9	22.6		29.7	28.0		40.2	42.4		48.4	51.2
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
-	51.8		22.6		29.7	28.0		40.2	42.4		48.4	51.2
LOS by Move:			С	D	С	C	С	D	D	С	D	D
HCM2kAvgQ:	4		1	1	11	6	5		3	1	3	5
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd PM



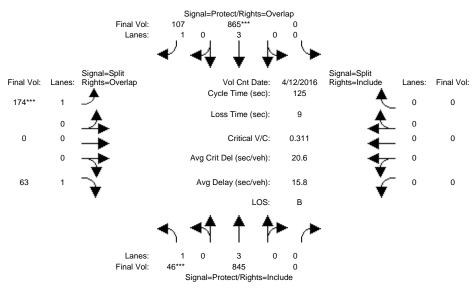
Approach:	No	rth Boı	und	Soi	ıth Bo	und	Ea	ast Bo	und	₩e	est Bo	und
Movement:		- T -			- T			- T			- T	- R
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:		4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0
	Į.											
Volume Module												
Base Vol:		1099	31		1075	237	185	42	125	53	75	114
_	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:			31		1075	237	185	42	125	53	75	114
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		1099	31		1075	237	185	42	125	53	75	114
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	1.00		1.00	1.00		1.00		1.00	1.00	1.00		1.00
PHF Volume:		1099	31		1075	237	185	42	125	53	75	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			31		1075	237	185	42	125	53	75	114
PCE Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
FinalVolume:			31		1075	237	185	42	125	53	75	114
	ı											
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
-	0.95		0.85		0.91	0.85		1.00	0.85		1.00	0.85
Lanes:	1.00		1.00		3.00	1.00		1.00	1.00		1.00	1.00
Final Sat.:			1615		5187	1615	1805		1615	1805		1615
G	Į.											
Capacity Anal	-			0 00	0 01	0 1 5	0 10	0 00	0 00	0 02	0 04	0 07
Vol/Sat:	U.U/ ****	0.21	0.02	0.02	0.21	0.15	V.1U	0.02	0.08	0.03	0.04	0.07 ***
Crit Moves:		0 42	0 40	0 11		0 40		0 00	0 00	0 07	0 14	
Green/Cycle:					0.40	0.40		0.20	0.20		0.14	0.14
Volume/Cap:			0.05		0.52	0.37		0.11	0.39		0.29	0.52
Delay/Veh:		26.4	21.1		28.6	26.7		41.4	44.5	34.1		52.3
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:		26.4 C	21.1 C		28.6	26.7 C	28.4 C	41.4	44.5	34.1 C	49.1	52.3
LOS by Move:				D	C			D 1	D		D	D 5
HCM2kAvgQ:	4		1 +ha n	2	11	6		1	4	2	3	5
Note: Queue	repor	Leu 15	rue n	ullber	or ca	ıs per	Tane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj PM



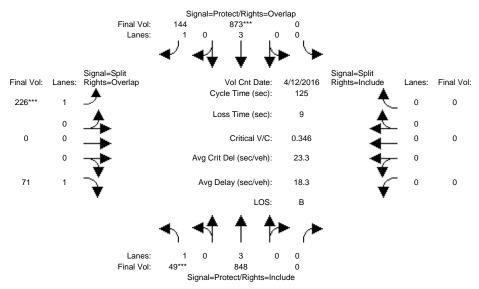
Approach:	No	rth Bo	und					ast Bo	und	We	est Bo	und
Movement:						- R		- T			- T	
Min. Green:		10			10			10		7		
Y+R:		4.0			4.0				4.0		4.0	
Volume Modul												
Base Vol:		1099			1075	237	185		125	53	75	114
Growth Adj:			1.00		1.00	1.00		1.00	1.00			1.00
Initial Bse:			31		1075	237	185	42	125	53	75	114
Added Vol:			0	0	36	26	39		9	0	0	0
PasserByVol:				0	0	0	0		0	0		0
Initial Fut:			31		1111	263	224		134	53		114
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:			31		1111	263	224	42	134	53	75	114
Reduct Vol:			0	0	0	0	0		0	0		0
Reduced Vol:			31		1111	263	224		134	53	75	114
PCE Adj: MLF Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
			1.00	1.00		1.00		1.00	1.00			1.00
FinalVolume:						263			134	53		114
Saturation F	1											
Sat/Lane:			1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:			0.85	0.95		0.85		1.00	0.85	0.95		0.85
	1.00		1.00		3.00	1.00		1.00	1.00		1.00	1.00
Final Sat.:					5187	1615		1900	1615	1805		1615
Capacity Ana	İysis	Module	e :									
Vol/Sat:	0.07	0.22	0.02	0.02	0.21	0.16	0.12	0.02	0.08	0.03	0.04	0.07
Crit Moves:	****				****		****					****
Green/Cycle:	0.13	0.41	0.41	0.10	0.39	0.39	0.38	0.21	0.21	0.27	0.13	0.13
Volume/Cap:	0.55	0.53	0.05	0.21	0.55	0.42	0.39	0.11	0.39	0.12	0.31	0.55
Delay/Veh:			21.8	51.8	30.2	28.5		40.0	43.3	34.5	50.2	54.4
User DelAdj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			21.8		30.2	28.5		40.0	43.3		50.2	54.4
LOS by Move:			С			С	С			С		D
HCM2kAvgQ:		12	1	2			6		4	2	3	5
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing PM



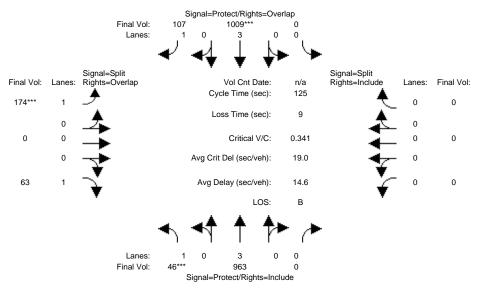
Approach:	No	rth Boi	und	Sou	ıth Bo	ound	Ea	ast Bo	und	We	est Bo	und
Movement:	L ·		- R		- T			- T		L -	- T	- R
Min. Green:	: 7		0	,	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0	-	4.0
Volume Module	Į.									I		1
Base Vol:	46	845	0	0	865	107	174	0	63	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	845	0	0	865	107	174	0	63	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	46	845	0	0	865	107	174	0	63	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	46	845	0	0	865	107	174	0	63	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	845	0	0	865	107	174	0	63	0	0	0
PCE Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:		845	0		865	107	174		63	. 0	0	0
	ı											
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
-	0.95		1.00	1.00		0.85		1.00	0.85		1.00	1.00
Lanes:		3.00	0.00		3.00	1.00		0.00	1.00		0.00	0.00
Final Sat.:			0		5187	1615	1805	0	1615	0	0	0
G	1		I									
Capacity Anal				0 00	0 17	0 07	0 10	0 00	0 04	0 00	0 00	0 00
Vol/Sat:	****	0.16	0.00	0.00	0.17	0.07	****	0.00	0.04	0.00	0.00	0.00
Crit Moves:		0 62	0 00	0 00		0.05		0 00	0 20	0 00	0 00	0.00
<pre>Green/Cycle: Volume/Cap:</pre>			0.00		0.54	0.85 0.08		0.00	0.39		0.00	0.00
Delay/Veh:			0.00		16.2	1.6	33.3	0.00	24.1	0.00	0.00	0.00
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdiDel/Veh:				0.0		1.6	33.3	0.0	24.1	0.0	0.0	0.0
LOS by Move:			0.0 A	0.0 A	В	1.0 A	33.3 C		Z 4 . 1	0.0 A	0.0 A	0.0 A
HCM2kAvqQ:	2		0	0	6	1	5	0	1	0	0	0
			-	-	-		_	-	_	Ü	3	J
Note: Queue	report	ted is	the n	umber	of ca	ars per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM



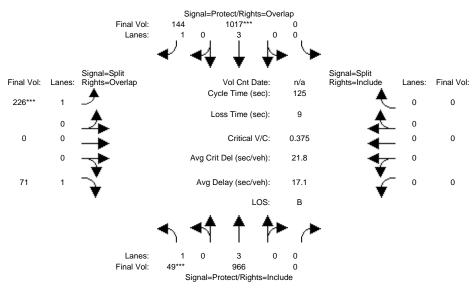
Approach:	No	rth Bo	und	Sou	uth Bo	ound	Ea	ast Bo	und	We	est Bo	und
Movement:	L ·		- R			- R		- T		L -	- T	- R
Min. Green:	: 7				10	 10	10	0	10	0	0	0
Y+R:		4.0	4.0		4.0			4.0	4.0	4.0	-	4.0
1 + K •												
Volume Module	Į.		1							I		- 1
Base Vol:	46	845	0	0	865	107	174	0	63	0	0	0
Growth Adj:			1.00	-	1.00	1.00		1.00	1.00	-	1.00	1.00
Initial Bse:		845	0	0	865	107	174	0	63	0	0	0
Added Vol:	3	3	0	0	8	37	52	0	8	0	0	0
Reassigned :			0	0	0	0	0	0	0	0	0	0
		848	0	0	873	144	226	0	71	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	49	848	0	0	873	144	226	0	71	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			0	0	873	144	226	0	71	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	49	848	0	0	873	144	226	0	71	0	0	0
Saturation F	low Mo	odule:										
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:	0.95		1.00	1.00	0.91	0.85		1.00	0.85		1.00	1.00
Lanes:		3.00	0.00		3.00	1.00		0.00	1.00		0.00	0.00
Final Sat.:			0		5187	1615	1805	0	1615	. 0	0	0
	1		I									
Capacity Ana												
Vol/Sat:		0.16	0.00	0.00	0.17	0.09		0.00	0.04	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:			0.00		0.49	0.85		0.00	0.44		0.00	0.00
Volume/Cap:			0.00	0.00		0.10		0.00	0.10		0.00	0.00
Delay/Veh:		14.2	0.0		19.9	1.6	29.4	0.0	20.5	0.0	0.0	0.0
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:				0.0		1.6	29.4	0.0	20.5	0.0	0.0	0.0
LOS by Move:			A	A		A	C		C	A	A	A
HCM2kAvgQ:	2		0	0	7	1	6	0	2	0	0	0
Note: Queue	repor	tea is	the n	umber	OI Ca	ars per	ıane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd PM



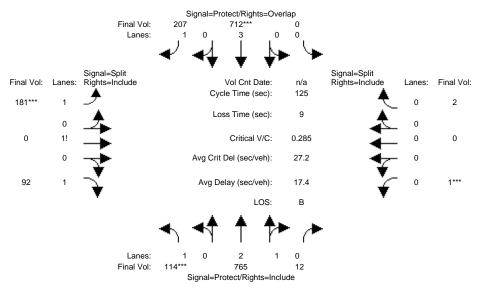
Approach:			und			und		ast Bo		We	est Bo	und
Movement:	L ·		- R		- T	- R		- T			- T	- R
Min. Green:	7		0	1	10	10		0	10	0	0	0
Y+R:	4.0		4.0		4.0			4.0	4.0			4.0
Volume Module	e:						•					
Base Vol:	46	963	0	0	1009	107	174	0	63	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	963	0	0	1009	107	174	0	63	0	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	46	963	0	0	1009	107	174	0	63	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	46	963	0	0	1009	107	174	0	63	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	46	963	0	0	1009	107	174	0	63	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	46	963	0	0	1009	107	174	0	63	0	0	0
Saturation F	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	1.00	1.00	0.91	0.85	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:			0		5187	1615	1805	0	1615	. 0	0	0
	1											
Capacity Ana												
Vol/Sat:		0.19	0.00	0.00	0.19	0.07		0.00	0.04	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:			0.00		0.57	0.85		0.00	0.36		0.00	0.00
Volume/Cap:			0.00		0.34	0.08	0.34	0.00	0.11	0.00	0.00	0.00
Delay/Veh:			0.0		14.4	1.5	36.0	0.0	26.9	0.0	0.0	0.0
User DelAdj:			1.00		1.00	1.00	1.00		1.00	1.00		1.00
AdjDel/Veh:				0.0		1.5	36.0	0.0	26.9	0.0	0.0	0.0
LOS by Move:			A	A		A	D	A	C	A	A	A
HCM2kAvgQ:	2		0	0	7	1	5	0	2	0	0	0
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj PM



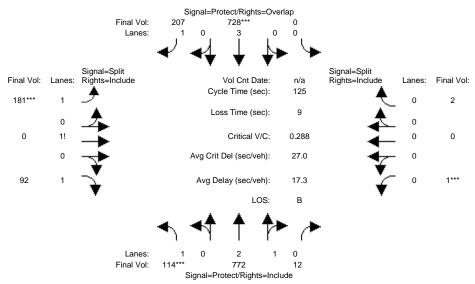
Approach:						und		ast Bo			est Bo	
Movement:	L ·		- R		- T	- R 		- T			- T	- R
Min. Green:	7		0		10	10		0	10	0	0	0
Y+R:	4.0		4.0		4.0			4.0	4.0			4.0
Volume Module	e :		·			·						
Base Vol:	46	963	0	0	1009	107	174	0	63	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	963	0	0	1009	107	174	0	63	0	0	0
Added Vol:	3		0	0	8	37	52	0	8	0	0	0
PasserByVol:			0	0	0	0	0	0	0	0	0	0
Initial Fut:	49	966	0	0	1017	144	226	0	71	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	49	966	0	0	1017	144	226	0	71	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	49	966	0	0	1017	144	226	0	71	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	49	966	0	0	1017	144	226	0	71	0	0	0
Saturation F	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	1.00	1.00	0.91	0.85	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:			0		5187	1615	1805	0	1615	. 0	0	0
	1											
Capacity Ana												
Vol/Sat:		0.19	0.00	0.00	0.20	0.09		0.00	0.04	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:			0.00		0.52	0.86	0.33		0.41		0.00	0.00
Volume/Cap:			0.00	0.00		0.10	0.38	0.00	0.11	0.00	0.00	0.00
Delay/Veh:		12.7	0.0		17.8	1.5	32.1	0.0	23.2	0.0	0.0	0.0
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:				0.0		1.5	32.1	0.0	23.2	0.0	0.0	0.0
LOS by Move:			A	A		A	C	A	C	A	A	A
HCM2kAvgQ:	2		0	0	8	1	7		2	0	0	0
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing PM



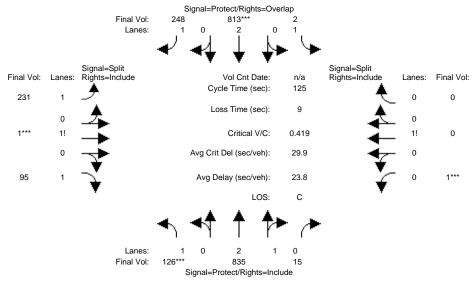
Approach:										West B	ound
Movement:			- R			- R		- T		L - T	
Min. Green:		10		0				0		0 0	
Y+R:		4.0			4.0			4.0		4.0 4.0	-
Volume Modul	e:		•			·			·		
Base Vol:	114	765	12	0	712	207	181	0	92	1 0	_
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
Initial Bse:	114	765	12	0	712	207	181	0	92	1 0	2
	0		0	0	0	0	0	0	0	0 0	0
PasserByVol:			0	0	0	0	0	0	0	0 0	
Initial Fut:	114	765	12	0	712	207	181	0	92	1 0	
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
PHF Volume:	114	765	12	0	712	207	181	0	92	1 0	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0 0	0
Reduced Vol:	114	765	12	0	712	207	181	0	92	1 0	2
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
FinalVolume:	114	765	12	0	712	207	181	0	92	1 0	2
	1										
Saturation F											
Sat/Lane:	1900	1900	1900	1900	1900	1900		1900	1900	1900 1900	
Adjustment:			0.91	1.00	0.91	0.85	0.92	1.00	0.92	0.90 1.00	
Lanes:	1.00		0.05	0.00	3.00	1.00	1.66	0.00	1.34		0.67
Final Sat.:			80		5187	1615	2903		2334	567 0	
	1										
Capacity Ana											
Vol/Sat:		0.15	0.15	0.00	0.14	0.13		0.00	0.04		0.00
Crit Moves:	****				****		****			***	
Green/Cycle:			0.70		0.48	0.70		0.00	0.22	0.01 0.00	0.01
Volume/Cap:			0.21		0.29	0.18	0.29	0.00	0.18	0.29 0.00	0.29
Delay/Veh:			6.5	0.0		6.5	40.8	0.0	39.8	76.2 0.0	76.2
User DelAdj:			1.00		1.00	1.00		1.00	1.00	1.00 1.00	1.00
AdjDel/Veh:			6.5			6.5	40.8	0.0	39.8	76.2 0.0	76.2
LOS by Move:					В		D		D	E A	
HCM2kAvgQ:		4	4	0	6	_	4		2	0 0	0
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•			

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM



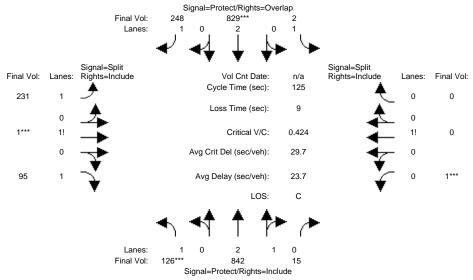
Approach:	No	rth Boi	und	Soi	ıth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T ·			- T			- T			- T	- R
Min. Green:	7	10	10	0	10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0
	I											
Volume Module			1.0		510	0.05	101	•	0.0	-	•	
Base Vol:	114	765	12	0	712	207	181	0	92	1	0	2
	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		765	12	0	712	207	181	0	92	1	0	2
Added Vol:	0	7	0	0	16	0	0	0	0	0	0	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	114		12	0	728	207	181	0	92	1	0	2
User Adj:	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Adj:	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Volume:	114	772	12	0	728	207	181	0	92	1	0	2
	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			12	0	728	207	181	0	92	1	0	2
PCE Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			12	. 0	728	207	181	0	92	_ 1	0	2
	ı											
Saturation F			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
-	0.95		0.91		0.91	0.85		1.00	0.92		1.00	0.90
Lanes:	1.00		0.05		3.00	1.00		0.00	1.34		0.00	0.67
Final Sat.:			79		5187	1615	2903	0	2334	567	0	1134
	1		- 1									
Capacity Anal				0 00	0 14	0 10	0 06	0 00	0 04	0 00	0 00	0 00
Vol/Sat:	0.06	0.15	0.15	0.00	0.14	0.13		0.00	0.04	****	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:			0.71		0.49	0.70		0.00	0.22		0.00	0.01
Volume/Cap:			0.21		0.29	0.18		0.00	0.18		0.00	0.29
Delay/Veh:			6.4		19.2	6.4	41.1	0.0	40.0	76.6	0.0	76.6
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			6.4		19.2	6.4	41.1	0.0	40.0	76.6	0.0	76.6
LOS by Move:			A	A	В	A	D	A	D	E	A	E
HCM2kAvgQ:	3		4	0	- 6	3	4	-	2	0	0	0
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd PM



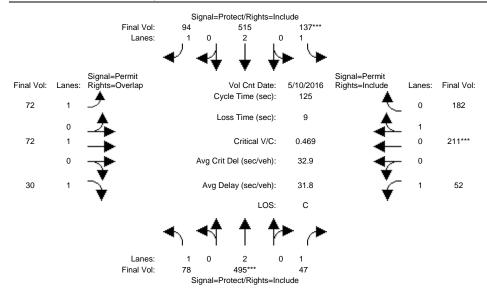
Approach:	No	rth Bo	und	Soi	ıth Bo	und	Ea	ast Bo	und	₩e	est Bo	und
Movement:	L .		- R		- T			- T		L -		- R
Min. Green:	. 7	10	10	. 7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module	≘:											
Base Vol:	126	835	15	2	813	248	231	1	95	1	0	0
	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:		835	15	2	813	248	231	1	95	1	0	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	126		15	2	813	248	231	1	95	1	0	0
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		1.00	1.00	1.00		1.00		1.00	1.00	1.00		1.00
PHF Volume:	126	835	15	2	813	248	231	1	95	1	0	0
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:			15	2	813	248	231	1	95	1	0	0
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
FinalVolume:			15		813	248	231	1	95	1	0	0
Cotumption E	ı											
Saturation Fi		1900	1900	1000	1900	1900	1000	1900	1900	1000	1900	1900
	0.95		0.91		0.95	0.85		0.92	0.92		1.00	1.00
Lanes:	1.00		0.05		2.00	1.00		0.92	1.29	1.00		0.00
Final Sat.:			91		3610	1615	2990	11	2263	1805	0.00	0.00
Capacity Anal	1									1		
Vol/Sat:		0.16	0.16	0 00	0.23	0.15	0 08	0.09	0.04	0.00	0 00	0.00
Crit Moves:	****	0.10	0.10	0.00	****	0.15	0.00	****	0.01	****	0.00	0.00
Green/Cycle:	0.15	0.48	0.48	0.16	0.49	0.70	0.20	0.20	0.20	0.08	0.00	0.00
Volume/Cap:			0.34	0.01		0.22		0.46	0.21	0.01		0.00
Delay/Veh:			20.3	43.8		6.9		44.1	41.4	52.9	0.0	0.0
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:			20.3	43.8	21.0	6.9	43.2	44.1	41.4	52.9	0.0	0.0
LOS by Move:		С	С	D	С	А	D	D	D	D	A	А
HCM2kAvgQ:	4	7	7	0	10	3	5	6	2	0	0	0
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj PM



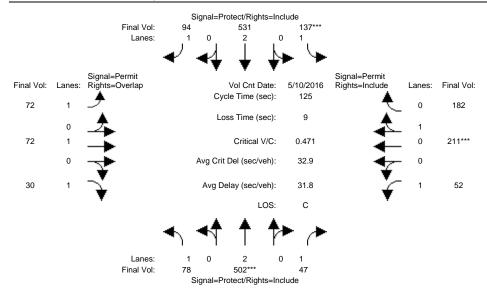
Approach:	No	rth Boi	und	Soi	ıth Bo	und	E.	ast Bo	und	₩e	est Bo	und
Movement:	L ·		- R		- T			- T			- T	- R
Min. Green:	. 7	10	10	. 7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module	≘:											
Base Vol:	126	835	15	2	813	248	231	1	95	1	0	0
	1.00		1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:		835	15	2	813	248	231	1	95	1	0	0
Added Vol:	0	7	0	0	16	0	0	0	0	0	0	0
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
			15	2	829	248	231	1	95	1	0	0
User Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Volume:	126	842	15	2	829	248	231	1	95	1	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		842	15	2	829	248	231	1	95	1	0	0
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			15		829	248	231	1	95	1	0	0
Cotumption E	ı											
Saturation Fi		1900	1900	1000	1900	1900	1000	1900	1900	1000	1900	1900
	0.95		0.91		0.95	0.85		0.92	0.92		1.00	1.00
Lanes:	1.00		0.05		2.00	1.00		0.92	1.29		0.00	0.00
Final Sat.:			91		3610	1615	2990	11	2263	1805	0.00	0.00
Capacity Anal	1		- 1							1		
Vol/Sat:		0.17	0.17	0 00	0.23	0.15	0 08	0.09	0.04	0 00	0.00	0.00
Crit Moves:	****	0.1	0.1	0.00	****	0.15	0.00	****	0.01	****	0.00	0.00
Green/Cycle:	0.15	0.48	0.48	0.16	0.50	0.70	0.20	0.20	0.20	0.08	0.00	0.00
Volume/Cap:			0.34	0.01		0.22		0.46	0.21		0.00	0.00
Delay/Veh:			20.1			6.9		44.4	41.6	52.9	0.0	0.0
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:			20.1	43.8	20.8	6.9	43.4	44.4	41.6	52.9	0.0	0.0
LOS by Move:		С	С	D	С	А	D	D	D	D	А	А
HCM2kAvqQ:	4	7	7	0	11	3	5	6	2	0	0	0
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing PM



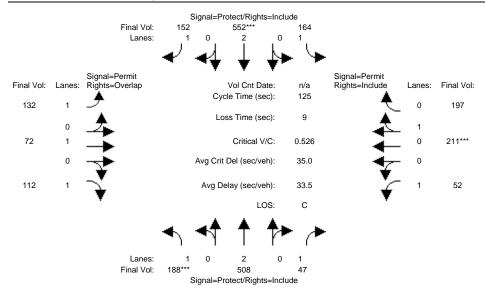
Street Name:									Mapl			
Approach:											est Bo	und
Movement:							L -	- T	- R	L -	- T	
 Min. Green:		10				10				10		 10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
 Volume Module												
Base Vol:	78		47	137	_	94	72	72	30	52	211	182
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:			47	137	515	94	72	72	30	52	211	182
Added Vol:			0	137	212	0	7 2	7 2	0	0	0	102
PasserByVol:			0	0	-	0	0	0	0	0	0	0
Initial Fut:	70	405	47	137		94	72	72	30	52		182
					0 = 0							
User Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Volume:	/8	495	47	137	515	94	72	72	30	52	211	182
Reduct Vol: Reduced Vol:	0	0	0	0	0	0	0	0	0	0		0
			47	137		94	72	72	30	52	211	182
_		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			47		515	94	. 72		30	. 52		182
 Saturation Fl												
		1900	1900	1900	1900	1900	1000	1900	1900	1000	1900	1900
Adjustment:				0.95		0.85		1.00	0.85		0.93	0.93
3		2.00	1.00		2.00	1.00		1.00	1.00		0.54	0.46
Final Sat.:					3610			1900			950	819
 Capacity Anal												
		0.14	0.03	0.08	0.14	0.06	0.10	0.04	0.02	0.04	0.22	0.22
Crit Moves:		****		***							****	
Green/Cycle:	0.13	0.29	0.29	0.16	0.33	0.33	0.47	0.47	0.60	0.47	0.47	0.47
Volume/Cap:			0.10		0.44	0.18		0.08	0.03		0.47	0.47
Delay/Veh:			32.3	48.7		30.3		18.0	10.1		22.7	22.7
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:				48.7		30.3		18.0	10.1		22.7	22.7
LOS by Move:			C	D		C C		В	В	В		C
HCM2kAvgQ:	3	8	1	5	_	2	2		0	1	_	10
Note: Queue r									3	_	- 5	
1.000 Queue I	CPCL		J11C 11		J1 00	LO PCI	14110	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM



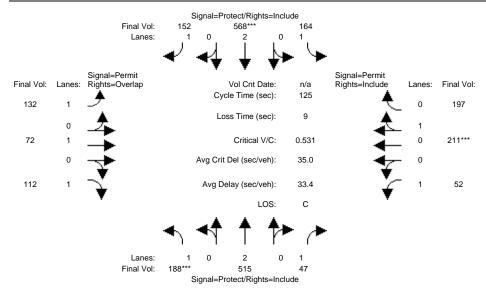
Street Name:		V	eteran	s Blvo	d				Mapl	e St		
Approach:	No	rth Bo	und	Sot	uth Bo	und	Εá	ast Bo	und	We	est Bo	und
Movement:	L ·	- T	- R	L -	- T	- R	$_{\rm L}$.	- T	- R	ь.	- T	- R
 Min. Green:		10				10				10		 10
Y+R:	4.0			4.0			4.0	4.0	4.0	4.0	4.0	4.0
Volume Module					_							
Base Vol:	78		47	137			72	72	30	52		182
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:			47	137	515	94	72	72	30	52		182
Added Vol:			0	0	16	0	0	0	0	0		0
Reassigned :			0	0	0	0	0	0	0	0		0
Initial Fut:	78	502	47	137	531	94	72	72	30	52	211	182
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	78	502	47	137	531	94	72	72	30	52	211	182
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	78	502	47	137	531	94	72	72	30	52	211	182
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	78	502	47	137	531	94	72	72	30	52	211	182
Saturation Fl			'	'		'	'		'	'		'
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:			0.85	0.95	0.95	0.85	0.39	1.00	0.85	0.71	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.54	0.46
Final Sat.:					3610				1615		950	819
Capacity Anal				ı		1	1		'	1		ı
		0.14	0.03	0.08	0.15	0.06	0.10	0.04	0.02	0.04	0.22	0.22
Crit Moves:		****		****							****	
Green/Cycle:	0.13	0.30	0.30	0.16	0.33	0.33	0.47	0.47	0.60	0.47	0.47	0.47
Volume/Cap:			0.10		0.45	0.18		0.08	0.03		0.47	0.47
Delay/Veh:			32.1	48.8		29.9		18.2	10.3		22.9	22.9
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:				48.8		29.9		18.2	10.3		22.9	22.9
LOS by Move:			32.1 C	70.0 D		29.9 C		10.2	10.3		22.9 C	ZZ.9 C
HCM2kAvgQ:	3 D	8	1	5	_	2	2		0	1	_	10
Note: Queue r									U		10	10
Note: Queue r	ebor	tea is	the n	unber	OT G9	rrs ber	тапе	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd PM



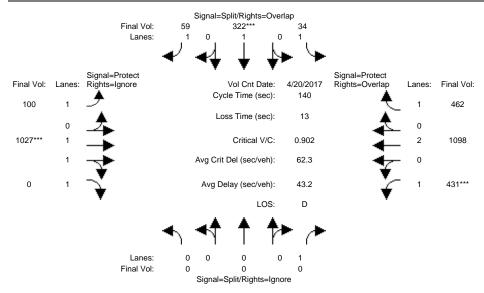
Street Name:									Mapl			_
Approach:						und						
Movement:	ь. 	- T ·	- R l	ь - 		- R					- T	
Min. Green:		10			10			10		10		
Y+R:	4.0				4.0	4.0	4.0		4.0	4.0		4.0
Volume Module												
	188	508	47	164	552	152	132	72	112	52	211	197
Growth Adj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
Initial Bse:		508	47	164	552	152	132	72	112	52	211	197
	100	0	4 /	104	55Z 0	152	132	0	0	0	0	197
	-	-	-	-	-	-	0	-	0	-	-	0
Reassigned:		0	0	1.64	0	1.50		0		0	0	
Initial Fut:			47	164		152	132	72	112	52		197
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Volume:		508	47	164	552	152	132	72	112	52	211	197
Reduct Vol:			0	0		0	0	0	0	0	0	0
Reduced Vol:			47	164	552	152	132	72	112	52	211	197
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			47		552	152	132	72	112	52	211	197
Saturation F												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.36	1.00	0.85	0.71	0.93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.52	0.48
Final Sat.:	1805	3610	1615	1805	3610	1615	675	1900	1615	1349	912	851
Capacity Ana	lysis	Module	e:									
Vol/Sat:	0.10	0.14	0.03	0.09	0.15	0.09	0.20	0.04	0.07	0.04	0.23	0.23
Crit Moves:	****				****						****	
Green/Cycle:	0.20	0.30	0.30	0.19	0.29	0.29	0.44	0.44	0.64	0.44	0.44	0.44
Volume/Cap:	0.53	0.47	0.10	0.47	0.53	0.32	0.45	0.09	0.11	0.09	0.53	0.53
Delay/Veh:	46.3	36.3	31.9	46.0	37.6	35.1	25.5	20.4	8.9	20.5	26.2	26.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
				46.0				20.4			26.2	26.2
				D	D	D		C	A	C		
					_		_	_		_	_	
									_	_		
_	46.3 1.00 46.3 D 6	36.3 1.00 36.3 D	31.9 1.00 31.9 C	46.0 1.00 46.0 D 5	37.6 1.00 37.6 D	35.1 1.00 35.1 D	25.5 1.00 25.5 C 4	20.4 1.00 20.4 C 2	8.9 1.00 8.9	20.5 1.00 20.5	26.2 1.00 26.2	26.2 1.00

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj PM



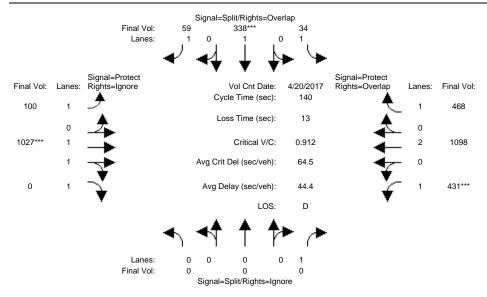
Street Name: Approach:		V		s Blv	d ith Bo	und	T7.	ast Do	Mapl	e St Wes	ı+ Do	nd
Movement:		гин во - Т				- R			- R			
Min. Green:		10			10			10		10		10
Y+R:		4.0			4.0			4.0	4.0	4.0		4.0
Volume Modul												
Base Vol:	188	508	47	164	552	152	132	72	112	52	211	197
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1	1.00	1.00
Initial Bse:	188	508	47	164	552	152	132	72	112	52	211	197
Added Vol:	0		0	0	16	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	188	515	47	164	568	152	132	72	112	52	211	197
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1	L.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1	1.00	1.00
PHF Volume:	188	515	47	164	568	152	132	72	112	52	211	197
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	188	515	47	164	568	152	132	72	112	52	211	197
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1	L.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1	1.00	1.00
FinalVolume:	188	515	47	164	568	152	132	72	112	52	211	197
Saturation F	low M	odule:	·							•		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900 1	L900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.35	1.00	0.85	0.71 0).93	0.93
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00 0).52	0.48
Final Sat.:	1805	3610	1615	1805	3610	1615	669	1900	1615	1349	912	851
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	0.10	0.14	0.03	0.09	0.16	0.09	0.20	0.04	0.07	0.04).23	0.23
Crit Moves:	***				****					*	***	
Green/Cycle:	0.20	0.30	0.30	0.19	0.30	0.30	0.44	0.44	0.63	0.44	.44	0.44
Volume/Cap:	0.53	0.47	0.10	0.47	0.53	0.32	0.45	0.09	0.11	0.09 0).53	0.53
Delay/Veh:	46.6	36.0	31.6	46.0	37.2	34.6	25.9	20.7	9.2	20.8 2	26.6	26.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1	1.00	1.00
AdjDel/Veh:	46.6	36.0	31.6	46.0	37.2	34.6	25.9	20.7	9.2	20.8 2	26.6	26.6
LOS by Move:	D	D	С	D	D	С	С	С	A	С	С	C
HCM2kAvgQ:	6	8	1	5	9	4	4	2	2	1	12	12
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing PM



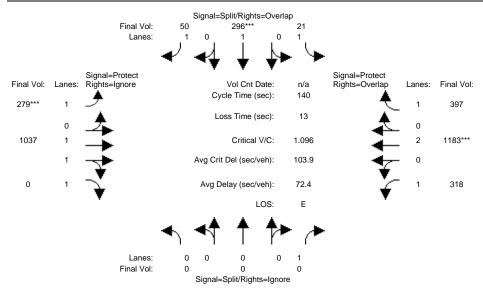
		rth Bo		Sou		und_	Ea	ast Bo		We	est Bo	und
Movement:		- T				- R			- R		- T	– R
Min. Green: Y+R:		0		10	10 4.0		. 7	10 4.0		•	10	10 4.0
Volume Module	e: >>	Count		_	pr 201	7 <<						
Base Vol:	0	0	186	32	306	56	95	976	0		1043	439
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		0	186	32	306	56	95	976	0		1043	439
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		0	186	32	306	56	95	976	0	409	1043	439
User Adj:	1.00		0.00		1.00	1.00		1.00	0.00		1.00	1.00
PHF Adj:		0.95	0.00	0.95		0.95	0.95	0.95	0.00		0.95	0.95
PHF Volume:	0	0	0	34	322	59	100	1027	0	431	1098	462
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	34	322	59	100	1027	0	431	1098	462
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:		0	0	34	322	59	100	1027	0	431	1098	462
Saturation F	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.83	0.97	0.83	0.92	0.92	0.95	0.65	0.65	0.58
Lanes:	0.00	0.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	0	0	1900	1568	1845	1568	1753	3505	1805	1227	2454	1098
Capacity Anal	lysis	Module	e:									
Vol/Sat:	0.00	0.00	0.00	0.02	0.17	0.04	0.06	0.29	0.00	0.35	0.45	0.42
Crit Moves:					***			****		****		
Green/Cycle:	0.00	0.00	0.00	0.19	0.19	0.19	0.07	0.36	0.00	0.35	0.65	0.65
Volume/Cap:	0.00	0.00	0.00	0.11	0.92	0.20	0.85	0.81	0.00	1.00	0.69	0.65
Delay/Veh:	0.0	0.0	0.0	47.2	84.9	48.1	105.7	44.0	0.0	89.0	17.1	17.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	47.2	84.9	48.1	105.7	44.0	0.0	89.0	17.1	17.2
LOS by Move:		A	A	D	F	D	F	D	A	F	В	В
	0	0	0	1	15	2	6	22	0	24	16	13
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM



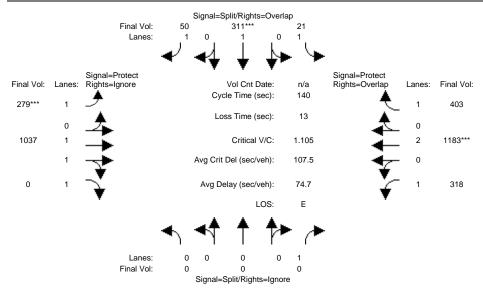
Street Name: Approach:			Woodsi						Bl (U		SB Ram	
Movement:									- R		- T	
Min. Green:	0	0	0	10	10	10	7	10	10	7	10	10
Y+R:	4.0				4.0			4.0				4.0
 Volume Module												
Base Vol:	0	0	186	32	306	56	95	976	0	409	1043	439
Growth Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
Initial Bse:			186	32	306	56	95	976	0		1043	439
Added Vol:		0	0	0	15	0	0	0	0	0		6
Reassigned :				0	0	0	0	0	0	0	0	0
Initial Fut:				32		56	95			409	1043	445
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00		1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:			0	34	338	59	100	1027	0	431	1098	468
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	34	338	59	100	1027	0	431	1098	468
PCE Adj:			0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	0	0	34	338	59	100	1027	0	431	1098	468
Saturation Fl	ow Mo	odule:	•				•			•		·
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.83	0.97	0.83	0.92	0.92	0.95	0.65	0.65	0.58
Lanes:	0.00	0.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	0	0	1900	1568	1845	1568	1753	3505	1805	1227	2454	1098
Capacity Anal	ysis	Module	e:									
Vol/Sat:	0.00	0.00	0.00	0.02		0.04	0.06		0.00		0.45	0.43
Crit Moves:					***			****		****		
Green/Cycle:			0.00	0.19	0.19	0.19	0.07	0.36	0.00	0.35	0.65	0.65
Volume/Cap:	0.00	0.00	0.00	0.11	0.97	0.20		0.81	0.00	1.00	0.69	0.66
Delay/Veh:	0.0	0.0	0.0	47.2	95.7	48.1	105.7	44.0	0.0	89.0	17.1	17.5
User DelAdj:			1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	47.2	95.7	48.1	105.7	44.0	0.0		17.1	17.5
LOS by Move:	A	A	A	_	F	D	F	_	A	F		В
HCM2kAvgQ:	0	0	0	1	17	2	6	22	0	24	16	13
Note: Queue r	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd PM



Street Name: Approach:			Woodsi	de Rd	ıth Bo	und	Vet	terans	Bl (U und	S101 S	SB Ram est Bo	_
Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R
Min. Green:		0	0	10	10	10	7	10	10	7		10
Y+R: 		4.0			4.0				4.0		4.0	4.0
Volume Module			ļ	I		ļ	I		ı	I		ı
Base Vol:	0	0	186	21	296	50	279	1037	105	318	1183	397
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	186	21	296	50	279	1037	105	318	1183	397
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	186	21	296	50	279	1037	105	318	1183	397
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	21	296	50	279	1037	0	318	1183	397
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	21	296	50	279	1037	0	318	1183	397
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:			0		296	50		1037	0		1183	397
Saturation Fl	Low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.83	0.97	0.83	0.92	0.92	0.95	0.46	0.46	0.41
Lanes:	0.00	0.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	0	0	1900	1568	1845	1568	1753	3505	1805	876	1753	784
Capacity Anal	lysis	Modul	e:									
Vol/Sat:	0.00	0.00	0.00	0.01	0.16	0.03	0.16	0.30	0.00	0.36	0.67	0.51
Crit Moves:					***		****				****	
Green/Cycle:	0.00	0.00	0.00	0.15	0.15	0.29	0.15	0.34	0.00	0.42	0.62	0.76
Volume/Cap:	0.00	0.00	0.00	0.09	1.10	0.11	1.10	0.87	0.00	0.87	1.10	0.66
Delay/Veh:	0.0	0.0	0.0	51.9	143	36.4	144.5	49.9	0.0	56.0	84.6	10.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:			0.0	51.9	143	36.4	144.5	49.9	0.0	56.0	84.6	10.9
LOS by Move:		A	A	D	F	D	F	D	A	E	F	В
11011211111	0		0	1	17	1	18		0	15	37	9
Note: Queue r	repor	ted is	the n	umber	of ca	rs per	lane	•				

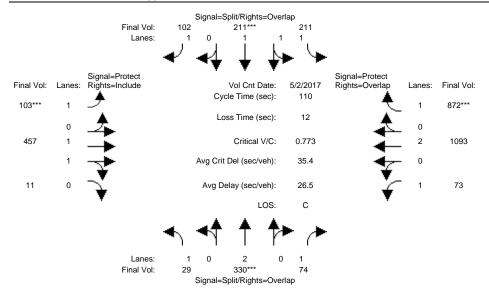
Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj PM



Street Name: Approach:			Woodsi	de Rd	ıth Bo	und	Vet	terans	Bl (U und	S101 S	SB Ram	_
Movement:	L -	- T	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R
Min. Green:		0	0	10	10	10	7	10	10	7		10
Y+R: 		4.0			4.0			4.0	4.0		4.0	4.0
Volume Module				1								
Base Vol:	0	0	186	21	296	50	279	1037	105	318	1183	397
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	186	21	296	50	279	1037	105	318	1183	397
Added Vol:	0	0	0	0	15	0	0	0	0	0	0	6
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	186	21	311	50	279	1037	105	318	1183	403
User Adj:		1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Volume:	0	0	0	21	311	50	279	1037	0	318	1183	403
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	21	311	50	279	1037	0	318	1183	403
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	0	0	21	311	50	279	1037	0	318	1183	403
Saturation Fl				•		•						
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	1.00	0.83	0.97	0.83	0.92	0.92	0.95	0.46	0.46	0.41
Lanes:	0.00	0.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	0	0	1900	1568	1845	1568	1753	3505	1805	876	1753	784
Capacity Anal	ysis	Modul	e:	•		•	•		•	•		
Vol/Sat:	0.00	0.00	0.00	0.01	0.17	0.03	0.16	0.30	0.00	0.36	0.67	0.51
Crit Moves:					***		****				* * * *	
Green/Cycle:	0.00	0.00	0.00	0.15	0.15	0.30	0.14	0.34	0.00	0.42	0.61	0.76
Volume/Cap:	0.00	0.00	0.00	0.09	1.11	0.11	1.11	0.87	0.00	0.87	1.11	0.67
Delay/Veh:		0.0	0.0	51.1	144	35.9	147.7	50.8	0.0		88.4	11.1
User DelAdj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	51.1	144	35.9	147.7	50.8	0.0	57.5	88.4	11.1
LOS by Move:			А	D	F	D	F	D	A	E	F	В
HCM2kAvgQ:	0		0	1	18	1	19	25	0	15	37	10
Note: Queue r	eport	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing PM

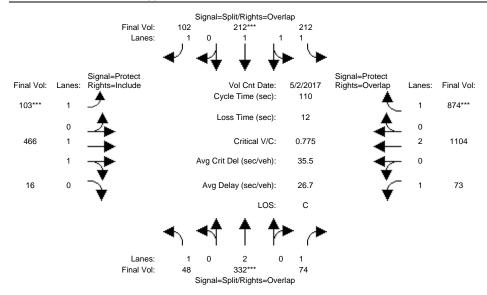
Intersection #7: Winslow/Whipple



Street Name: North Bound	Street Name:		Wins	slow/i	nducti	rial				Whippl	e Ave		
Min. Green: 10 10 10 10 10 10 10 7 10 10 7 10 10 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	Approach:	No	rth Bo	und	Sot	ith Bo	und	Εá	ast Bo	ound	We	est Bo	ound
Min. Green: 10 10 10 10 10 10 10 7 10 10 7 7 10 10 YHR: 4,0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.	movement.	ъ.	– I .	- K	ь -	- I ·	- K	ь -	- I	– R	ь -	- I	- R
Min. Green: 10 10 10 10 10 10 10 7 10 10 7 10 10 7 10 10 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0													
Volume Module: > Count Date: 2 May 2017 << Sase Vol: 29 330 74 211 211 102 103 457 11 73 1093 872	Min. Green:	10	10	10	10	10	10	7	10	10	7	10	10
Volume Module: >> Count Date: 2 May 2017 << Base Vol: 29 330 74 211 211 102 103 457 11 73 1093 872 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Y+R:	4.0											
Base Vol: 29 330 74 211 211 102 103 457 11 73 1093 872 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0							<<						
Initial Bse: 29 330													
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	_						1.00						
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Initial Bse:	29	330					103	457				
Initial Fut: 29 330	Added Vol:	0	0										
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0				0	0	0	0	0	0	0	0	0	0
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Initial Fut:	29	330	74	211	211	102	103	457	11	73	1093	872
PHF Volume: 29 330 74 211 211 102 103 457 11 73 1093 872 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume: 29 330 74 211 211 102 103 457 11 73 1093 872 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Reduced Vol: 29 330 74 211 211 102 103 457 11 73 1093 872 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	PHF Volume:	29	330	74	211	211	102	103	457	11	73	1093	872
Reduced Vol: 29 330 74 211 211 102 103 457 11 73 1093 872 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Reduced Vol:	29	330	74	211	211	102	103	457	11	73	1093	872
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0						1.00							
FinalVolume: 29 330 74 211 211 102 103 457 11 73 1093 872	_			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190	FinalVolume:	29	330	74	211	211	102			11	73	1093	872
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190													
Adjustment: 0.95 0.95 0.85 0.93 0.93 0.85 0.95 0.95 0.95 0.95 0.95 0.95 0.85 Lanes: 1.00 2.00 1.00 1.50 1.50 1.00 1.00 1.95 0.05 1.00 2.00 1.00 Final Sat.: 1805 3610 1615 2643 2643 1615 1805 3511 85 1805 3610 1615 1615 1805 3511 85 1805 3610 1615 1615 1805 3511 85 1805 3610 1615 1615 1805 3511 85 1805 3610 1615 1615 1615 1805 3511 85 1805 3610 1615 1615 1615 1615 1615 1615 1615 1					'			'			'		
Adjustment: 0.95 0.95 0.95 0.85 0.93 0.93 0.85 0.95 0.95 0.95 0.95 0.95 0.95 0.95 Lanes: 1.00 2.00 1.00 1.50 1.50 1.00 1.00 1.95 0.05 1.00 2.00 1.00 Final Sat.: 1805 3610 1615 2643 2643 1615 1805 3511 85 1805 3610 1615 1615 1805 3511 85 1805 3610 1615 1615 1805 3511 85 1805 3610 1615 1615 1805 3511 85 1805 3610 1615 1615 1805 3511 85 1805 3610 1615 1615 1615 1615 1615 1615 1615 1	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Lames: 1.00 2.00 1.00 1.50 1.50 1.00 1.00 1.95 0.05 1.00 2.00 1.00 Final Sat.: 1805 3610 1615 2643 2643 1615 1805 3511 85 1805 3610 1615 1615 1805 3511 85 1805 3610 1615 1615 1805 3511 85 1805 3610 1615 1615 1805 3511 85 1805 3610 1615 1615 1805 3511 85 1805 3610 1615 1615 1615 1615 1615 1615 1615 1													
Final Sat.: 1805 3610 1615 2643 2643 1615 1805 3511 85 1805 3610 1615										0.05	1.00	2.00	1.00
Capacity Analysis Module: Vol/Sat: 0.02 0.09 0.05 0.08 0.08 0.06 0.06 0.13 0.13 0.04 0.30 0.54 Crit Moves: **** **** **** Green/Cycle: 0.12 0.12 0.34 0.10 0.10 0.18 0.08 0.45 0.45 0.22 0.59 0.70 Volume/Cap: 0.13 0.76 0.13 0.77 0.77 0.35 0.76 0.29 0.29 0.18 0.51 0.78 Delay/Veh: 43.5 54.4 25.3 54.8 54.8 40.4 71.5 19.4 19.4 35.2 13.4 14.6 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Capacity Analysis Module: Vol/Sat: 0.02 0.09 0.05 0.08 0.08 0.06 0.06 0.13 0.13 0.04 0.30 0.54 Crit Moves: **** **** **** Green/Cycle: 0.12 0.12 0.34 0.10 0.10 0.18 0.08 0.45 0.45 0.22 0.59 0.70 Volume/Cap: 0.13 0.76 0.13 0.77 0.77 0.35 0.76 0.29 0.29 0.18 0.51 0.78 Delay/Veh: 43.5 54.4 25.3 54.8 54.8 40.4 71.5 19.4 19.4 35.2 13.4 14.6 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Vol/Sat: 0.02 0.09 0.05 0.08 0.08 0.06 0.06 0.13 0.13 0.04 0.30 0.54 Crit Moves: **** **** **** **** **** **** Green/Cycle: 0.12 0.12 0.34 0.10 0.10 0.18 0.08 0.45 0.22 0.59 0.70 Volume/Cap: 0.13 0.76 0.13 0.77 0.77 0.35 0.76 0.29 0.18 0.51 0.78 Delay/Veh: 43.5 54.4 25.3 54.8 54.8 40.4 71.5 19.4 19.4 35.2 13.4 14.6 User DelAdj: 1.00					1		'	1		į	ı		'
Crit Moves: ***** ***** ***** *****		-			0.08	0.08	0.06	0.06	0.13	0.13	0.04	0.30	0.54
Green/Cycle: 0.12 0.12 0.34 0.10 0.10 0.18 0.08 0.45 0.45 0.22 0.59 0.70 Volume/Cap: 0.13 0.76 0.13 0.77 0.77 0.35 0.76 0.29 0.29 0.18 0.51 0.78 Delay/Veh: 43.5 54.4 25.3 54.8 54.8 40.4 71.5 19.4 19.4 35.2 13.4 14.6 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0				0.00	0.00				0.15	0.15	0.01	0.50	
Volume/Cap: 0.13 0.76 0.13 0.77 0.77 0.35 0.76 0.29 0.29 0.18 0.51 0.78 Delay/Veh: 43.5 54.4 25.3 54.8 54.8 40.4 71.5 19.4 19.4 35.2 13.4 14.6 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0				0.34	0.10	0.10	0.18	0.08	0.45	0.45	0.22	0.59	0.70
Delay/Veh: 43.5 54.4 25.3 54.8 54.8 40.4 71.5 19.4 19.4 35.2 13.4 14.6 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
AdjDel/Veh: 43.5 54.4 25.3 54.8 54.8 40.4 71.5 19.4 19.4 35.2 13.4 14.6 LOS by Move: D D C D D D E B B D B HCM2kAvgQ: 1 7 2 7 7 3 5 5 5 2 11 20													
LOS by Move: D D C D D E B B D B B HCM2kAvgQ: 1 7 2 7 7 3 5 5 5 2 11 20	_												
	-												
	HCM2kAvaO:	1	7	2	7	7	3	5	5	5	2	11	
Note: Queue reported is the number of cars per lane.										5	2		20

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM

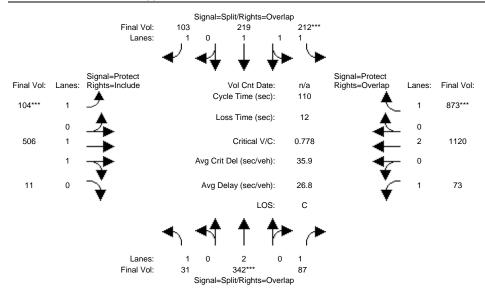
Intersection #7: Winslow/Whipple



$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	Street Name:									Whippl			
Min. Green: 10 10 10 10 10 10 10 7 10 10 7 10 10 7 10 10 7 10 10 7 10 10 10 10 10 10 10 10 10 10 10 10 7 10 10 7 10 10 10 10 10 10 10 10 10 10 10 10 10													
Min. Green: 10 10 10 10 10 10 10 10 7 10 7 10 10 7 10 10 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0													
Volume Module: >> Count Date: 2 May 2017 < Base Vol: 29 330 74 211 211 102 103 457 11 73 1093 872 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0								•					
Volume Module: >> Count Date: 2 May 2017 << Base Vol: 29 330													
Base Vol:													
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0					_	-		103	457	11	73	1093	872
Initial Bse:													
Reassigned: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
Reassigned: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Added Vol:	19	2										
Initial Fut: 48 332 74 212 212 102 103 466 16 73 1104 874 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Reassigned:	0	0					-	-				
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0							•						
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
PHF Volume: 48 332 74 212 212 102 103 466 16 73 1104 874 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	_												
Reduct Vol:													
Reduced Vol: 48 332 74 212 212 102 103 466 16 73 1104 874 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Peduct Vol:	10	7.72										
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Reduced Vol:	4.8	333						-				
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
FinalVolume: 48 332 74 212 212 102 103 466 16 73 1104 874	_												
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190	_												
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190													
Adjustment: 0.95 0.95 0.85 0.93 0.93 0.93 0.85 0.95 0.95 0.95 0.95 0.95 0.85 Lanes: 1.00 2.00 1.00 1.50 1.50 1.00 1.00 1.93 0.07 1.00 2.00 1.00 Final Sat.: 1805 3610 1615 2643 2643 1615 1805 3473 119 1805 3610 1615 1615 1805 3473 119 1805 3610 1615 1805 3473 119 1805 3610 1615 1806 3473 119 1805 3473 119 1805 3610 1615 1806 3473 119 1805 3610 1615 1806 3473 119 1805 3473 119 1805 3610 1615 1806 3473 119 1805 3													
Adjustment: 0.95 0.95 0.85 0.93 0.93 0.93 0.85 0.95 0.95 0.95 0.95 0.95 0.85 Lanes: 1.00 2.00 1.00 1.50 1.50 1.00 1.00 1.93 0.07 1.00 2.00 1.00 Final Sat.: 1805 3610 1615 2643 2643 1615 1805 3473 119 1805 3610 1615 1615 1805 3473 119 1805 3610 1615 1805 3473 119 1805 3610 1615 1806 3473 119 1805 3473 119 1805 3610 1615 1806 3473 119 1805 3610 1615 1806 3473 119 1805 3473 119 1805 3610 1615 1806 3473 119 1805 3	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Final Sat.: 1805 3610 1615 2643 2643 1615 1805 3473 119 1805 3610 1615 1805 3473 119 1805 3610 1615 1805 3610 1615 1805 3473 119 1805 3610 1615 1805 3610 1615 1805 3610 1615 1805 3610 1615 1805 3610 1615 1805 3610 1615 1805 3610 1615 1805 3610 1615 1805 3610 1615 1805 3610 1615 1805 3610 1615 1805 3610 18				0.85	0.93	0.93	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Final Sat.: 1805 3610 1615 2643 2643 1615 1805 3473 119 1805 3610 1615	Lanes:	1.00	2.00	1.00	1.50	1.50	1.00	1.00	1.93	0.07	1.00	2.00	1.00
Capacity Analysis Module: Vol/Sat: 0.03 0.09 0.05 0.08 0.08 0.06 0.06 0.13 0.13 0.04 0.31 0.54 Crit Moves: **** Green/Cycle: 0.12 0.12 0.34 0.10 0.10 0.18 0.07 0.45 0.45 0.21 0.59 0.70 Volume/Cap: 0.22 0.76 0.14 0.77 0.77 0.35 0.76 0.30 0.30 0.19 0.52 0.78 Delay/Veh: 44.2 54.5 25.6 54.9 54.9 40.4 71.9 19.2 19.2 35.6 13.4 14.7 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Capacity Analysis Module: Vol/Sat: 0.03 0.09 0.05 0.08 0.08 0.06 0.06 0.13 0.13 0.04 0.31 0.54 Crit Moves: **** **** ***** Green/Cycle: 0.12 0.12 0.34 0.10 0.10 0.18 0.07 0.45 0.45 0.21 0.59 0.70 Volume/Cap: 0.22 0.76 0.14 0.77 0.77 0.35 0.76 0.30 0.30 0.19 0.52 0.78 Delay/Veh: 44.2 54.5 25.6 54.9 54.9 40.4 71.9 19.2 19.2 35.6 13.4 14.7 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Vol/Sat: 0.03 0.09 0.05 0.08 0.08 0.06 0.06 0.13 0.04 0.31 0.54 Crit Moves: **** **** **** **** **** **** **** Green/Cycle: 0.12 0.12 0.34 0.10 0.10 0.18 0.07 0.45 0.21 0.59 0.70 Volume/Cap: 0.22 0.76 0.14 0.77 0.77 0.35 0.76 0.30 0.19 0.52 0.78 Delay/Veh: 44.2 54.5 25.6 54.9 54.9 40.4 71.9 19.2 35.6 13.4 14.7 User DelAdj: 1.00					1		'	1		'	ı		'
Green/Cycle: 0.12 0.12 0.34 0.10 0.10 0.18 0.07 0.45 0.45 0.21 0.59 0.70 Volume/Cap: 0.22 0.76 0.14 0.77 0.77 0.35 0.76 0.30 0.30 0.19 0.52 0.78 Delay/Veh: 44.2 54.5 25.6 54.9 54.9 40.4 71.9 19.2 19.2 35.6 13.4 14.7 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0					0.08	0.08	0.06	0.06	0.13	0.13	0.04	0.31	0.54
Green/Cycle: 0.12 0.12 0.34 0.10 0.10 0.18 0.07 0.45 0.45 0.21 0.59 0.70 Volume/Cap: 0.22 0.76 0.14 0.77 0.77 0.35 0.76 0.30 0.30 0.19 0.52 0.78 Delay/Veh: 44.2 54.5 25.6 54.9 54.9 40.4 71.9 19.2 19.2 35.6 13.4 14.7 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Crit Moves:		****										****
Volume/Cap: 0.22 0.76 0.14 0.77 0.77 0.35 0.76 0.30 0.30 0.19 0.52 0.78 Delay/Veh: 44.2 54.5 25.6 54.9 54.9 40.4 71.9 19.2 19.2 35.6 13.4 14.7 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0		0.12	0.12	0.34	0.10	0.10	0.18	0.07	0.45	0.45	0.21	0.59	0.70
Delay/Veh: 44.2 54.5 25.6 54.9 54.9 40.4 71.9 19.2 19.2 35.6 13.4 14.7 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0					0.77	0.77							0.78
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
AdjDel/Veh: 44.2 54.5 25.6 54.9 54.9 40.4 71.9 19.2 19.2 35.6 13.4 14.7													
LOS by Move: D D C D D D E B B D B B				C			D	E		В	D. D	В	В
HCM2kAvgQ: 2 8 2 7 7 3 5 5 2 11 20	HCM2kAvq0:	2									_		
Note: Queue reported is the number of cars per lane.										_	_		_ 3

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd PM

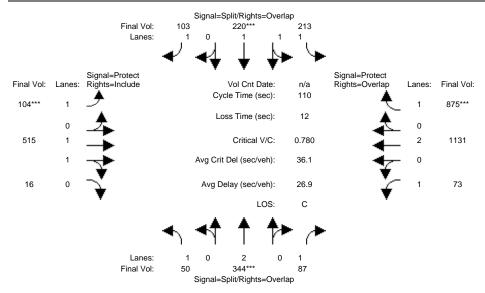
Intersection #7: Winslow/Whipple



Street Name: Approach:								at Ro	Whippl ound		agt Ro	und
Movement:	L -	- T -	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
 Min. Green:		10			10		7			•	 10	10
Y+R:	4.0	4.0			4.0	4.0		4.0	4.0	4.0		4.0
Volume Module												
Base Vol:	31	342	87	212	219	103	104	506	11	73	1120	873
Growth Adj:				1.00		1.00	1.00		1.00		1.00	1.00
Initial Bse:			87	212	219	103	104	506	11	73	1120	873
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	31	342	87	212	219	103	104	506	11	73	1120	873
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	31	342	87	212	219	103	104	506	11	73	1120	873
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	31	342	87	212	219	103	104	506	11	73	1120	873
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	31	342	87	212		103	104		11		1120	873
Saturation Fl	ow Mo	odule:	•				•			•		•
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.93	0.93	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Lanes:	1.00	2.00	1.00	1.48	1.52	1.00	1.00	1.96	0.04	1.00	2.00	1.00
Final Sat.:	1805	3610	1615	2600	2685	1615	1805	3523	77	1805	3610	1615
Capacity Anal							•					
		0.09		0.08	0.08	0.06	0.06	0.14	0.14	0.04	0.31	0.54
Crit Moves:		***		****			****					****
Green/Cycle:	0.12	0.12	0.33	0.10	0.10	0.18	0.08	0.46	0.46	0.20	0.59	0.69
Volume/Cap:	0.14	0.77	0.16	0.78	0.78	0.35	0.77	0.31	0.31	0.20	0.53	0.78
Delay/Veh:			26.5	54.9	54.9	40.2	72.5		18.9		13.8	15.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:				54.9		40.2	72.5		18.9		13.8	15.0
LOS by Move:			C	D	D	D	E	В	В	D		В
HCM2kAvgQ:			2	7	7	3	5		6	2	11	20
Note: Queue r		ted is	the n	umber	of ca	rs per	lane					

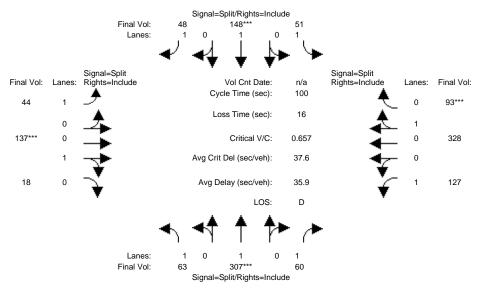
Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj PM

Intersection #7: Winslow/Whipple



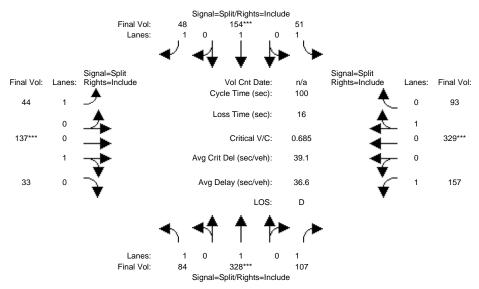
Street Name:	No	Win	slow/i	nducti	rial	und	Whipple Ave East Bound West Bound					
Movement:	L	– T	- R	ь.	- T	- R	L -	- T	- R	L ·	- T	- R
Min Garani										7		· 10
Min. Green: Y+R:		10 4.0		10 4 0	4.0			10 4.0			4.0	4.0
Volume Module	ė:			•								
Base Vol:	31	342	87	212	219	103	104	506	11	73	1120	873
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	31	342	87	212	219	103	104	506	11	73	1120	873
Added Vol:	19		0	1	1	0	0	9	5	0	11	2
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	50	344	87	213	220	103	104	515	16	73	1131	875
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	344	87	213	220	103	104	515	16	73	1131	875
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	344	87	213	220	103	104	515	16	73	1131	875
PCE Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	344	87	213	220	103	104	515	16	73	1131	875
Saturation F	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.93	0.93	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Lanes:	1.00	2.00	1.00	1.48	1.52	1.00	1.00	1.94	0.06	1.00	2.00	1.00
Final Sat.:	1805	3610	1615	2600	2685	1615	1805	3487	108	1805	3610	1615
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	0.03	0.10	0.05	0.08	0.08	0.06	0.06	0.15	0.15	0.04	0.31	0.54
Crit Moves:		***			****		****					****
Green/Cycle:	0.12	0.12	0.32	0.11	0.11	0.18	0.07	0.46	0.46	0.20	0.59	0.69
Volume/Cap:	0.22	0.77	0.17	0.78	0.78	0.35	0.77	0.32	0.32	0.20	0.53	0.78
Delay/Veh:	43.9	54.5	26.8	55.0	55.0	40.2	72.9	18.8	18.8	37.0	13.9	15.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.9	54.5	26.8	55.0	55.0	40.2	72.9	18.8	18.8	37.0	13.9	15.1
LOS by Move:	D	D	С	D	D	D	E	В	В	D	В	В
HCM2kAvgQ:	2	8	2	7	7	3	5	6	6	2	12	20
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing PM



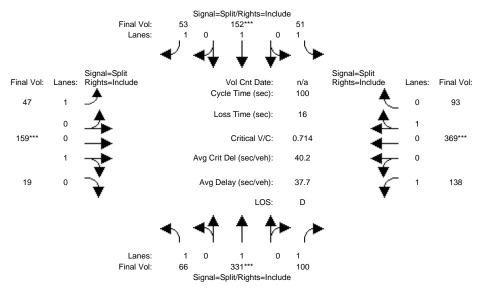
Approach:	No	rth Boı	und					East Bound L - T - R			est Bo	und
Movement:		- T -								L -		- R
 Min. Green:	10	10	10	1	10	10	1	10	10	10		10
Y+R:	4.0		4.0		4.0			4.0	4.0			4.0
Volume Module			1	ı		1	1		ı	1		1
Base Vol:	63	307	60	51	148	48	44	137	18	127	328	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	307	60	51	148	48	44	137	18	127	328	93
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	63	307	60	51	148	48	44	137	18	127	328	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:		307	60	51	148	48	44	137	18	127	328	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			60	51	148	48	44	137	18	127	328	93
PCE Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			60	51		48		137	18		328	93
	1											
Saturation F												
Sat/Lane:		1900	1900	1900		1900		1900	1900		1900	1900
Adjustment:			0.85	0.95		0.85		0.98	0.98		0.97	0.97
	1.00		1.00	1.00		1.00		0.88	0.12		0.78	0.22
Final Sat.:			1615		1900	1615		1651	217	1805		406
	1											
Capacity Anal				0 00	0 00	0 02	0 00	0 00	0 00	0 07	0 00	0 00
Vol/Sat:		0.16	0.04	0.03	0.08	0.03	0.02	0.08	0.08	0.07	0.23	0.23
0220 110100	0 05		0 05	0 10		0 10	0 12		0 12	0 25	0 25	
Green/Cycle: Volume/Cap:			0.25 0.15	0.12		0.12 0.25		0.13	0.13		0.35	0.35
Delay/Veh:			29.7	40.5		0.⊿5 40.7		48.2	48.2		30.0	30.0
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdiDel/Veh:			29.7	40.5		40.7		48.2	48.2		30.0	30.0
LOS by Move:			29.7 C	40.5 D	49.0 D	40.7 D	39.3 D	40.2 D	40.2 D	23.0 C	30.0 C	30.0 C
HCM2kAvq0:	2		1	2	6	2	1		6	3	11	11
Note: Queue			_				_	-	3	J		
noce gacac	LCPOI	ccu ib	C11C 11	and C I	or ca	TO PCI		•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM



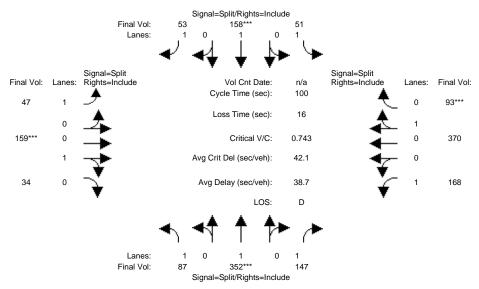
Approach:	No	rth Boı	und	Sou	uth Bo	und	East Bound L - T - R			We	est Bo	und
Movement:		- T -				- R					- T	
 Min. Green:	10		10		10	10		10	10		10	10
Y+R:	4.0		4.0		4.0			4.0				
1 + K •												
Volume Module			I	I		ļ	l		ı	I		ļ
Base Vol:	63	307	60	51	148	48	44	137	18	127	328	93
Growth Adj:	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	307	60	51	148	48	44	137	18	127	328	93
Added Vol:	21	21	47	0	6	0	0	0	15	30	1	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	84	328	107	51	154	48	44	137	33	157	329	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	328	107	51	154	48	44	137	33	157	329	93
	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:			107	51	154	48	44	137	33	157	329	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	84	328	107	51	154	48	44	137	33	157	329	93
Saturation F	low Mo	odule:	·	•		•						
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.97	0.97	0.95	0.97	0.97
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.81	0.19	1.00	0.78	0.22
Final Sat.:			1615		1900	1615		1487	358		1432	405
	1											
Capacity Ana												
Vol/Sat:		0.17	0.07	0.03	0.08	0.03	0.02	0.09	0.09	0.09	0.23	0.23
0110 110 100					****			****			****	
Green/Cycle:			0.25	0.12		0.12		0.13	0.13		0.34	0.34
Volume/Cap:			0.26	0.24		0.25		0.69	0.69		0.69	0.69
Delay/Veh:			30.3	40.6		40.8		49.0	49.0		31.9	31.9
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			30.3	40.6	50.8	40.8	38.8		49.0		31.9	31.9
LOS by Move:			С	D	D	D	D	D	D	С		С
	2		3	2	6		1		6	3	11	11
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd PM



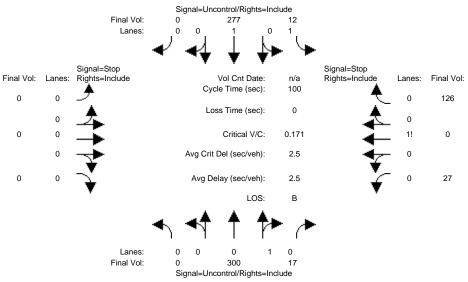
Approach:	No	rth Bo	Bound South Bound							We	est Bo	und
Movement:		- T									- T	
Min. Green:		10		10				10		10		10
Y+R:		4.0			4.0			4.0			4.0	
Volume Modul			,	1		'	ı		'	1		
Base Vol:	66	331	100	51	152	53	47	159	19	138	369	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	66	331	100	51	152	53	47	159	19	138	369	93
Added Vol:			0	0	0	0	0	0	0	0	0	0
Reassigned :		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	66	331	100	51	152	53	47	159	19	138	369	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:			100	51	152	53	47	159	19	138	369	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	66	331	100	51	152	53	47	159	19	138	369	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			100		152		47		19		369	93
	1											
Saturation F												
	1900		1900		1900	1900		1900	1900	1900		1900
Adjustment:			0.85	0.95		0.85		0.98	0.98		0.97	0.97
Lanes:			1.00	1.00		1.00			0.11	1.00		0.20
Final Sat.:			1615		1900	1615		1670	200		1472	371
Capacity Ana					0 00	0 00		0 10	0 10		0 05	0 05
Vol/Sat:			0.06	0.03	0.08	0.03	0.03	0.10	0.10	0.08	0.25	0.25
Crit Moves:			0 04	0 11		0 11	0 10	****	0 10		****	0 05
Green/Cycle:			0.24		0.11	0.11		0.13	0.13		0.35	0.35
Volume/Cap:			0.25		0.71	0.29		0.71	0.71		0.71	0.71
Delay/Veh:			30.8	41.2		41.7		50.9	50.9		31.9	31.9
User DelAdj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			30.8	41.2		41.7			50.9	23.0		31.9
LOS by Move:			C				D		D	C		C
HCM2kAvgQ:		. 11		. 2		_	1		7	3	12	12
Note: Queue	repor	ted is	the n	umber	oi ca	ırs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj PM



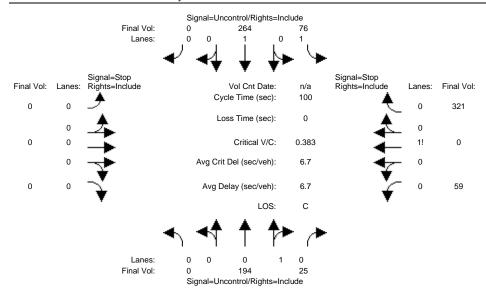
Approach:								East Bound L - T - R			est Bo	und
Movement:		- T ·									- T	
 Min. Green:	10		10	1	10	10	1	10	10	10		10
Y+R:	4.0		4.0		4.0			4.0	4.0			
1 + K •												
Volume Module			ı	I		I	I		ı	I		ļ
Base Vol:	66	331	100	51	152	53	47	159	19	138	369	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	66	331	100	51	152	53	47	159	19	138	369	93
Added Vol:	21	21	47	0	6	0	0	0	15	30	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	87	352	147	51	158	53	47	159	34	168	370	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:		352	147	51	158	53	47	159	34	168	370	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	87	352	147	51	158	53	47	159	34	168	370	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	87	352	147	51	158	53	47	159	34	168	370	93
	I											
Saturation F												
Sat/Lane:	1900	1900	1900	1900	1900	1900		1900	1900		1900	1900
Adjustment:	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.97	0.97	0.95	0.97	0.97
	1.00		1.00		1.00	1.00		0.82	0.18		0.80	0.20
Final Sat.:			1615		1900	1615		1525	326		1473	370
	1											
Capacity Anal				0 00		0 00		0 10	0 10	0 00	0 05	0 05
Vol/Sat:		0.19	0.09	0.03	0.08	0.03	0.03	0.10	0.10	0.09	0.25	0.25 ***
0110 110 100	0 05		0 05			0 11	0 14		0 14	0 0 4	0 04	
Green/Cycle:			0.25		0.11	0.11		0.14	0.14		0.34	0.34
Volume/Cap:			0.36		0.74	0.29		0.74	0.74		0.74	0.74
Delay/Veh:			31.6	41.2		41.7		52.2	52.2		34.0	34.0
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			31.6	41.2		41.7		52.2	52.2		34.0	34.0
LOS by Move:			C	D	E	D	D	D	D	C		C
HCM2kAvgQ:	2		4	. 2	6	_	1	-	7	4	13	13
Note: Queue	repor	ted is	the n	umber	oi ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) Existing PM



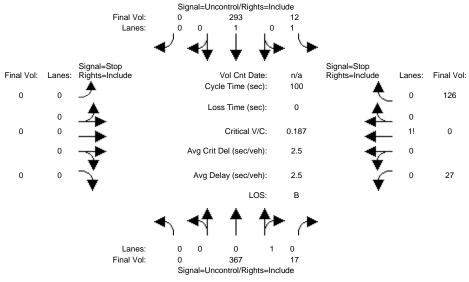
Approach:	No	rth Bo	nund	Soi	ıth Ro	ound	F.	agt Ro	ound	TAT 6	eat Ro	nund
Movement:												
Volume Module	1											
Base Vol:	0	300	17	12	277	0	0	0	0	27	0	126
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	300	17	12	277	0	0	0	0	27	0	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	300	17	12	277	0	0	0	0	27	0	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	300	17	12	277	0	0	0	0	27	0	126
Critical Gap												
Critical Gp:											6.5	6.2
FollowUpTim:												
Capacity Mod	ule:											
Cnflict Vol:	XXXX	XXXX	xxxxx	317	XXXX	XXXXX	XXXX	xxxx	XXXXX	610	610	309
Potent Cap.:	XXXX	XXXX	xxxxx	1255	XXXX	XXXXX	XXXX	xxxx	XXXXX	461	412	736
Move Cap.:	XXXX	XXXX	xxxxx	1255	XXXX	XXXXX	XXXX	xxxx	XXXXX	458	408	736
Volume/Cap:	XXXX	XXXX	XXXX	0.01	XXXX	XXXX			XXXX		0.00	0.17
Level Of Ser	vice N	Module	: :									
2Way95thQ:	XXXX	xxxx	xxxxx	0.0	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX
Control Del:	xxxxx		xxxxx	7.9	XXXX	XXXXX				XXXXX		XXXXX
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT -	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	665	XXXXX
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	0.9	XXXXX
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.0	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	В	*
ApproachDel:	X	xxxxx		XX	xxxxx		X	xxxxx			12.0	
ApproachLOS:		*			*			*			В	
Note: Queue	report	ted is	s the r	number	of ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing + Proj PM



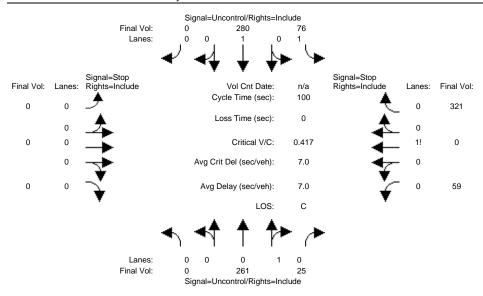
Approach:				South Bound					We	est Bo	ound	
Movement:											- T	- R
							:					
Volume Modul	e:											
Base Vol:	0	300	17	12	277	0	0	0	0	27	0	126
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	300	17	12	277	0	0	0	0	27	0	126
Added Vol:	0	0	7	51	0	0	0	0	0	21	0	89
Reassigned :	0	-106	1	13	-13	0	0	0	0	11	0	106
Initial Fut:	0	194	25	76	264	0	0	0	0	59	0	321
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	0	194	25	76	264	0	0	0	0	59	0	321
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	194	25	76	264	0	0	0	0	59	0	321
Critical Gap	Modu.	le:										
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Mod	ule:											
Cnflict Vol:	xxxx	xxxx	xxxxx	219	xxxx	xxxxx	XXXX	xxxx	xxxxx	623	623	207
Potent Cap.:	xxxx	xxxx	xxxxx	1362	xxxx	xxxxx	XXXX	xxxx	xxxxx	453	405	839
Move Cap.:	xxxx	xxxx	xxxxx	1362	xxxx	xxxxx	XXXX	xxxx	xxxxx	434	383	839
Volume/Cap:	xxxx	xxxx	XXXX	0.06	xxxx	XXXX	XXXX	xxxx	XXXX	0.14	0.00	0.38
Level Of Ser	vice D	Module	e:									
2Way95thQ:	xxxx	xxxx	xxxxx	0.2	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	XXXX	XXXXX
Control Del:	xxxxx	xxxx	xxxxx	7.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	XXXX	XXXXX
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	733	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	3.0	XXXXX
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	15.1	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	C	*
ApproachDel:	x	xxxxx		x	xxxxx		x	xxxxx			15.1	
ApproachLOS:		*			*			*			С	
Note: Queue	report	ted is	s the r	number	of ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) Bkgd PM



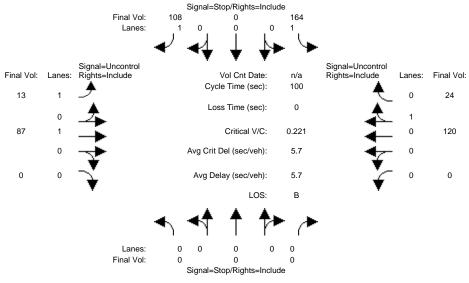
			Ü		•							
Approach:	No	rth Bo	ound	Soi	ath Bo	ound	Εä	ast Bo	ound	We	est Bo	ound
Movement:	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R
Volume Module	e:											
Base Vol:	0	367	17	12	293	0	0	0	0	27	0	126
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	367	17	12	293	0	0	0	0	27	0	126
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	367	17	12	293	0	0	0	0	27	0	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	367	17	12	293	0	0	0	0	27	0	126
Critical Gap	Modu.	le:										
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Mod	ule:											
Cnflict Vol:	XXXX	xxxx	xxxxx	384	xxxx	xxxxx	XXXX	xxxx	xxxxx	693	693	376
Potent Cap.:	XXXX	xxxx	xxxxx	1186	xxxx	xxxxx	XXXX	xxxx	xxxxx	413	370	675
Move Cap.:	XXXX	xxxx	xxxxx	1186	xxxx	xxxxx	XXXX	xxxx	xxxxx	409	366	675
Volume/Cap:	XXXX	xxxx	xxxx	0.01	xxxx	XXXX	XXXX	xxxx	XXXX	0.07	0.00	0.19
Level Of Ser	vice 1	Module	e:									
2Way95thQ:	XXXX	xxxx	xxxxx	0.0	xxxx	XXXXX	XXXX	xxxx	XXXXX	XXXX	xxxx	XXXXX
Control Del:	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	606	XXXXX
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.0	XXXXX
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	12.9	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	В	*
ApproachDel:	X	xxxxx		X	xxxxx		X	xxxxx			12.9	
ApproachLOS:		*			*			*			В	
Note: Queue	repor	ted is	s the 1	number	of ca	ars pei	lane					

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Bkgd + Proj PM



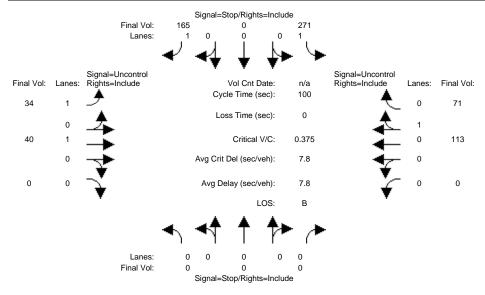
Approach: North Bound South Bound East Bound	West Bound
Movement: $L - T - R L - T - R$	
Volume Module:	
Base Vol: 0 367 17 12 293 0 0 0	
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	
Initial Bse: 0 367 17 12 293 0 0 0	
Added Vol: 0 0 7 51 0 0 0 0	21 0 89
Reassigned: 0 -106 1 13 -13 0 0 0	11 0 106
Initial Fut: 0 261 25 76 280 0 0 0	59 0 321
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00 1.00 1.00
PHF Volume: 0 261 25 76 280 0 0 0	59 0 321
Reduct Vol: 0 0 0 0 0 0 0 0	0 0 0
FinalVolume: 0 261 25 76 280 0 0 0	59 0 321
Critical Gap Module:	
Critical Gp:xxxxx xxxx xxxxx 4.1 xxxx xxxxx xxxxx xxxxx	6.4 6.5 6.2
FollowUpTim:xxxxx xxxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxxx xxxxx	3.5 4.0 3.3
Capacity Module:	
Cnflict Vol: xxxx xxxx xxxxx 286 xxxx xxxxx xxxx xxx	706 706 274
Potent Cap.: xxxx xxxx xxxxx 1288 xxxx xxxxx xxxx xx	406 363 770
Move Cap.: xxxx xxxx xxxxx 1288 xxxx xxxxx xxxx xx	387 342 770
Volume/Cap: xxxx xxxx xxxx 0.06 xxxx xxxx xxxx xxxx	0.15 0.00 0.42
Level Of Service Module:	
2Way95thQ: xxxx xxxx xxxxx 0.2 xxxx xxxxx xxxx xxx	xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx 8.0 xxxx xxxxx xxxxx xxxxx xxxxx	xxxxx xxxx xxxxx
LOS by Move: * * * A * * * *	* * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT	LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxx xxxx	xxxx 668 xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx	xxxxx 3.6 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx	
Shared LOS: * * * * * * * * *	* C *
ApproachDel: xxxxxx xxxxx xxxxxx	17.3
ApproachLOS: * * *	C
Note: Queue reported is the number of cars per lane.	

Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) Existing PM



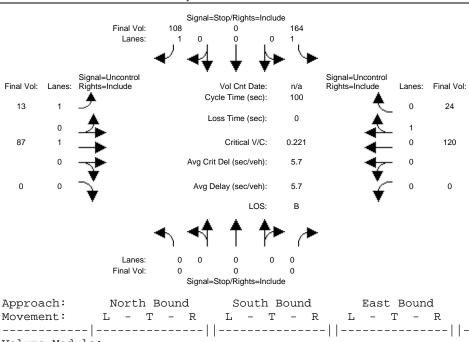
			Oigila	ii-Otop/1tigii	.0-11101440							
Approach:	Nor	th Bo	ound	Soi	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:	L -	T	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R
Volume Module												
Base Vol:	0	0	0	164	0	108	13	87	0	0	120	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	164	0	108	13	87	0	0	120	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	164	0	108	13	87	0	0	120	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	164	0	108	13	87	0	0	120	24
Critical Gap	Modul	e:										
Critical Gp::	XXXXX	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	XXXXX
FollowUpTim:	XXXXX	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	XXXXX
Capacity Mod	ule:											
Cnflict Vol:	XXXX	xxxx	xxxxx	245	xxxx	132	144	xxxx	xxxxx	XXXX	xxxx	XXXXX
Potent Cap.:	XXXX	xxxx	xxxxx	748	xxxx	923	1451	xxxx	xxxxx	XXXX	xxxx	XXXXX
Move Cap.:	XXXX	xxxx	xxxxx	743	xxxx	923	1451	xxxx	xxxxx	XXXX	xxxx	XXXXX
Volume/Cap:	XXXX	xxxx	XXXX	0.22	xxxx	0.12	0.01	xxxx	XXXX	XXXX	xxxx	XXXX
Level Of Ser	vice M	odule	<u>:</u>									•
2Way95thQ:	xxxx	xxxx	xxxxx	0.8	xxxx	0.4	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	XXXXX	xxxx	xxxxx	11.2	xxxx	9.4	7.5	xxxx	xxxxx	xxxxx	xxxx	XXXXX
LOS by Move:	*	*	*	В	*	A	A	*	*	*	*	*
Movement:	LT -	LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT -	- LTR	- RT
Shared Cap.:	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX
SharedQueue:	XXXXX	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX
Shrd ConDel:	XXXXX	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX
Shared LOS:	*	*	*		*		*	*	*	*	*	*
ApproachDel:	XX	xxxx			10.5		X	xxxxx		XX	xxxx	
ApproachLOS:		*			В			*			*	
Note: Queue	report	ed is	s the r	number	of ca	ars per	lane					

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing + Proj PM



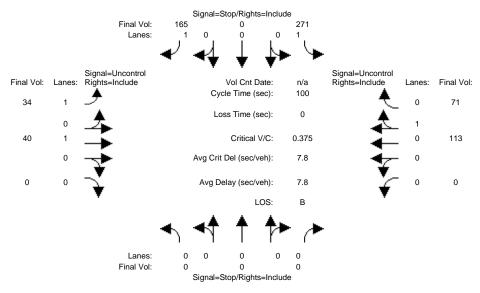
				South Bound			East Bound R L - T - R					
Volume Modul		_										
Base Vol:	0		0			108				0		24
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		0	0	164	0	108	13	87	0	0	120	24
Added Vol:	0	0	0	60	0	15	17	0	0	0	0	40
Reassigned:		0	0	47	0	42	4	-47	0	0	-7	7
Initial Fut:		0	0	271	0	165	34	40	0	0	113	71
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
TIII VOLUME.	0	0	0	271	0	165	34	40	0	0	113	71
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	0
FinalVolume:			0		-		34		0	0		71
Critical Gap												
Critical Gp:												
FollowUpTim:							2.2					
Capacity Mod												
Cnflict Vol:					XXXX	149			XXXXX		XXXX	XXXXX
Potent Cap.:									xxxxx		XXXX	XXXXX
Move Cap.:									xxxxx		XXXX	XXXXX
Volume/Cap:					XXXX				XXXX			XXXX
	1											
Level Of Ser												
2Way95thQ:									xxxxx			
Control Del:					XXXX				xxxxx			
LOS by Move:				В				*		*	*	*
Movement:											- LTR	- RT
Shared Cap.:												XXXXX
SharedQueue:	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX
Shrd ConDel:												
Shared LOS:	*	*	*		*	*	*	*	*	*	*	*
ApproachDel:							XX			XX	XXXXX	
ApproachLOS:		*			В			*			*	
Note: Queue	report	ted is	s the r	number	of ca	ars per	r lane					

Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) Bkgd PM



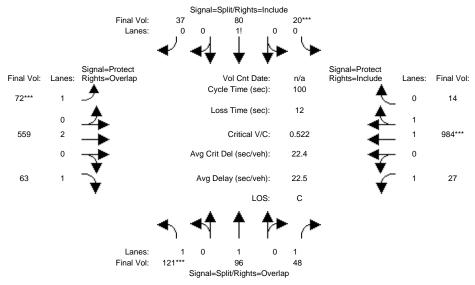
			Ü	. 0								
Approach:	No	rth B	ound					ast B	ound	We	est Bo	ound
Movement:	L	- T	- R	L ·	- T	- R	L	- T	- R	L -	- T	- R
Volume Modul	e:											
Base Vol:	0	0	0	164	0	108	13	87	0	0	120	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	164	0	108	13	87	0	0	120	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	164	0	108	13	87	0	0	120	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	164	0	108	13	87	0	0	120	24
Critical Gap	Modu	le:										'
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:									xxxxx			
Capacity Mod				' '			' '			' '		ı.
Cnflict Vol:	xxxx	xxxx	xxxxx	245	xxxx	132	144	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:				748	xxxx	923	1451	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:				743	xxxx	923			xxxxx		xxxx	xxxxx
Volume/Cap:						0.12	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Ser	1			1 1			' '			1 1		1
2Way95thQ:				0.8	xxxx	0.4	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:						9.4			xxxxx			
LOS by Move:			*	В		A			*	*	*	*
Movement:			- RT	LT ·				- LTR	- RT	LT -	- LTR	- RT
Shared Cap.:												xxxxx
SharedQueue:												
Shrd ConDel:												
Shared LOS:	*		*		*		*	*	*	*	*	*
ApproachDel:	Υ.	xxxxx			10.5		ν.	xxxxx		v	xxxx	
ApproachLOS:					10.3		Λ.	*			*	
Note: Queue			s the r	numher	_	arg nei	r lane					
Note: Queue	r chor	ccu li	a cire i	TAIIDET	OT C	are her	Lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Bkgd + Proj PM



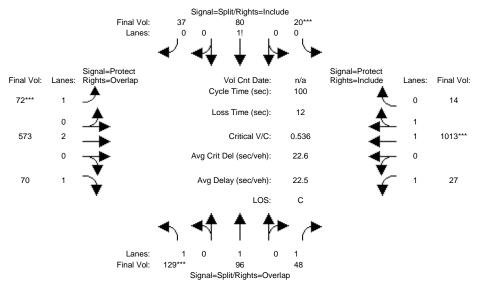
Approach: Movement:	L ·	- Т	ound – R	L ·	- Т	- R	L -	- Т	- R	L -	- Т	
Volume Module												
Base Vol:	0	0	0	164	0	108	13	87	0	0	120	24
Growth Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	164	0	108	13	87	0	0	120	24
Added Vol:	0	0	0	60	0	15	17	0	0	0	0	40
Reassigned:	0	0	0	47	0	42	4	-47	0	0	-7	7
Initial Fut:	0	0	0	271	0	165	34	40	0	0	113	71
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	271	0	165	34	40	0	0	113	71
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:		0	0	271					0	0		71
	1											
Critical Gap												
Critical Gp:												
FollowUpTim:							2.2					
Capacity Mod												
Cnflict Vol:					xxxx	149			xxxxx			XXXXX
Potent Cap.:						904			xxxxx			XXXXX
Move Cap.:						904			xxxxx			XXXXX
Volume/Cap:					XXXX				XXXX			XXXX
Level Of Serv	1											
2Way95th0:				1 7	3,53,53,53,5	0.7	0 1	3,53,53,53,5	3535353535	xxxx	3,53,53,53,5	3,53,53,53,5
Control Del:					XXXX					XXXXX		
LOS by Move:					*	9.9 A		*		*	*	*
Movement:				_								_ DT
Shared Cap.:												XXXXX
SharedQueue:												
Shrd ConDel:												
Shared LOS:	*	*	*		*			*	*	*	*	*
ApproachDel:	X	xxxxx			11.8		X	xxxx		xx	xxxx	
ApproachLOS:	111	*			В		212	*		112	*	
Note: Queue	report	ted is	s the r	number	of ca	ars pei	r lane					
	_					_						

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing PM



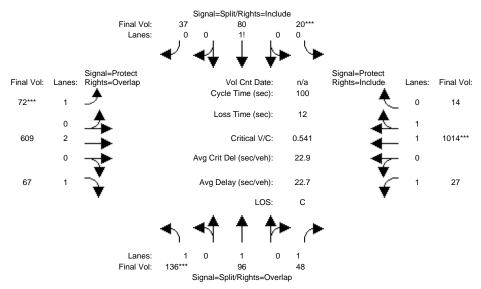
Approach:	No	rth Boı	und	Sou	ıth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T -			- T			- T		L -		- R
 Min. Green:	10	10	10		10	10		10	10	7		10
Y+R:	4.0	4.0	4.0		4.0			4.0	4.0	4.0		4.0
Volume Module			'	'		'	'		'	'		'
Base Vol:	121	96	48	20	80	37	72	559	63	27	984	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	121	96	48	20	80	37	72	559	63	27	984	14
	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	121	96	48	20	80	37	72	559	63	27	984	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	121	96	48	20	80	37	72	559	63	27	984	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	96	48	20	80	37	72	559	63	27	984	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			48	20	80	37	72		63	27	984	14
	1											
Saturation F												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900		1900		1900	1900
Adjustment:	0.95	1.00	0.85	0.96	0.96	0.96	0.95	0.95	0.85	0.95	0.95	0.95
	1.00		1.00		0.58	0.27	1.00		1.00		1.97	0.03
Final Sat.:			1615		1062	491	1805		1615		3552	51
	1		- 1									
Capacity Ana												
Vol/Sat:		0.05	0.03	0.08	0.08	0.08		0.15	0.04	0.01	0.28	0.28
Crit Moves:	****			****			****				****	
Green/Cycle:			0.32		0.14	0.14		0.42	0.55		0.53	0.53
Volume/Cap:			0.09	0.52		0.52		0.37	0.07		0.52	0.52
Delay/Veh:			24.1	41.5		41.5	48.0		10.7		15.5	15.5
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:			24.1	41.5	41.5	41.5	48.0		10.7	33.5		15.5
LOS by Move:			С	D	D	D	D	С	В	C	В	В
	4	_	1	5	5	5	2	-	1	1	11	11
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM



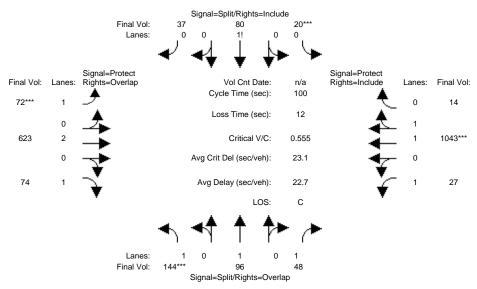
Approach:	No	rth Boi	und	501	ıth Bo	und	F:	ast Bo	und	TATA	est Bo	und
Movement:		- T			лен ве - Т			- T			- T	- R
Min. Green:	10		10	1	10	10	7		10	7		10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module	e:			•		•	•			•		•
Base Vol:	121	96	48	20	80	37	72	559	63	27	984	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	121	96	48	20	80	37	72	559	63	27	984	14
Added Vol:	8	0	0	0	0	0	0	14	7	0	29	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	96	48	20	80	37	72	573	70	27	1013	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	129	96	48	20	80	37	72	573	70	27	1013	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	129	96	48	20	80	37	72	573	70	27	1013	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	129	96	48	20	80	37	72		70		1013	14
Saturation F												
Sat/Lane:	1900	1900	1900	1900	1900	1900		1900	1900		1900	1900
Adjustment:	0.95	1.00	0.85	0.96	0.96	0.96		0.95	0.85	0.95	0.95	0.95
Lanes:		1.00	1.00		0.58	0.27		2.00	1.00		1.97	0.03
Final Sat.:			1615		1062	491		3610	1615		3554	49
	1											
Capacity Ana	_											
Vol/Sat:		0.05	0.03		0.08	0.08		0.16	0.04	0.01	0.29	0.29
Crit Moves:	****			****			****				****	
Green/Cycle:			0.32		0.14	0.14		0.42	0.55		0.53	0.53
Volume/Cap:			0.09		0.54	0.54		0.38	0.08		0.54	0.54
Delay/Veh:			24.0	42.2		42.2		20.1	10.4		15.6	15.6
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			24.0	42.2		42.2		20.1	10.4		15.6	15.6
LOS by Move:			С	D	D	D	D	С	В	С	В	В
HCM2kAvgQ:	4	-	1	5	5	5	2	-	1	1	11	11
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd PM



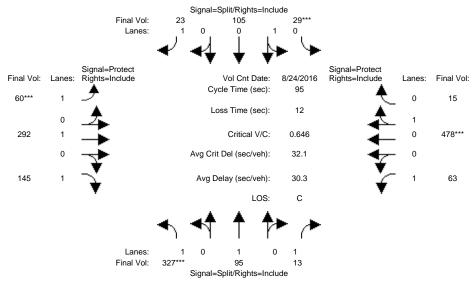
Approach:	No	rth Bo	und	Sou	ath Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T				- R					- T	
Min. Green:		 10		10				10		7		10
Y+R:		4.0			4.0			4.0			4.0	
Volume Module			,	1		'	ı		'	1		'
Base Vol:	136	96	48	20	80	37	72	609	67	27	1014	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	96	48	20	80	37	72	609	67	27	1014	14
Added Vol:			0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			48	20	80	37	72	609	67	27	1014	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:			48	20	80	37	72	609	67	27	1014	14
Reduct Vol:			0	0	0	0	0		0	0	0	0
Reduced Vol:			48	20	80	37	72		67		1014	14
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00			1.00		1.00	1.00
FinalVolume:				. 20					67		1014	14
Saturation F				1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.85	0.96		0.96		0.95	0.85		0.95	0.95
Lanes:			1.00	0.15		0.27		2.00	1.00		1.97	0.03
Final Sat.:			1615		1062	491		3610	1615 		3554	49
Capacity Ana												
Vol/Sat:		0.05	0.03	0 00	0.08	0.08	0 04	0 17	0.04	0 01	0.29	0.29
	****		0.03	****	0.00	0.00	****	0.17	0.04	0.01	****	0.49
Green/Cycle:					0.14	0.14		0.43	0.56	Λ 1Ω	0.53	0.53
Volume/Cap:			0.09		0.54	0.54		0.40	0.07		0.54	0.54
Delay/Veh:			24.2	42.4		42.4		20.1	9.9		15.9	15.9
User DelAdj:						1.00		1.00	1.00		1.00	1.00
AdiDel/Veh:						42.4			9.9		15.9	15.9
LOS by Move:			Z 1. Z				D		Э. Э А		В	В
HCM2kAvq0:		3	1	5						1		11
Note: Queue :									_	_		
	-					-						

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj PM



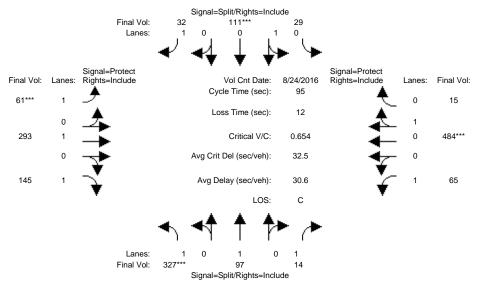
Approach:	No	rth Boı	und	Sou	ıth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T -				- R		- T			- T	
Min. Green:	10	10	10		10		7		10	7		10
Y+R:	4.0		4.0		4.0			4.0	4.0			4.0
Volume Module	e:		·			•						
Base Vol:	136	96	48	20	80	37	72	609	67	27	1014	14
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	96	48	20	80	37	72	609	67	27	1014	14
	8	0	0	0	0	0	0	14	7	0	29	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			48	20	80	37	72	623	74	27	1043	14
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	144	96	48	20	80	37	72	623	74	27	1043	14
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	144	96	48	20	80	37	72	623	74	27	1043	14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	144	96	48	20	80	37	72	623	74	27	1043	14
	1											
Saturation F												
Sat/Lane:	1900	1900	1900	1900	1900	1900		1900	1900		1900	1900
Adjustment:	0.95	1.00	0.85	0.96	0.96	0.96	0.95	0.95	0.85	0.95	0.95	0.95
	1.00		1.00		0.58	0.27		2.00	1.00		1.97	0.03
Final Sat.:			1615		1062	491		3610	1615		3555	48
	1											
Capacity Ana												
Vol/Sat:		0.05	0.03	0.08	0.08	0.08		0.17	0.05	0.01	0.29	0.29
Crit Moves:	****			****			****				****	
Green/Cycle:			0.32		0.14	0.14		0.43	0.57		0.53	0.53
Volume/Cap:			0.09	0.55		0.55		0.40	0.08		0.55	0.55
Delay/Veh:			24.1	43.2		43.2		20.0	9.7		16.1	16.1
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			24.1	43.2		43.2		20.0	9.7		16.1	16.1
LOS by Move:			C	D	D	D	D	В	A	C	В	В
HCM2kAvgQ:	5		1	. 5	5	5	2		1	1	12	12
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing PM



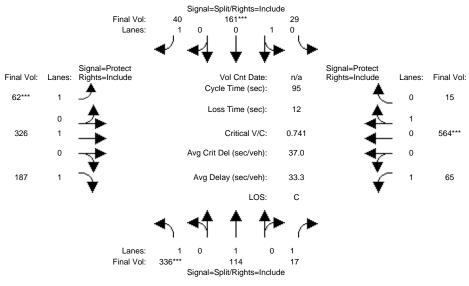
Approach:	No	rth Boi	und	Sou	ath Bo	ound	Ea	ast Bo	und	We	est Bo	und
Movement:		- T ·				- R		- T		_ L ·		- R
Min. Green:	10	10	10	1	10	 10	7		10	7	10	10
Y+R:	4.0	4.0	4.0		4.0			4.0	4.0	4.0		4.0
1 + K •												
Volume Module	1					16 <<	I		I	I		Į
Base Vol:	324	94	47	29	104	167	59	289	259	62	473	16
	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		94	47	29	104	167	59	289	259	62	473	16
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		94	47	29	104	167	59	289	259	62	473	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	327	95	47	29	105	169	60	292	262	63	478	16
Reduct Vol:	0	0	34	0	0	146	0	0	117	0	0	1
Reduced Vol:	327	95	13	29	105	23	60	292	145	63	478	15
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	327	95	13	29	105	23	60	292	145	63	478	15
Saturation Fl	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.92	0.97	0.69	0.96	0.96	0.82	0.95	1.00	0.63	0.92	0.96	0.95
Lanes:	1.00	1.00	1.00	0.22	0.78	1.00	1.00	1.00	1.00	1.00	0.97	0.03
Final Sat.:			1310		1421	1562		1900	1204		1771	56
	1		I									
Capacity Anal												
Vol/Sat:		0.05	0.01		0.07	0.01		0.15	0.12	0.04	0.27	0.27
Crit Moves:	****			****			****				****	
Green/Cycle:			0.28		0.11	0.11		0.32	0.32		0.41	0.41
Volume/Cap:			0.04		0.66	0.13		0.47	0.37		0.66	0.66
Delay/Veh:			24.8	48.6		38.4		26.2	25.2		25.2	25.2
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			24.8	48.6		38.4		26.2	25.2		25.2	25.2
LOS by Move:			C	D	D		D	С	С	D	С	С
HCM2kAvgQ:	8		0	5	5	1	2	-	3	2	12	12
Note: Queue 1	report	ted is	the n	umber	of ca	ars per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM



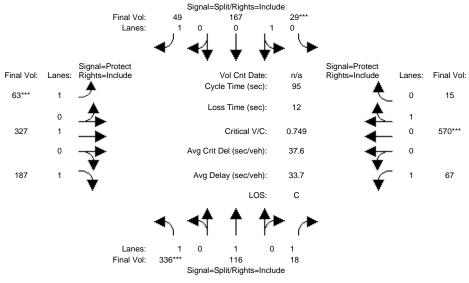
Approach:		rth Bo				ound - R			ound - R		est Bo - T	
Movement:				ј	- 1	- ĸ l	ј					
		10		10				10		7		10
Y+R:		4.0				4.0		4.0			4.0	4.0
Volume Module							'		'	'		'
Base Vol:	324	94	47	29	104	167	59	289	259	62	473	16
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	324	94	47	29	104	167	59	289	259	62	473	16
Added Vol:	0	2	1	0	6	9	1	1	0	2	6	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	324	96	48	29	110	176	60	290	259	64	479	16
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	327	97	48	29	111	178	61	293	262	65	484	16
Reduct Vol:	0	0	34	0	0	146	0	0	117	0	0	1
Reduced Vol:	327	97	14	29	111	32	61	293	145	65	484	15
PCE Adj:	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:						32			145	65		15
	1											
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900	1900		1900
Adjustment:			0.69		0.96	0.82		1.00	0.63	0.92		0.95
		1.00	1.00		0.79	1.00		1.00	1.00	1.00		0.03
Final Sat.:			1310		1439	1562		1900	1204		1774	56
Capacity Ana	_											
Vol/Sat:		0.05	0.01	0.08	0.08	0.02		0.15	0.12	0.04		0.27
Crit Moves:	****				****		****				****	
Green/Cycle:			0.28		0.11	0.11		0.32	0.32		0.41	0.41
Volume/Cap:			0.04		0.67	0.18		0.48	0.37		0.67	0.67
Delay/Veh:			25.0		48.6	38.5		26.2	25.2	35.7		25.5
User DelAdj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			25.0	48.6		38.5		26.2	25.2	35.7		25.5
LOS by Move:			C	D		D	D		C		C	C
HCM2kAvgQ:		2	0	5		1	2		3	2	13	13
Note: Queue	repor	ıea ıs	tne n	umper	or ca	ırs per	Tane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd PM



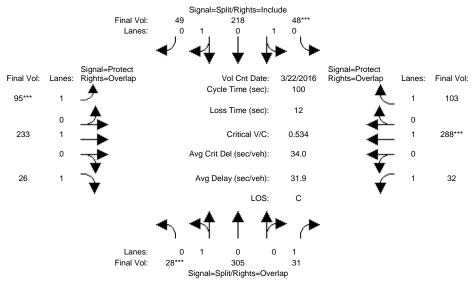
Movement: L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R Nin. Green: 10 10 10 10 10 10 10 10 10 10 10 7 10 10 7 10 10 10 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0	Approach:	No	rth Bo	und	Sou	ıth Bo	ound	Ea	ast Bo	und	We	est Bo	und
Min. Green: 10 10 10 10 10 10 10 10 7 10 7 10 10 7 10 10 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0													
Y+R:													
Volume Module: Base Vol:													
Volume Module: Base Vol: 333 113 50 29 159 184 61 323 301 64 558 16 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Base Vol: 333 113 50 29 159 184 61 323 301 64 558 16 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0				50	29	159	184	61	323	301	64	558	16
Initial Bse: 333 113 50 29 159 184 61 323 301 64 558 16 Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0													
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	_												
Reassigned: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0					0	0		0	0		0	0	0
Initial Fut: 333 113 50 29 159 184 61 323 301 64 558 16 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0					0	0	0	0	0	0	0	0	0
PHF Adj: 0.99 0.99 0.99 0.99 0.99 0.99 0.99 0.9				50	29	159	184			301	64		16
PHF Volume: 336 114 51 29 161 186 62 326 304 65 564 16 Reduct Vol: 0 0 34 0 0 146 0 0 117 0 0 1 Reduced Vol: 336 114 17 29 161 40 62 326 187 65 564 15 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Reduct Vol: 0 0 34 0 0 146 0 0 117 0 0 1 Reduced Vol: 336 114 17 29 161 40 62 326 187 65 564 15 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Reduced Vol: 336 114 17 29 161 40 62 326 187 65 564 15 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	PHF Volume:	336	114	51	29	161	186	62	326	304	65	564	16
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00	Reduct Vol:	0	0	34	0	0	146	0	0	117	0	0	1
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Reduced Vol:	336	114	17	29	161	40	62	326	187	65	564	15
FinalVolume: 336 114 17 29 161 40 62 326 187 65 564 15	PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190					1.00	1.00	1.00	1.00					1.00
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190													
Sat/Lane: 1900 0.96 0.96 0.82 0.95 1.00 0.63 0.92 0.96 0.96 0.96 0.82 0.95 1.00 0.03 0.03 1.00 1.00 1.00 0.03 1.00 1.00 1.00 1.01 1.00													
Adjustment: 0.92 0.97 0.69 0.96 0.96 0.82 0.95 1.00 0.63 0.92 0.96 0.96 Lanes: 1.00 1.00 1.00 0.15 0.85 1.00 1.00 1.00 1.00 1.00 0.97 0.03 Final Sat.: 1745 1837 1310 281 1541 1562 1805 1900 1204 1745 1782 48													
Lanes: 1.00 1.00 1.00 0.15 0.85 1.00 1.00 1.00 1.00 1.00 0.97 0.03 Final Sat.: 1745 1837 1310 281 1541 1562 1805 1900 1204 1745 1782 48													
Final Sat.: 1745 1837 1310 281 1541 1562 1805 1900 1204 1745 1782 48													
Capacity Analysis Module: Vol/Sat: 0.19 0.06 0.01 0.10 0.10 0.03 0.03 0.17 0.16 0.04 0.32 0.32 Crit Moves: **** Green/Cycle: 0.25 0.25 0.25 0.25 0.14 0.14 0.14 0.07 0.34 0.34 0.15 0.41 0.41 Volume/Cap: 0.77 0.25 0.05 0.77 0.77 0.19 0.46 0.50 0.46 0.25 0.77 0.77 Delay/Veh: 40.9 28.7 27.0 53.0 53.0 36.8 44.7 25.6 25.3 36.5 28.7 28.7 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
Vol/Sat: 0.19 0.06 0.01 0.10 0.10 0.03 0.03 0.17 0.16 0.04 0.32 0.32 Crit Moves: ****													
Crit Moves: ****		_			0 10	0 10	0 02	0 03	0 17	0 16	0 04	0 22	0 22
Green/Cycle: 0.25 0.25 0.25 0.14 0.14 0.14 0.07 0.34 0.34 0.15 0.41 0.41 Volume/Cap: 0.77 0.25 0.05 0.77 0.77 0.19 0.46 0.50 0.46 0.25 0.77 0.77 Delay/Veh: 40.9 28.7 27.0 53.0 53.0 36.8 44.7 25.6 25.3 36.5 28.7 28.7 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0			0.06				0.03		0.17	0.10	0.04		0.32
Volume/Cap: 0.77 0.25 0.05 0.77 0.77 0.19 0.46 0.50 0.46 0.25 0.77 0.77 Delay/Veh: 40.9 28.7 27.0 53.0 53.0 36.8 44.7 25.6 25.3 36.5 28.7 28.7 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0			0 25				0 1/		0.34	0.34	0 15		0 41
Delay/Veh: 40.9 28.7 27.0 53.0 53.0 36.8 44.7 25.6 25.3 36.5 28.7 28.7 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	-												
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0													
<u> </u>	_												
- ACTURL/VED: 40.9 28.7 27.0 53.0 53.0 53.0 36.8 44.7 25.6 25.3 36.5 28.7 28.7	_						36.8			25.3			28.7
LOS by Move: D C C D D D C C D C C	3												
HCM2kAvgQ: 9 3 0 7 7 1 2 7 4 2 16 16									_				
Note: Queue reported is the number of cars per lane.				the n	umber	of ca							

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj PM



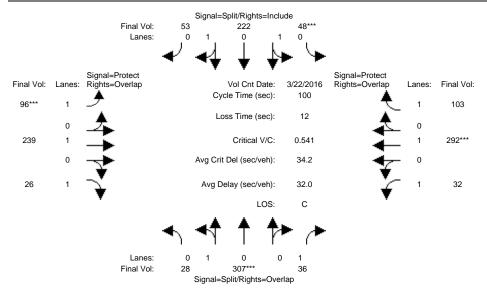
Approach:	No	rth Bo	und	Sou	uth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T				- R					- T	
Min. Green:		10		10				10		7		10
Y+R:		4.0			4.0			4.0			4.0	
Volume Modul												
Base Vol:		113		29	159	184	61		301	64	558	16
Growth Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
Initial Bse:			50	29	159	184	61	323	301	64	558	16
Added Vol:			1	0	6	9	1		0	2	6	0
PasserByVol:			0	0	0	0	0		0	0	0	0
Initial Fut:			51	29		193	62		301	66		16
User Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Adj:			0.99	0.99		0.99		0.99	0.99	0.99		0.99
PHF Volume:			52	29	167	195	63	327	304	67	570	16
	0		34	0		146	0		117	0	0	1
Reduced Vol:			18	29	167	49	63	327	187	67	570	15
PCE Adj:	1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
FinalVolume:						49			187			15
	1											
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900	1900		1900
Adjustment:				0.96		0.82		1.00	0.63	0.92		0.96
Lanes:			1.00	0.15		1.00		1.00	1.00		0.97	0.03
Final Sat.:			1310		1552	1562		1900	1204		1782	47
Capacity Ana				0 11	0 11	0 00	0 02	0 17	0 16	0 04	0 20	0 20
Vol/Sat:	0.19 ****	0.06	0.01	****	0.11	0.03	0.03 ****	0.1/	0.16	0.04	0.32	0.32
Crit Moves:		0 05			0 14	0 14		0 24	0 04	0 1 5		0 41
Green/Cycle:			0.25		0.14	0.14			0.34		0.41	0.41
Volume/Cap:			0.05		0.77	0.23		0.51	0.46		0.77	0.77
Delay/Veh:			27.2		53.4	36.9		25.6	25.3		29.1	29.1
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			27.2		53.4			25.6	25.3	36.6		29.1
LOS by Move:			C			D 1	D		C	D	C 1.6	C 1.6
HCM2kAvgQ:		3	0	8			2		4	2	16	16
Note: Queue	repor	tea is	tne n	umber	oi ca	ırs per	Iane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing PM



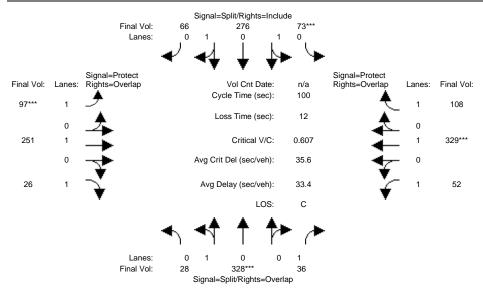
Approach:	No	rth Bo	und	Sou	uth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T ·			- T			- T		_ L ·		- R
Min Croon:	10		10	1	 10	10	 7		10	7	 10	10
Min. Green:		10	4.0						4.0	-		
Y+R:	4.0				4.0	4.0		4.0		4.0		4.0
Volume Module	1					.6 << 5	1					
Base Vol:	28	305	31	48	218	49	95	233	26	32	288	103
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		305	31	48	218	49	95	233	26	32	288	103
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:			0	0	0	0	0	0	0	0	0	0
Initial Fut:			31	48	218	49	95	233	26	32	288	103
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adi:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
	28	305	31	48	218	49	95	233	26	32	288	103
	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:		305	31	48	218	49	95	233	26	32	288	103
PCE Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:		305	31	48	218	49	95		26	32		103
Saturation F	1		I	1		ı	1		'	1		1
Sat/Lane:		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.92	0.92	0.92	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:		0.92	1.00	0.30	1.39	0.31	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:			1615		2421	544		1900	1615		1900	1615
Capacity Anal	lysis	Module	e:			•						
Vol/Sat:	0.18	0.18	0.02	0.09	0.09	0.09	0.05	0.12	0.02	0.02	0.15	0.06
Crit Moves:	****			****			****				****	
Green/Cycle:	0.33	0.33	0.47	0.17	0.17	0.17	0.10	0.24	0.57	0.14	0.28	0.45
Volume/Cap:	0.53	0.53	0.04	0.53	0.53	0.53	0.53	0.50	0.03	0.13	0.53	0.14
Delay/Veh:	28.2	28.2	14.4	38.9	38.9	38.9	46.0	33.5	9.3	38.0	31.3	16.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.2	28.2	14.4	38.9	38.9	38.9	46.0	33.5	9.3	38.0	31.3	16.1
LOS by Move:	С	С	В	D	D	D	D	С	A	D	С	В
HCM2kAvgQ:	9	9	1	4	4	4	4	7	0	1	8	2
Note: Queue	report	ted is	the n	umber	of ca	ars per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM



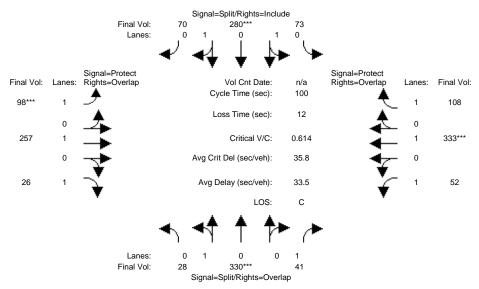
Approach: Movement:		rth Bo				und – R			und – R		est Bo - T	
Movement.												
	10				10			10		•	10	10
Y+R:			4.0		4.0			4.0		4.0	4.0	4.0
Volume Module	: >>	Count	Date:	['] 22 Ma	ar 201	6 << 5	:00-6	:00	'	1		'
Base Vol:	28	305	31	48	218	49	95	233	26	32	288	103
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	305	31	48	218	49	95	233	26	32	288	103
	0	2	5	0	4	4	1	6	0	0	4	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	28	307	36	48	222	53	96	239	26	32	292	103
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	307	36	48	222	53	96	239	26	32	292	103
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			36	48	222	53	96	239	26	32	292	103
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			36		222	53		239	26		292	103
Saturation Fl	Low Mo	odule:										
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.85	0.92		0.92		1.00	0.85		1.00	0.85
		0.92	1.00		1.37	0.33	1.00	1.00	1.00		1.00	1.00
Final Sat.:			1615		2402	574		1900	1615		1900	1615
Capacity Anal	-											
		0.18	0.02		0.09	0.09		0.13	0.02	0.02	0.15	0.06
0110 110 100		****		****			****				****	
Green/Cycle:			0.46		0.17	0.17		0.25	0.57		0.28	0.45
Volume/Cap:			0.05		0.54	0.54		0.51	0.03		0.54	0.14
Delay/Veh:	28.5	28.5	14.7	38.9	38.9	38.9	46.3	33.5	9.3	38.2	31.4	16.0
User DelAdj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	28.5	28.5	14.7	38.9	38.9	38.9	46.3	33.5	9.3	38.2	31.4	16.0
LOS by Move:			В	D	D	D	D	C	A	D	C	В
HCM2kAvgQ:		9	1	5	5	5	4		0	1	8	2
Note: Queue 1	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd PM



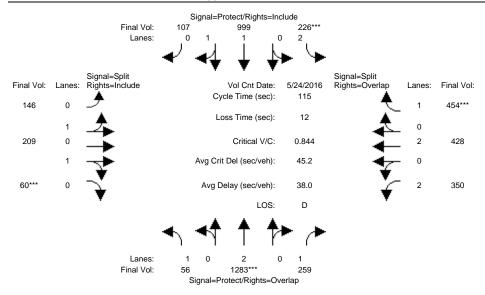
Approach: Movement:		rth Boi				und – R			und – R		est Bo - T	
Min. Green:	10				10			10		•	10	10
Y+R:	4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0	4.0	4.0
Volume Module										•		
Base Vol:	28	328	36	73	276	66	97	251	26	52	329	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	328	36	73	276	66	97	251	26	52	329	108
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	28	328	36	73	276	66	97	251	26	52	329	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	28	328	36	73	276	66	97	251	26	52	329	108
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			36	73	276	66	97	251	26	52	329	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	28	328	36	73	276	66	97	251	26	52	329	108
Saturation Fl	Low Mo	odule:	•			•	•			•		•
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	1.00	0.85	0.92	0.92	0.92	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	0.08	0.92	1.00	0.35	1.33	0.32	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	149	1744	1615	614	2322	555	1805	1900	1615	1805	1900	1615
Capacity Anal	lysis	Module	e:									
Vol/Sat:	0.19	0.19	0.02	0.12	0.12	0.12	0.05	0.13	0.02	0.03	0.17	0.07
Crit Moves:		****		****			****				****	
Green/Cycle:	0.31	0.31	0.44	0.20	0.20	0.20	0.09	0.24	0.55	0.13	0.29	0.48
Volume/Cap:	0.61	0.61	0.05	0.61	0.61	0.61	0.61	0.54	0.03	0.22	0.61	0.14
Delay/Veh:	31.1	31.1	16.1	38.3	38.3	38.3	50.4	34.2	10.1	39.5	32.9	14.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	31.1	31.1	16.1	38.3	38.3	38.3	50.4	34.2	10.1	39.5	32.9	14.5
LOS by Move:	С	С	В	D	D	D	D	С	В	D	С	В
HCM2kAvgQ:	10	10	1	6	6	6	4	7	0	2	9	2
Note: Queue 1	repor	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj PM



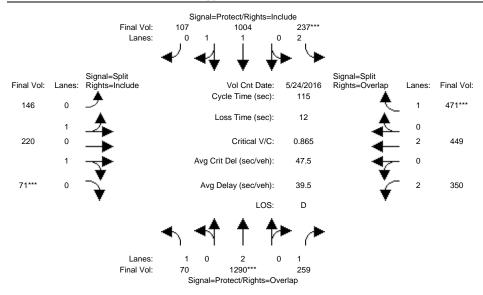
Approach:								ast Bo		We	est Bo	und
Movement:		- T ·						- T		L .		- R
 Min. Green:	10	10	10	1	10		7		10	7		10
Y+R:	4.0		4.0		4.0			4.0	4.0	4.0		4.0
Volume Module			'	'		'	'		'	'		'
Base Vol:	28	328	36	73	276	66	97	251	26	52	329	108
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	28	328	36	73	276	66	97	251	26	52	329	108
Added Vol:	0	2	5	0	4	4	1	6	0	0	4	0
PasserByVol:		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	28	330	41	73	280	70	98	257	26	52	333	108
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	28	330	41	73	280	70	98	257	26	52	333	108
	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			41	73	280	70	98	257	26	52	333	108
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:		330	41		280	70	98		26		333	108
	1											
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.85	0.92		0.92		1.00	0.85		1.00	0.85
	0.08		1.00		1.32	0.33		1.00	1.00		1.00	1.00
Final Sat.:			1615		2309	577		1900	1615		1900	1615
	1											
Capacity Anal				0 10	0 10	0 10	0 05	0 1 4	0 00		0 10	0 0 0
Vol/Sat:		0.19	0.03	0.12	0.12	0.12	0.05	0.14	0.02	0.03	0.18	0.07
0110 110 100	0 01			0 00					0 55	0 10		0 10
Green/Cycle:			0.44	0.20		0.20		0.25	0.55		0.29	0.48
Volume/Cap:			0.06	0.61		0.61		0.55	0.03		0.61	0.14
Delay/Veh:			16.4		38.3	38.3		34.2	10.1		33.0	14.4
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			16.4	38.3		38.3		34.2	10.1		33.0	14.4
LOS by Move:			В	D	D	D	D	С	В	D	C	В
HCM2kAvgQ:	10		. 1	. 6	6	6	4	-	0	2	10	2
Note: Queue	repor	ted is	the n	umber	oi ca	rs per	ıane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing PM



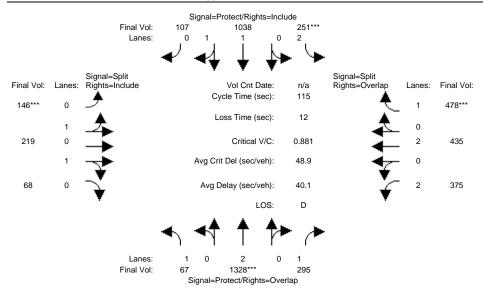
Approach: North Bound		El Camino Real						Whipple Av						
Min. Green: 7 10 10 7 10 10 10 10 10 10 10 10 10 10 10 10 10														
Min. Green: 7 10 10 7 10 10 10 10 10 10 10 10 10 10 10 17 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0														
Y+R:														
Volume Module: >> Count Date: 24 May 2016 << Base Vol: 56 1283 259 226 999 107 146 209 60 350 428 454 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0														
Base Vol: 56 1283 259 226 999 107 146 209 60 350 428 454 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0														
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0				Date:										
Initial Bse: 56 1283							107	146	209	60	350	428	454	
Added Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Initial Bse:	56	1283	259	226	999	107	146	209	60	350	428	454	
Initial Fut: 56 1283 259 226 999 107 146 209 60 350 428 454 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0					0	0	0	0	0		0		0	
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0					0	0	0	0	0	0	0	0	0	
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Initial Fut:	56	1283	259	226	999	107	146	209	60	350	428	454	
PHF Volume: 56 1283 259 226 999 107 146 209 60 350 428 454 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Reducd Vol: 56 1283 259 226 999 107 146 209 60 350 428 454 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Reduced Vol: 56 1283 259 226 999 107 146 209 60 350 428 454 PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	PHF Volume:	56	1283	259	226	999	107	146	209	60	350	428	454	
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0	
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Reduced Vol:	56	1283	259	226	999	107	146	209	60	350	428	454	
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0					1.00	1.00	1.00	1.00		1.00			1.00	
FinalVolume: 56 1283 259 226 999 107 146 209 60 350 428 454														
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190	_													
Saturation Flow Module: Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190														
Adjustment: 0.95 0.95 0.85 0.92 0.94 0.94 0.91 0.91 0.91 0.92 0.95 0.85 Lanes: 1.00 2.00 1.00 2.00 1.81 0.19 0.70 1.01 0.29 2.00 2.00 1.00 Final Sat.: 1805 3610 1615 3502 3212 344 1221 1748 502 3502 3610 1615				1	1		ı	1		1	1		1	
Lanes: 1.00 2.00 1.00 2.00 1.81 0.19 0.70 1.01 0.29 2.00 2.00 1.00 Final Sat.: 1805 3610 1615 3502 3212 344 1221 1748 502 3502 3610 1615	Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Final Sat.: 1805 3610 1615 3502 3212 344 1221 1748 502 3502 3610 1615	Adjustment:	0.95	0.95	0.85	0.92	0.94	0.94	0.91	0.91	0.91	0.92	0.95	0.85	
Final Sat.: 1805 3610 1615 3502 3212 344 1221 1748 502 3502 3610 1615	Lanes:	1.00	2.00	1.00	2.00	1.81	0.19	0.70	1.01	0.29	2.00	2.00	1.00	
Capacity Analysis Module: Vol/Sat: 0.03 0.36 0.16 0.06 0.31 0.31 0.12 0.12 0.12 0.10 0.12 0.28 Crit Moves: **** **** **** Green/Cycle: 0.08 0.42 0.68 0.08 0.42 0.42 0.14 0.14 0.14 0.26 0.26 0.33 Volume/Cap: 0.38 0.84 0.24 0.84 0.75 0.75 0.84 0.84 0.84 0.39 0.46 0.84 Delay/Veh: 51.7 34.4 7.2 73.5 30.6 30.6 60.7 60.7 60.7 35.6 36.4 47.3 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Final Sat.:	1805	3610	1615	3502	3212	344	1221	1748	502			1615	
Vol/Sat: 0.03 0.36 0.16 0.06 0.31 0.12 0.12 0.12 0.10 0.12 0.28 Crit Moves: **** <td rowspan<="" td=""><td></td><td> </td><td></td><td> </td><td> </td><td></td><td> </td><td> </td><td></td><td> </td><td> </td><td></td><td> </td></td>	<td></td> <td> </td> <td></td> <td> </td>													
Crit Moves: **** **** **** **** **** **** **** *	Capacity Anal	lysis	Modul	e:				•						
Green/Cycle: 0.08 0.42 0.68 0.08 0.42 0.42 0.14 0.14 0.14 0.26 0.26 0.33 Volume/Cap: 0.38 0.84 0.24 0.84 0.75 0.75 0.84 0.84 0.84 0.39 0.46 0.84 Delay/Veh: 51.7 34.4 7.2 73.5 30.6 30.6 60.7 60.7 60.7 35.6 36.4 47.3 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Vol/Sat:	0.03	0.36	0.16	0.06	0.31	0.31	0.12	0.12	0.12	0.10	0.12	0.28	
Volume/Cap: 0.38 0.84 0.24 0.84 0.75 0.75 0.84 0.84 0.84 0.39 0.46 0.84 Delay/Veh: 51.7 34.4 7.2 73.5 30.6 30.6 60.7 60.7 60.7 35.6 36.4 47.3 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Crit Moves:		****		***					***			****	
Delay/Veh: 51.7 34.4 7.2 73.5 30.6 30.6 60.7 60.7 60.7 35.6 36.4 47.3 User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Green/Cycle:	0.08	0.42	0.68	0.08	0.42	0.42	0.14	0.14	0.14	0.26	0.26	0.33	
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	Volume/Cap:	0.38	0.84	0.24	0.84	0.75	0.75	0.84	0.84	0.84	0.39	0.46	0.84	
AdjDel/Veh: 51.7 34.4 7.2 73.5 30.6 30.6 60.7 60.7 60.7 35.6 36.4 47.3 LOS by Move: D C A E C C E E D D D	_			7.2	73.5	30.6	30.6			60.7	35.6	36.4	47.3	
AdjDel/Veh: 51.7 34.4 7.2 73.5 30.6 30.6 60.7 60.7 60.7 35.6 36.4 47.3 LOS by Move: D C A E C C E E D D D	- ·													
LOS by Move: D C A E C C E E E D D D														
HCM2kAvgQ: 2 22 3 6 18 18 10 10 10 5 6 16														
	HCM2kAvq0:	2				_	_							
Note: Queue reported is the number of cars per lane.										-	_	-	*	

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM



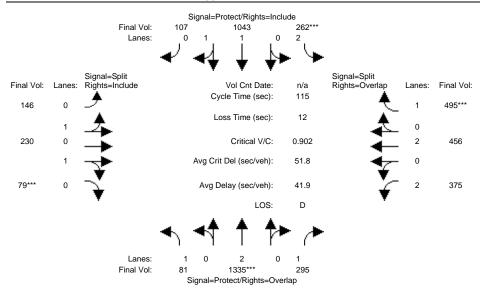
Street Name:		E	l Cami	no Rea	al		Whipple Av					
Approach:	No:	rth Bo	und	Soi	ıth Bo	und	Εá	ast Bo	und	We	est Bo	und
Movement:	L ·	– T	– R	L -	- T	- R	L ·	- T	- R	ь.	- T	- R
Min. Green:		10		7					10			
Y+R:		4.0		4.0				4.0		4.0		
Volume Module												
		1283	259	226	999	107	146	209	60	350	428	454
Growth Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
			259	226	999	107	146	209	60	350	428	454
Initial Bse: Added Vol:	14	7	0	11	5	0	0	11	11	0	21	17
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			259	237	1004	107	146	220	71	350		471
User Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:			259	237	1004	107	146	220	71	350	449	471
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	70	1290	259	237	1004	107	146	220	71	350	449	471
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	70	1290	259	237	1004	107	146	220	71	350	449	471
Saturation Fl	low M	odule:		•		•	•			•		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.94	0.94	0.91	0.91	0.91	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	2.00	1.81	0.19	0.67	1.01	0.32	2.00	2.00	1.00
Final Sat.:	1805	3610	1615	3502	3217	343	1158	1745	563	3502	3610	1615
Capacity Anal	lysis	Modul	e:									
Vol/Sat:	0.04	0.36	0.16	0.07	0.31	0.31	0.13	0.13	0.13	0.10	0.12	0.29
Crit Moves:		****		****					****			****
Green/Cycle:	0.08	0.41	0.67	0.08	0.41	0.41	0.15	0.15	0.15	0.26	0.26	0.34
Volume/Cap:	0.48	0.87	0.24	0.87	0.76	0.76	0.87	0.87	0.87	0.39	0.48	0.87
Delay/Veh:	53.2	36.4	7.5	76.2	31.4	31.4	62.5	62.5	62.5	35.4	36.5	49.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	53.2	36.4	7.5	76.2	31.4	31.4	62.5	62.5	62.5	35.4	36.5	49.3
LOS by Move:	D		A	E		C	E	E	E	D	D	D
HCM2kAvgQ:	2	23	3	7	19	19	11	11	11	5	7	16
Note: Queue 1	repor	ted is	the n	umber	of ca	ırs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd PM



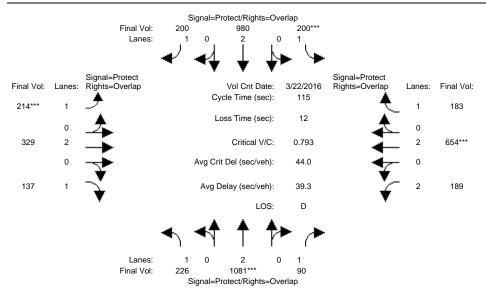
Street Name:		E	l Cami	no Rea	al		Whipple Av East Bound West Bound					
Movement:	L ·	- T	– R	Г.	- T	- R	L -	- T	- R	L -	- T	- R
		10							10			
Y+R:		4.0			4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Modul												
		1328	205	251	1020	107	146	219	68	375	435	478
								1.00	1.00	1.00		1.00
Growth Adj:						1.00		219			435	
Initial Bse: Added Vol:	6 /	1328	295		1038	107	146		68	375		478
			0 0	0	0	0	0	0	0	0	0	0 0
Reassigned:				0	0		0					
Initial Fut:			295		1038		146		68	375		478
User Adj:			1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Adj:			1.00		1.00	1.00	1.00		1.00	1.00		1.00
PHF Volume:	67	1328	295		1038	107	146	219	68	375	435	478
Reduct Vol:	0	0		0	0	0	0		0	0		0
Reduced Vol:	67	1328	295	251	1038	107	146	219	68	375	435	478
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	67	1328	295	251	1038	107	146	219	68	375	435	478
Saturation F	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.94	0.94	0.91	0.91	0.91	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	2.00	1.81	0.19	0.67	1.02	0.31	2.00	2.00	1.00
Final Sat.:	1805	3610	1615			333	1168	1752	544	3502	3610	1615
Capacity Ana												
Vol/Sat:	0.04	0.37	0.18	0.07	0.32	0.32	0.13	0.13	0.13	0.11	0.12	0.30
Crit Moves:		***		***			****					****
Green/Cycle:			0.67	0.08	0.42	0.42	0.14	0.14	0.14	0.25	0.25	0.34
Volume/Cap:	0.47	0.88	0.27	0.88	0.77	0.77	0.88	0.88	0.88	0.42	0.47	0.88
Delay/Veh:			7.7	77.8		31.0		65.1	65.1		36.7	51.4
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:						31.0		65.1	65.1		36.7	51.4
LOS by Move:			A				E			D		D
HCM2kAvgQ:	2	24	4	7	_	19	11		11	5		17
Note: Queue :										5	,	± /
1,000 Queue	- CPOT	ccu ib	C11C 11	CI	J1 C6	TD PCT	_uiic	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj PM



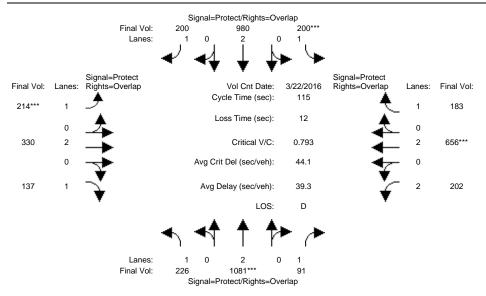
Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R L - T - R Min. Green: 7 10 10 7 10 10 10 10 10 10 10 10 10 10 10 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Min. Green: 7 10 10 7 10 10 10 10 10 10 10 10 10 10 10 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Volume Module:
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Initial Bse: 67 1328 295 251 1038 107 146 219 68 375 435 478
Added Vol: 14 7 0 11 5 0 0 11 11 0 21 17
PasserByVol: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 81 1335 295 262 1043 107 146 230 79 375 456 495
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Volume: 81 1335 295 262 1043 107 146 230 79 375 456 495 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
FinalVolume: 81 1335 295 262 1043 107 146 230 79 375 456 495
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190
Adjustment: 0.95 0.95 0.85 0.92 0.94 0.94 0.91 0.91 0.92 0.95 0.85
Lanes: 1.00 2.00 1.00 2.00 1.81 0.19 0.64 1.01 0.35 2.00 2.00 1.00
Final Sat.: 1805 3610 1615 3502 3228 331 1110 1749 601 3502 3610 1615
Capacity Analysis Module:
Vol/Sat: 0.04 0.37 0.18 0.07 0.32 0.32 0.13 0.13 0.13 0.11 0.13 0.31
Crit Moves: **** **** ****
Green/Cycle: 0.08 0.41 0.67 0.08 0.41 0.41 0.15 0.15 0.15 0.26 0.26 0.34
Volume/Cap: 0.57 0.90 0.27 0.90 0.78 0.78 0.90 0.90 0.90 0.42 0.49 0.90
Delay/Veh: 56.8 39.7 7.9 81.3 31.8 31.8 67.6 67.6 67.6 35.9 36.8 54.2
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
AdjDel/Veh: 56.8 39.7 7.9 81.3 31.8 31.8 67.6 67.6 67.6 35.9 36.8 54.2
LOS by Move: E D A F C C E E E D D D
HCM2kAvgQ: 3 25 4 8 20 20 12 12 12 5 7 18
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing PM



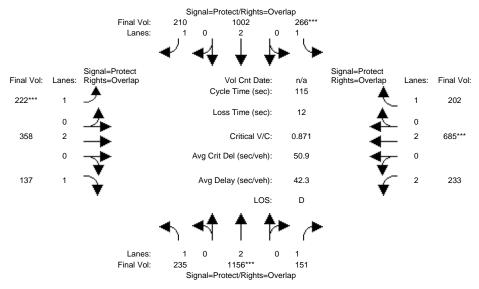
Street Name:		E	l Cami	no Rea	al		Jefferson Ave					
Approach:	No	rth Boi	und	Sou	ıth Bo	und	Εá	ast Bo	und	We	est Bo	und
movement.	ъ.	- I ·	- K	ь -	- I	- R	ь -	- I	- K	ь -	- I	- R
Min. Green:	7	10	10	. 7	10	10	. 7	10	10	. 7	10	10
Y+R:						4.0					4.0	
Volume Module	e: >>	Count	Date:	22 Ma	ar 201	6 << 4	:45-5	:45				
Base Vol:	226	1081	90	200	980	200	214	329	137	189	654	183
Growth Adj:	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00
Initial Bse:							214			189	654	183
Added Vol:			0				0		0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	226	1081	90	200	980	200	214	329	137	189	654	183
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:			90	200	980	200	214	329	137	189	654	183
Reduct Vol:	0	0		0	0	0	0	0	0	0		0
Reduced Vol:	226	1081	90	200	980	200	214	329	137	189	654	183
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	226	1081	90	200	980	200	214	329	137	189	654	183
Saturation F	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:			0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.92	0.95	0.85
Lanes:				1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:						1615			1615		3610	
Capacity Ana	lysis	Module	e:									
Vol/Sat:	0.13	0.30	0.06	0.11	0.27	0.12	0.12	0.09	0.08	0.05	0.18	0.11
Crit Moves:		***		****			****				****	
Green/Cycle:	0.16	0.38	0.53	0.14	0.35	0.50	0.15	0.23	0.39	0.15	0.23	0.37
Volume/Cap:	0.77	0.79	0.11	0.79	0.77	0.25	0.79	0.40	0.22	0.36	0.79	0.31
Delay/Veh:	57.4	35.0	13.6	63.5	35.8	16.3	61.9	38.2	23.5	44.2	47.1	26.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.4	35.0	13.6	63.5	35.8	16.3	61.9	38.2	23.5	44.2	47.1	26.2
LOS by Move:	E	D	В	E	D	В	E	D	С	D	D	C
HCM2kAvgQ:		19	B 2	7	16	4			3			4
Note: Queue	report					rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM



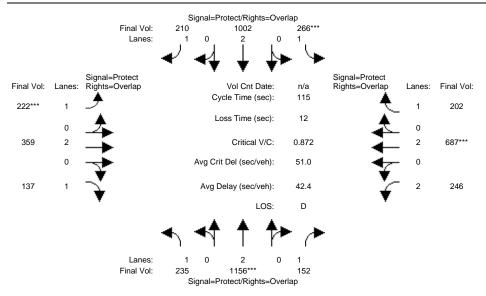
Street Name:		E	l Cami	no Rea	al		Jefferson Ave					
Approach:						und	Εá	ast Bo	und	We	est Bo	und
Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L ·	- T	- R
Min. Green:	. 7	10	10	. 7	10	10	. 7	10	10	. 7	10	10
Y+R:		4.0				4.0			4.0			
Volume Module	 : >>	Count	 Date:	22 Ma	 ar 201	 6 << 4	:45-5	 : 45				
Base Vol:					980				137	189	654	183
Growth Adj:				1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Initial Bse:				200	980	200	214	329	137	189	654	183
Added Vol:	0	0	1	0	0	0	0	1	0	13	2	0
Reassigned:					0		0			0		0
Initial Fut:				200	980		214		137	202	656	183
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	226			200	980	200	214	330	137	202	656	183
PHF Volume: Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	226	1081	91	200	980	200	214	330	137	202	656	183
PCE Adj:	1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	226	1081	91		980	200	214	330	137	202	656	183
Saturation Fl	Low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1805	3610	1615	1805	3610	1615	1805	3610	1615	3502	3610	1615
Capacity Anal	lysis	Modul	e:	•		•	•			•		
Vol/Sat:	0.13	0.30	0.06	0.11	0.27	0.12	0.12	0.09	0.08	0.06	0.18	0.11
Crit Moves:		****		****			****				****	
Green/Cycle:	0.16	0.38	0.53	0.14	0.35	0.50	0.15	0.23	0.39	0.15	0.23	0.37
Volume/Cap:	0.77	0.79	0.11	0.79	0.77	0.25	0.79	0.40	0.22	0.38	0.79	0.31
Delay/Veh:	57.5	35.1	13.6	63.6	35.8	16.3	62.0	38.1	23.5	44.4	47.1	26.1
User DelAdj:			1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.5	35.1	13.6	63.6	35.8	16.3	62.0	38.1	23.5		47.1	26.1
LOS by Move:	E	D	В	E	D	В	E	D	С	D	D	C
HCM2kAvgQ:	9	19	2	7	17	4	9	5	3	3		4
Note: Queue 1	repor	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd PM



Street Name: Approach:		E: rth Boi		no Rea Sou				Jefferson Ave East Bound West Bound				und
Movement:	L ·	- T ·	- R	L -	- T	- R	L -	- T	- R		- Т	
Min. Green:	7	10	10	7	10	10	7	10	10	7	10	10
Y+R:	4.0		4.0		4.0	4.0		4.0	4.0	4.0		4.0
Volume Module			ļ	I		1	I		ı	ļ		Į.
Base Vol:	235	1156	151	266	1002	210	222	358	137	233	685	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	235	1156	151	266	1002	210	222	358	137	233	685	202
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	235	1156	151	266	1002	210	222	358	137	233	685	202
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	235	1156	151	266	1002	210	222	358	137	233	685	202
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	235	1156	151	266	1002	210	222	358	137	233	685	202
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	235	1156	151	266	1002	210	222	358	137	233	685	202
Saturation F	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:	1805	3610	1615	1805	3610	1615	1805	3610	1615	3502	3610	1615
Capacity Ana	lysis	Module	e:									
Vol/Sat:	0.13	0.32	0.09	0.15	0.28	0.13	0.12	0.10	0.08	0.07	0.19	0.13
Crit Moves:		****		****			****				****	
Green/Cycle:	0.17	0.37	0.51	0.17	0.37	0.51	0.14	0.21	0.39	0.14	0.22	0.39
Volume/Cap:	0.76	0.87	0.18	0.87	0.76	0.26	0.87	0.46	0.22	0.46	0.87	0.32
Delay/Veh:	55.9	40.4	15.2	69.3	34.7	16.3	74.5	39.8	23.9	45.8	53.8	25.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.9	40.4	15.2	69.3	34.7	16.3	74.5	39.8	23.9	45.8	53.8	25.0
LOS by Move:	E	D	В	E	С	В	E	D	C	D	D	С
HCM2kAvgQ:	10	23	3	10	17	4	11	6	3	4	13	5
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

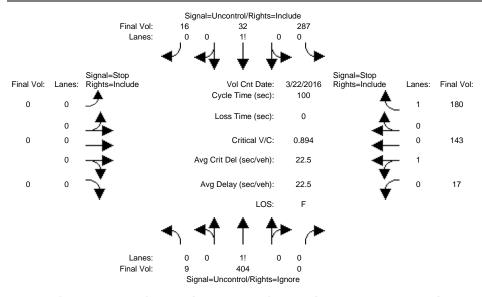
Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj PM



	El Camino Real North Bound South Bound						Jefferson Ave					
		rth Bo									est Bo	
Movement:												
Min. Green:		10			10		•				10	
Y+R:		4.0			4.0			4.0				4.0
Volume Module												
Base Vol:	235	1156	151	266	1002	210	222	358	137	233	685	202
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	235	1156	151	266	1002	210	222	358	137	233	685	202
Added Vol:	0	0	1	0	0	0	0		0	13	2	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			152	266	1002	210	222	359	137	246	687	202
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	235	1156	152	266	1002	210	222	359	137	246	687	202
	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:	235	1156	152	266	1002	210	222		137	246	687	202
PCE Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	235	1156	152	266	1002	210	222	359	137	246	687	202
Saturation F			'	'		'	'		'	1		'
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:				0.95	0.95	0.85	0.95	0.95	0.85	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00
Final Sat.:		3610	1615	1805	3610	1615		3610	1615		3610	1615
Capacity Ana				'		'	'		'	'		'
Vol/Sat:			0.09	0.15	0.28	0.13	0.12	0.10	0.08	0.07	0.19	0.13
Crit Moves:		****		***			***				****	
Green/Cycle:	0.17	0.37	0.52	0.17	0.37	0.51	0.14	0.21	0.38	0.15	0.22	0.39
Volume/Cap:	0.76	0.87	0.18	0.87	0.76	0.26	0.87	0.47	0.22	0.47	0.87	0.32
Delay/Veh:	55.9	40.5	15.0	69.4	34.7	16.3	74.6	40.3	24.2	45.5	53.9	25.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	55.9	40.5	15.0	69.4	34.7	16.3	74.6	40.3	24.2	45.5	53.9	25.0
LOS by Move:						В	E		С	D	D	С
HCM2kAvgQ:		23	3	10	17	4	11	6	3	4	13	5
Note: Queue		ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing PM

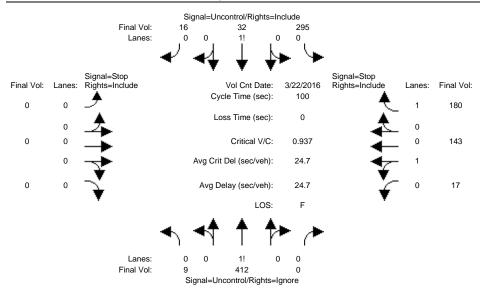
Intersection #16: Main & WB Woodside Ramps



Approach:	No	rth Bo	ound	South Bound						We	est Bo	ound
Movement:	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R
Volume Module	e: >>	Count	Date:	22 Ma	ar 201	l6 <<						
Base Vol:	8	372	240	264	29	15	0	0	0	16	132	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	372	240	264	29	15	0	0	0	16	132	166
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	372	240	264	29	15	0	0	0	16	132	166
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.00	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	9	404	0	287	32	16	0	0	0	17	143	180
Reduct Vol:			0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	404	0	287	32	16	0	0	0	17	143	180
Critical Gap	Modu.	le:										
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Mod	ule:											
Cnflict Vol:	48	xxxx	xxxxx	404	xxxx	xxxxx	XXXX	xxxx	xxxxx	1035	1043	404
Potent Cap.:	1559	xxxx	XXXXX	1154	XXXX	xxxxx	XXXX	xxxx	XXXXX	257	229	646
Move Cap.:	1559	xxxx	XXXXX	1154	XXXX	xxxxx	XXXX	xxxx	XXXXX	197	160	646
Volume/Cap:	0.01	xxxx	XXXX	0.25	XXXX	XXXX	XXXX	xxxx	XXXX	0.09	0.89	0.28
Level Of Serv	vice 1	Module	: :									
2Way95thQ:	0.0	xxxx	XXXXX	1.0	XXXX	xxxxx	XXXX	xxxx	XXXXX	XXXX	xxxx	1.1
Control Del:				9.1				xxxx	XXXXX	xxxxx	xxxx	12.7
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	В
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	164	XXXX	XXXXX
SharedQueue:	xxxxx	xxxx	XXXXX	xxxxx	XXXX	xxxxx	xxxxx	xxxx	XXXXX	7.6	xxxx	XXXXX
Shrd ConDel:	xxxxx	xxxx	XXXXX	xxxxx	XXXX	xxxxx	xxxxx	xxxx	XXXXX	121.6	xxxx	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	F	*	*
ApproachDel:	X	xxxxx		X			X				64.0	
ApproachLOS:		*			*			*			F	
Note: Queue	repor	ted is	s the r	number	of ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing + Proj PM

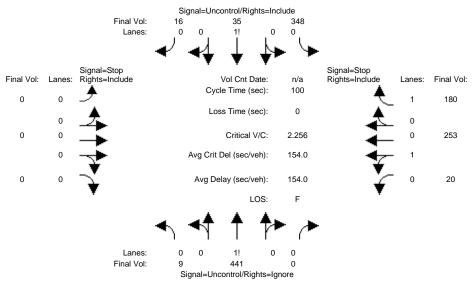
Intersection #16: Main & WB Woodside Ramps



Approach:	No	rth Bo	ound	South Bound						We	est Bo	ound
Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L ·	- T	- R
Volume Module	e: >>	Count	Date:	22 Ma	ar 201	l6 <<						
Base Vol:	8	372	240	264	29	15	0	0	0	16	132	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	372	240	264	29	15	0	0	0	16	132	166
Added Vol:	0	7	0	7	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	379	240	271	29	15	0	0	0	16	132	166
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.00	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
PHF Volume:	9	412	0	295	32	16	0	0	0	17	143	180
Reduct Vol:			0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	412	0	295	32	16	0	0	0	17	143	180
Critical Gap	Modu.	le:										
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Mod	ule:											
Cnflict Vol:	48	xxxx	xxxxx	412	xxxx	xxxxx	XXXX	xxxx	xxxxx	1058	1066	412
Potent Cap.:	1559	xxxx	XXXXX	1147	XXXX	xxxxx	XXXX	xxxx	XXXXX	249	222	640
Move Cap.:	1559	xxxx	XXXXX	1147	XXXX	xxxxx	XXXX	xxxx	XXXXX	189	153	640
Volume/Cap:	0.01	xxxx	XXXX	0.26	XXXX	XXXX	XXXX	xxxx	XXXX	0.09	0.94	0.28
Level Of Serv	vice D	Module	<u>:</u>									
2Way95thQ:	0.0	xxxx	xxxxx	1.0	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	XXXX	1.2
Control Del:				9.2				xxxx	XXXXX	xxxxx	xxxx	12.8
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	В
Movement:	LT ·	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	156	XXXX	XXXXX
SharedQueue:	xxxxx	xxxx	XXXXX	xxxxx	XXXX	xxxxx	xxxxx	xxxx	XXXXX	8.1	xxxx	XXXXX
Shrd ConDel:	xxxxx	xxxx	XXXXX	xxxxx	XXXX	xxxxx	xxxxx	xxxx	XXXXX	138.1	xxxx	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	F	*	*
ApproachDel:	X	xxxxx		XX			X	xxxxx			71.9	
ApproachLOS:		*			*			*			F	
Note: Queue	report	ted is	s the r	number	of ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Bkgd PM

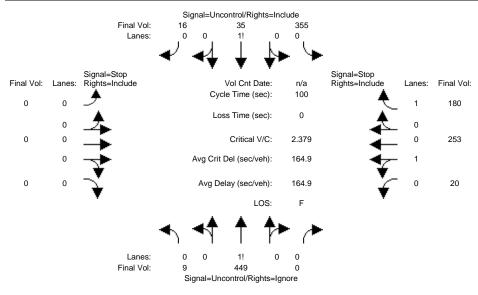
Intersection #16: Main & WB Woodside Ramps



Approach:	No	rth Bo	ound	South Bound						We	est Bo	ound
Movement:											- T	- R
Volume Module	e:											
Base Vol:	8	406	248	320	32	15	0	0	0	18	233	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	406	248	320	32	15	0	0	0	18	233	166
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	406	248	320	32	15	0	0	0	18	233	166
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.00	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
	9	441	0	348	35	16	0	0	0	20	253	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	441	0	348	35	16	0	0	0	20	253	180
Critical Gap	Modu.	le:										
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Modu	ıle:											
Cnflict Vol:	51	xxxx	xxxxx	441	xxxx	xxxxx	XXXX	xxxx	xxxxx	1197	1205	441
Potent Cap.:	1555	xxxx	xxxxx	1119	xxxx	xxxxx	XXXX	xxxx	xxxxx	205	184	616
Move Cap.:	1555	xxxx	xxxxx	1119	xxxx	xxxxx	XXXX	xxxx	xxxxx	143	112	616
Volume/Cap:	0.01	xxxx	XXXX	0.31	xxxx	XXXX	XXXX	xxxx	XXXX	0.14	2.26	0.29
Level Of Serv	vice D	Module	≘:									·
2Way95thQ:	0.0	xxxx	xxxxx	1.3	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	1.2
Control Del:	7.3	xxxx	xxxxx	9.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	13.2
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	В
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT -	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	114	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	24.1	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	713.7	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	F	*	*
ApproachDel:	x	xxxxx		x	xxxxx		x	xxxx		4	134.8	
ApproachLOS:		*			*			*			F	
Note: Queue	report	ted is	s the r	number	of ca	ars pei	r lane					

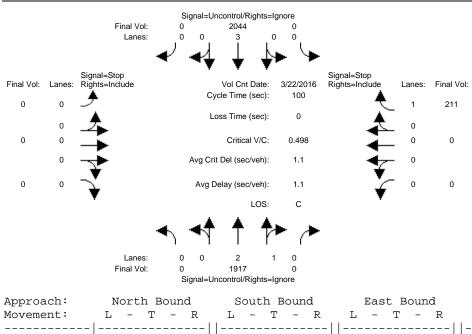
Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Bkgd + Proj PM

Intersection #16: Main & WB Woodside Ramps



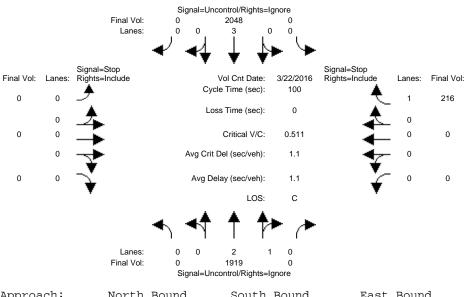
Approach:	No	rth Bo	ound	Sou	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:											- T	- R
Volume Module	e:											
Base Vol:	8	406	248	320	32	15	0	0	0	18	233	166
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	406	248	320	32	15	0	0	0	18	233	166
Added Vol:	0	7	0	7	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	413	248	327	32	15	0	0	0	18	233	166
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.00	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
	9	449	0	355	35	16	0	0	0	20	253	180
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	449	0	355	35	16	0	0	0	20	253	180
Critical Gap	Modu.	le:										
Critical Gp:	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Modu	ule:											
Cnflict Vol:	51	xxxx	xxxxx	449	xxxx	xxxxx	XXXX	xxxx	xxxxx	1220	1228	449
Potent Cap.:	1555	xxxx	xxxxx	1111	xxxx	xxxxx	XXXX	xxxx	xxxxx	199	178	610
Move Cap.:	1555	xxxx	xxxxx	1111	xxxx	xxxxx	XXXX	xxxx	xxxxx	137	106	610
Volume/Cap:	0.01	xxxx	XXXX	0.32	xxxx	XXXX	XXXX	xxxx	XXXX	0.14	2.38	0.30
Level Of Serv	vice D	Module	≘:									
2Way95thQ:	0.0	xxxx	xxxxx	1.4	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	1.2
Control Del:	7.3	xxxx	xxxxx	9.8	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	13.4
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	В
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT -	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	108	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	24.7	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	774.6	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	F	*	*
ApproachDel:	x	xxxxx		X	xxxxx		x	xxxx		4	471.5	
ApproachLOS:		*			*			*			F	
Note: Queue	report	ted is	s the r	number	of ca	ars per	r lane					

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing PM



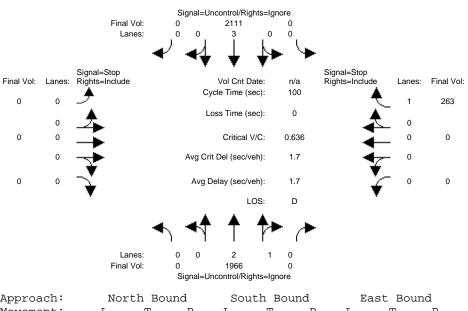
Approach:	No	rth Bo	ound	Sou	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:											- T	- R
Volume Module	e: >>	Count	Date:	22 Ma	ar 201	l6 <<						
Base Vol:	0	1917	352	0	2044	0	0	0	0	0	0	211
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1917	352	0	2044	0	0	0	0	0	0	211
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1917	352	0	2044	0	0	0	0	0	0	211
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
	0	1917	0	0	2044	0	0	0	0	0	0	211
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:			0		2044	0	-	0	0	0	0	211
Critical Gap	Modu:	le:										
Critical Gp:	xxxxx	XXXX	XXXXX	xxxxx	XXXX	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	XXXX	6.9
FollowUpTim:	xxxxx	XXXX	XXXXX	xxxxx	XXXX	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	XXXX	3.3
Capacity Modu	ıle:											
Cnflict Vol:	xxxx	XXXX	XXXXX	XXXX	XXXX	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	639
Potent Cap.:	xxxx	XXXX	XXXXX	XXXX	XXXX	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	424
Move Cap.:	xxxx	XXXX	XXXXX	XXXX	XXXX	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	424
Volume/Cap:	xxxx	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	XXXX	0.50
Level Of Serv	vice D	Module	: :									
2Way95thQ:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	XXXX	2.7
Control Del:				xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	21.6
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	C
Movement:	LT ·	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	XXXX	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	xxxxx	XXXX	XXXX	XXXXX
SharedQueue:	xxxxx	XXXX	xxxxx	xxxxx	xxxx	xxxxx	XXXXX	xxxx	XXXXX	xxxxx	xxxx	XXXXX
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	X	xxxxx		XX	xxxxx		X	xxxxx			21.6	
ApproachLOS:		*			*			*			С	
Note: Queue	report	ted is	s the r	number	of ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing + Proj PM



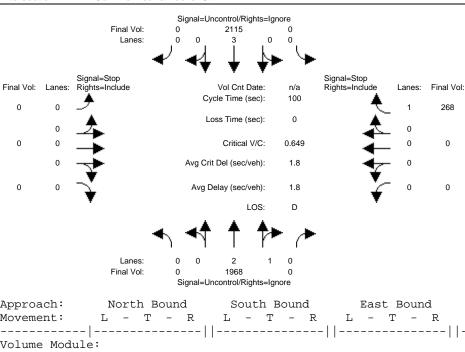
Approach:	No	rth Bo	ound	Sou	ath Bo	ound	Εá	ast Bo	ound	We	est Bo	ound
Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L ·	- T	- R
Volume Module	e: >>	Count	Date:	22 Ma	ar 201	l6 <<						
Base Vol:	0	1917	352	0	2044	0	0	0	0	0	0	211
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1917	352	0	2044	0	0	0	0	0	0	211
Added Vol:	0	2	0	0	4	0	0	0	0	0	0	5
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1919	352	0	2048	0	0	0	0	0	0	216
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1919	0	0	2048	0	0	0	0	0	0	216
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1919	0	0	2048	0	0	0	0	0	0	216
Critical Gap	Modu.	le:										
Critical Gp:2	xxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	XXXX	6.9
FollowUpTim:3	xxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Modu	ıle:											
Cnflict Vol:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	640
Potent Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	423
Move Cap.:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	XXXX	423
Volume/Cap:	xxxx	xxxx	XXXX	XXXX	XXXX	XXXX	XXXX	xxxx	XXXX	XXXX	XXXX	0.51
Level Of Serv	ice I	Module	: :									
2Way95thQ:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	2.8
Control Del:x								xxxx	xxxxx	xxxxx	XXXX	22.1
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	C
Movement:	LT ·	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	XXXX	XXXXX
SharedQueue:	XXXXX	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	XXXX	XXXXX
Shrd ConDel:	XXXXX	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	XXXX	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	X	xxxxx		XX	xxxxx		X	xxxxx			22.1	
ApproachLOS:		*			*			*			C	
Note: Queue r	report	ted is	s the r	number	of ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Bkgd PM



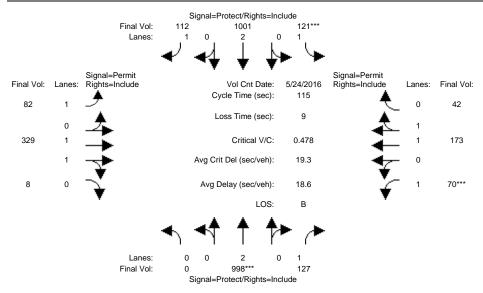
Approach:	No	rth Bo	ound	Sou	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R
Volume Module												
Base Vol:		1966	352		2111	0	0	0	0	0	0	263
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:	0	1966	352		2111	0	0	0	0	0	0	263
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1966	352	0	2111	0	0	0	0	0	0	263
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1966	0	0	2111	0	0	0	0	0	0	263
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1966	0	0	2111	0	0	0	0	0	0	263
Critical Gap	Modu.	le:										
Critical Gp:												6.9
FollowUpTim:												3.3
Capacity Mod	ule:											
Cnflict Vol:	XXXX	XXXX	XXXXX	XXXX	xxxx	XXXXX	XXXX	xxxx	xxxxx	XXXX	xxxx	655
Potent Cap.:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	413
Move Cap.:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	413
Volume/Cap:	xxxx	xxxx	XXXX	XXXX	XXXX	XXXX	XXXX	xxxx	XXXX	XXXX	xxxx	0.64
Level Of Serv	vice D	Module	e:									
2Way95thQ:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	4.3
Control Del:				xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	27.8
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	D
Movement:	LT ·	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT -	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX
Shrd ConDel:	xxxxx	xxxx	XXXXX	xxxxx	XXXX	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	xxxx	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	x	xxxxx		XX	xxxxx		x	xxxx			27.8	
ApproachLOS:		*			*			*			D	
Note: Queue	report	ted is	s the r	number	of ca	ars per	lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Bkgd + Proj PM



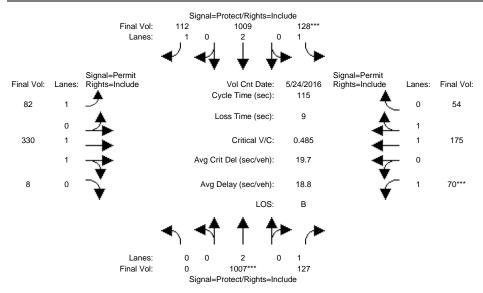
Approach: Movement:	_	North Bound L - T - R				ound - R			ound – R		est Bo - T	
Volume Module	e:											
Base Vol:	-	1966	352	-	2111	0	0	0	0	0	0	263
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1966	352	0	2111	0	0	0	0	0	0	263
Added Vol:	0	2	0	0	4	0	0	0	0	0	0	5
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1968	352	0	2115	0	0	0	0	0	0	268
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1968	0	0	2115	0	0	0	0	0	0	268
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	1968	0	0	2115	0	0	0	0	0	0	268
Critical Gap	Modu.	le:										
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.9
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3
Capacity Modu	ıle:											
Cnflict Vol:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	656
Potent Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	413
Move Cap.:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	413
Volume/Cap:	xxxx	xxxx	XXXX	XXXX	xxxx	XXXX	xxxx	xxxx	XXXX	XXXX	xxxx	0.65
Level Of Serv	vice D	Module	e:									
2Way95thQ:	xxxx	xxxx	xxxxx	XXXX	xxxx	xxxxx	xxxx	xxxx	xxxxx	XXXX	xxxx	4.5
Control Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	28.5
LOS by Move:	*	*	*	*	*	*	*	*	*	*	*	D
Movement:	LT ·	- LTR	- RT	LT -	- LTR	- RT	LT ·	- LTR	- RT	LT -	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	x	xxxxx		X	xxxxx		X	xxxxx			28.5	
ApproachLOS:		*			*			*			D	
Note: Queue	repor	ted is	s the r	number	of ca	ars pei	r lane					
-	-					-						

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing PM



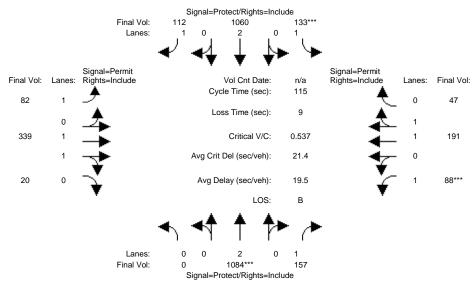
Approach: Movement:	North Bound L - T - R								und – R		est Bo - T	
	 						I					
		10			10			10			10	
Y+R:		4.0				4.0			4.0	4.0	4.0	4.0
Volume Module									'	1		
Base Vol:	0	998	127		1001	112	82		8	70	173	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	998	127	121	1001	112	82	329	8	70	173	42
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	998	127	121	1001	112	82	329	8	70	173	42
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	998	127	121	1001	112	82	329	8	70	173	42
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		998	127	121	1001	112	82	329	8	70	173	42
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	998	127	121	1001	112	82	329	8	70	173	42
Saturation Fl	Low Mo	odule:										
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	0.85	0.53	0.95	0.95	0.38	0.92	0.92
Lanes:			1.00		2.00	1.00	1.00	1.95	0.05		1.61	0.39
Final Sat.:			1615		3610	1615		3510	85		2821	685
Capacity Anal	-											
Vol/Sat:			0.08		0.28	0.07	0.08	0.09	0.09		0.06	0.06
Crit Moves:				****						****		
Green/Cycle:			0.58		0.72	0.72		0.20	0.20		0.20	0.20
Volume/Cap:			0.14	0.48		0.10		0.46	0.46		0.30	0.30
Delay/Veh:			11.1	47.0	6.4	4.9		40.8	40.8		39.2	39.2
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			11.1			4.9		40.8	40.8		39.2	39.2
LOS by Move:	A	В	В	D		A	D	D	D	D		D
HCM2kAvgQ:			2	4	7	1	3	-	6	3	4	4
Note: Queue r	report	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM



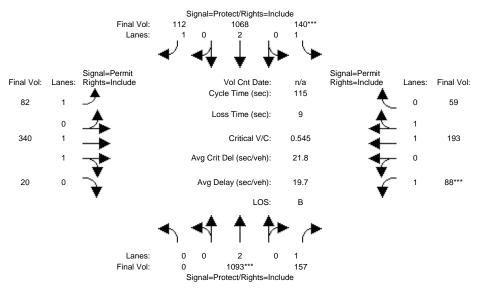
Approach: Movement:	North Bound L - T - R								und – R		est Bo - T	
			- K	I	_ 1		1		- K	I		
		10			10			10			10	
Y+R:		4.0				4.0			4.0		4.0	
Volume Module										1		1
Base Vol:			127		1001	112	82		8	70	173	42
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	998	127	121	1001	112	82	329	8	70	173	42
Added Vol:	0	9	0	7	8	0	0	1	0	0	2	12
Reassigned :		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1007	127	128	1009	112	82	330	8	70	175	54
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1007	127	128	1009	112	82	330	8	70	175	54
Reduct Vol:			0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1007	127	128	1009	112	82	330	8	70	175	54
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:				128		112		330	8	70	175	54
Saturation Fl	Low Mo	odule:										
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.85	0.95	0.95	0.85	0.51	0.95	0.95	0.38	0.92	0.92
Lanes:			1.00		2.00	1.00		1.95	0.05	1.00		0.47
Final Sat.:			1615		3610	1615		3510	85		2662	821
Capacity Anal	-											
Vol/Sat:			0.08		0.28	0.07	0.08	0.09	0.09		0.07	0.07
Crit Moves:				****						****		
Green/Cycle:					0.72	0.72		0.20	0.20	0.20		0.20
Volume/Cap:			0.14	0.49		0.10		0.47	0.47	0.49		0.33
Delay/Veh:			11.4	46.5	6.3	4.8		41.0	41.0	43.2		39.6
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:						4.8		41.0	41.0		39.6	39.6
LOS by Move:	A	В		D		A	D	D	D	D		D
HCM2kAvgQ:				4	7	1	3		6	3	4	4
Note: Queue 1	repor	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd PM



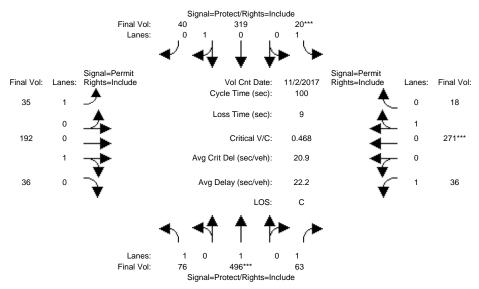
Approach:	No	rth Bo	und	Soi	ıth Bo	und	Ea	ast Bo	und	We	est Bo	und
		- T				- R		- T				- R
Min. Green:	0	10	10	7	10	10	10	10	10	10	10	10
Y+R:		4.0				4.0		4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:		1084			1060	112	82	339	20	88	191	47
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		1084	157		1060	112	82	339	20	88	191	47
Added Vol:	0		0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			157		1060	112	82		20	88	191	47
User Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:			157		1060	112	82	339	20	88	191	47
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:			157		1060	112	82	339	20	88	191	47
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:				1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:				133		112		339	20		191	47
			1									
Saturation Fl												
Sat/Lane:		1900			1900	1900		1900	1900		1900	1900
Adjustment:			0.85	0.95		0.85		0.94	0.94		0.92	0.92
Lanes:			1.00	1.00		1.00		1.89	0.11		1.61	0.39
Final Sat.:			1615		3610	1615		3382		726		692
Capacity Anal	-			0 00	0 00	0 05	0 00	0 10	0 10	0 10	0 00	0 0 0
Vol/Sat:			0.10	0.07 ****	0.29	0.07	0.08	0.10	0.10	0.12 ****	0.07	0.07
Crit Moves:			0 56		0 50	0 50	0 00	0 00	0 00		0 00	0 00
Green/Cycle:					0.70	0.70		0.23	0.23		0.23	0.23
Volume/Cap:			0.17		0.42	0.10		0.44	0.44		0.30	0.30
Delay/Veh:			12.5			5.7		38.7	38.7		37.2	37.2
User DelAdj:						1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:			12.5			5.7		38.7	38.7		37.2	37.2
LOS by Move:			В	D		A	D	D	D	D	D	D
HCM2kAvgQ:			3	4	8	1	_		6	4	4	4
Note: Queue 1	report	tea is	the n	unper	or ca	rs per	ıane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj PM



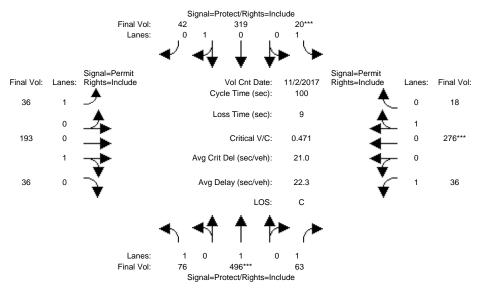
Approach:												
Movement:		- T -				- R		- T			- T	
Min. Green:		10			10			10		10		10
Y+R:		4.0			4.0			4.0				
Volume Module			'	'		'	'		'	'		'
Base Vol:	0	1084	157	133	1060	112	82	339	20	88	191	47
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1084	157	133	1060	112	82	339	20	88	191	47
Added Vol:		9	0	7	8	0	0	1	0	0	2	12
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1093	157	140	1068	112	82	340	20	88	193	59
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1093	157	140	1068	112	82	340	20	88	193	59
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		1093	157	140	1068	112	82	340	20	88	193	59
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	0	1093	157	140	1068	112	82	340	20	88	193	59
Saturation Fl	Low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	1.00	0.95	0.85	0.95	0.95	0.85	0.50	0.94	0.94	0.38	0.92	0.92
Lanes:			1.00	1.00	2.00	1.00	1.00	1.89	0.11	1.00	1.53	0.47
Final Sat.:			1615		3610	1615		3382		720		816
Capacity Anal												
		0.30	0.10		0.30	0.07	0.09	0.10	0.10		0.07	0.07
Crit Moves:				****						****		
Green/Cycle:			0.56		0.70	0.70		0.22	0.22		0.22	0.22
Volume/Cap:			0.18	0.55		0.10		0.45	0.45		0.32	0.32
Delay/Veh:			12.7	48.3	7.6	5.7		38.9	38.9		37.6	37.6
User DelAdj:			1.00			1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:			12.7			5.7	39.1		38.9		37.6	37.6
LOS by Move:				D			D		D	D	_	D
HCM2kAvgQ:			_	4			3		6	4	4	4
Note: Queue 1	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing PM



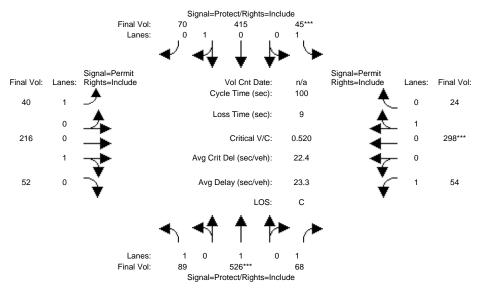
Approach:	No	rth Bo	und	Sou	ath Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:	L ·		- R		- T			- T		L -		- R
Min. Green:	 7		10	1	10	10	1	 10	10	10		10
Y+R:		4.0	4.0		4.0	4.0		4.0	4.0	4.0		4.0
1+K•												4.0
Volume Module	1			1	z 2017							
Base Vol:	76	496	63	20	319	40	35	192	36	36	271	18
Growth Adj:	1.00		1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		496	63	20	319	40	35	192	36	36	271	18
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:			0	0	0	0	0	0	0	0	0	0
Initial Fut:			63	20	-	40	35	192	36	36	271	18
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
	76	496	63	20	319	40	35	192	36	36	271	18
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		496	63	20	319	40	35	192	36	36	271	18
PCE Adi:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			63	20	319	40	35	192	36	36	271	18
Saturation F	low Mo	odule:	'							•		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.98	0.98	0.39	0.98	0.98	0.47	0.99	0.99
Lanes:	1.00	1.00	1.00	1.00	0.89	0.11	1.00	0.84	0.16	1.00	0.94	0.06
Final Sat.:	1805	1900	1615	1805	1660	208	737	1562	293	897	1766	117
	1		I									
Capacity Anal	lysis	Module	e:									
Vol/Sat:	0.04	0.26	0.04	0.01	0.19	0.19	0.05	0.12	0.12	0.04	0.15	0.15
Crit Moves:		****		****							****	
Green/Cycle:	0.16	0.53	0.53	0.07	0.44	0.44	0.31	0.31	0.31	0.31	0.31	0.31
Volume/Cap:	0.26	0.49	0.07	0.16	0.44	0.44	0.15	0.40	0.40	0.13	0.49	0.49
Delay/Veh:	37.3	15.4	11.6	44.3	19.9	19.9		27.5	27.5	24.9	28.7	28.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.3	15.4	11.6	44.3	19.9	19.9	25.2	27.5	27.5	24.9	28.7	28.7
LOS by Move:	D	В	В	D	В	В	C	С	С	C	С	C
HCM2kAvgQ:	2		1	1	8	8	1	-	6	1	7	7
Note: Queue	report	ted is	the n	umber	of car	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj PM



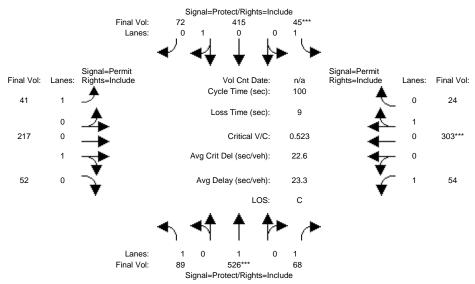
Approach:	No	rth Bo	und	Sou	ath Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T			- T			- T			- T	
 Min. Green:		10			10		•	10	 10		 10	· 10
Y+R:		4.0			4.0			4.0			4.0	4.0
Volume Module	e: >>	Count	Date:	2 Nov	z 2017	<< '	'			'		'
Base Vol:	76	496	63	20	319	40	35	192	36	36	271	18
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	76	496	63	20	319	40	35	192	36	36	271	18
Added Vol:	0		0	0	0	2	1	1	0	0	5	0
Reassigned :	0		0	0		0	0	0	0	0		0
Initial Fut:		496	63	20		42	36		36	36	276	18
User Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:		496	63	20	319	42	36	193	36	36	276	18
	0		0	0	0	0	0	0	0	0		0
Reduced Vol:		496	63	20	319	42	36	193	36	36	276	18
PCE Adj:	1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00			1.00		1.00	1.00
FinalVolume:						42			36		276	18
Saturation F	1											
Saturation F. Sat/Lane:		1900	1900	1000	1900	1900	1000	1900	1900	1000	1900	1900
Adjustment:			0.85	0.95		0.98		0.98	0.98		0.99	0.99
-	1.00		1.00		0.88	0.12			0.16		0.99	0.99
Final Sat.:			1615		1650	217		1563	292		1768	115
Capacity Ana				ı		'	I			ı		'
Vol/Sat:			0.04	0.01	0.19	0.19	0.05	0.12	0.12	0.04	0.16	0.16
Crit Moves:				****							****	
Green/Cycle:	0.16	0.53	0.53	0.07	0.44	0.44	0.31	0.31	0.31	0.31	0.31	0.31
Volume/Cap:	0.27	0.50	0.07	0.16	0.44	0.44	0.16	0.39	0.39	0.13	0.50	0.50
Delay/Veh:	37.5	15.6	11.7	44.3	20.0	20.0	25.0	27.3	27.3	24.7	28.5	28.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.5	15.6	11.7	44.3	20.0	20.0	25.0	27.3	27.3	24.7	28.5	28.5
LOS by Move:	D	В	В	D	C	С	С	С	C	С	C	С
HCM2kAvgQ:	2	10	1	1	8	8	1	6	6	1	8	8
Note: Queue	repor	ted is	the n	umber	of car	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd PM



Approach:	No	rth Bo	und	Sou	uth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T ·			- T			- T			- T	
 Min. Green:	7			7		10		10	10	10		10
Y+R:		4.0	4.0		4.0			4.0	4.0			
Volume Module			1	1		1	I			1		1
Base Vol:	89	526	68	45	415	70	40	216	52	54	298	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	89	526	68	45	415	70	40	216	52	54	298	24
Added Vol:	U	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89	526	68	45	415	70	40	216	52	54	298	24
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:		526	68	45	415	70	40	216	52	54	298	24
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			68	45	415	70	40	216	52	54	298	24
PCE Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			68		415	70	40		52		298	24
	1											
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.85		0.98	0.98		0.97	0.97		0.99	0.99
	1.00		1.00		0.86	0.14		0.81	0.19		0.93	0.07
Final Sat.:			1615		1590	268		1487	358	808		140
G	1		- 1									
Capacity Anal				0 00	0 06	0 06	0 06	0 1 5	0 1 5	0 07	0 17	0 17
Vol/Sat:		0.28	0.04	U.U∠ ****	0.26	0.26	0.06	0.15	0.15	0.07	0.17	0.17
0220 110100	0 10		0 50		0 10	0 16	0 20	0 20	0 20	0 20		0 20
Green/Cycle:			0.52		0.46	0.46 0.56		0.32	0.32		0.32	0.32
Volume/Cap:			0.08 12.1		0.56	20.3		0.45 27.5	0.45 27.5		28.7	28.7
Delay/Veh: User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdiDel/Veh:			12.1	46.1		20.3		27.5	27.5		28.7	28.7
LOS by Move:				40.1 D	20.3 C	20.3 C	24.9 C	27.5 C	27.5 C	∠5.1 C	20.7 C	20.7 C
HCM2kAvq0:	3		1	2	11	11	1		7	1		8
Note: Queue				_			_		,		o	o
Noce Queue	- CPOI	ccu is	CIIC II	u.iiDC1	or ca	TO PCI	Tane	•				

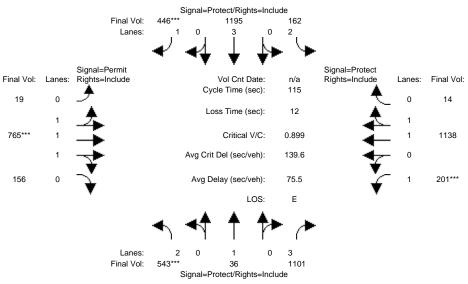
Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj PM



Approach:	No	rth Bo	und	Soi	ıth Bo	und	Ea	ast Bo	und	₩e	est Bo	und
Movement:		- T			- T			- T			- T	- R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0		4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:	89	526	68	45	415	70	40	216	52	54	298	24
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		526	68	45	415	70	40	216	52	54	298	24
Added Vol:	0	0	0	0	0	2	1	1	0	0	5	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	89		68	45	415	72	41	217	52	54	303	24
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:	89	526	68	45	415	72	41	217	52	54	303	24
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:			68	45	415	72	41	217	52	54	303	24
PCE Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			68		415	72 	41		52	54		24
Saturation F	1											
Saturation F. Sat/Lane:		1900	1900	1900	1900	1900	1000	1900	1900	1000	1900	1900
	0.95		0.85	0.95		0.98		0.97	0.97		0.99	0.99
Lanes:	1.00		1.00		0.85	0.15		0.81	0.19	1.00		0.07
Final Sat.:			1615		1583	275		1488	357		1741	138
Capacity Anal	1		- 1	1		ı	1		'	1		1
Vol/Sat:		0.28	0.04	0.02	0.26	0.26	0.06	0.15	0.15	0.07	0.17	0.17
Crit Moves:		****		****							***	
Green/Cycle:	0.12	0.52	0.52	0.07	0.46	0.46	0.32	0.32	0.32	0.32	0.32	0.32
Volume/Cap:	0.40	0.54	0.08	0.36	0.57	0.57		0.45	0.45		0.54	0.54
Delay/Veh:	41.6	16.8	12.3	46.1	20.5	20.5	24.8	27.3	27.3	24.9	28.6	28.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	41.6	16.8	12.3	46.1	20.5	20.5	24.8	27.3	27.3	24.9	28.6	28.6
LOS by Move:	D	В	В	D	C	C	C	С	С	C	C	C
HCM2kAvgQ:	3	11	1	2	11	11	1	7	7	1	9	9
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project PM

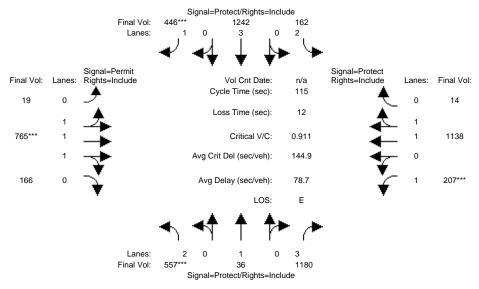
Intersection #1: Veterans BI & Whipple Av



				_		_				_		
Street Name:					. 1 . 5	,	_	. 5	Whipp	ole Av	. 5	,
									ound_			
Movement:											- T	
Min. Green:		1.0	1.0		1.0	1.0	1.0	1.0	1.0		1.0	1.0
Y+R:									4.0			4.0
1 T.K.												
Volume Module	•			1						1		
			1068	157	1159	433	18	742	151	195	1104	14
Growth Adj:				1.00				1.00			1.00	
Initial Bse:				157		433		742	151	195		14
Added Vol:				0	0	0	0		0	0		0
Reassigned:				0		0	0			0		0
Initial Fut:						433			151			14
User Adi:	1.00	1.00	1.00		1.00			1.00			1.00	1.00
PHF Adj:	0.97	0.97		0.97				0.97			0.97	
PHF Volume:				162		446	19		156	201		14
Reduct Vol:						0	0	0	0			0
Reduced Vol:			1101	162	1195	446			156			14
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00			1.00		1.00	
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
FinalVolume:	543	36	1101	162	1195	446	19	765	156	201	1138	14
Saturation Fl	low Mo	odule:	·	•								
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:									0.64		0.94	0.94
Lanes:	2.00	1.00	3.00	2.00	3.00	1.00	0.06	2.44	0.50	1.00	1.97	0.03
Final Sat.:											3522	
Capacity Anal	lysis	Modul	e:									
Vol/Sat:	0.16	0.02	0.26	0.05	0.23				0.26		0.32	0.32
Crit Moves:										****		
Green/Cycle:			0.32	0.08	0.26	0.26	0.20	0.20	0.20	0.30	0.49	0.49
Volume/Cap:	1.12	0.06	0.82	0.58	0.89	1.07	1.29	1.29	1.29	0.37	0.66	0.66
Delay/Veh: 1	127.2	27.1	39.9	54.2	49.2	107.8	184.8	185	184.8	32.2	23.0	23.0
User DelAdj:									1.00		1.00	1.00
AdjDel/Veh: 1	127.2	27.1	39.9	54.2	49.2	107.8	184.8	185	184.8		23.0	23.0
LOS by Move:	F	C	D	D	D			F	F	С	C	C
HCM2kAvgQ:				4			22		22	6	16	16
Note: Queue 1	repor	ted is	the n	umber	of ca	ars per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative PM

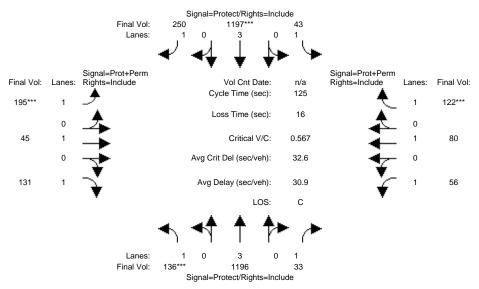
Intersection #1: Veterans BI & Whipple Av



Street Name: Approach:		Veteran	s Bl	1+h D/	ound	·	act D	Whipp ound	le Av	st Bo	und
Movement: L	- T	- R	L -	- T	- R	L ·	- T	- R	L -	Т	- R
 Min. Green:	7 10							10			
Y+R: 4	.0 4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
 Volume Module:		-									
	27 35	1068	157	1159	433	18	742	151	105	1104	14
Growth Adj: 1.				1.00	1.00		1.00	1.00	1.00		1.00
	27 35	1068		1159	433	18	742	151		1104	14
Added Vol:		77	137	46	133	0	7 4 2	10	195 6	0	0
Reassigned:		0	0	0	0	0	0	0		0	0
	10 35	1145		1205	433	18				1104	14
	00 1.00			1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj: 0.				0.97	0.97		0.97	0.97	0.97		0.97
PHF Volume: 5		1180		1242	446	19	765	166		1138	14
Reduct Vol:		0	0	0	0	0	0			0	0
	57 36	1180		1242	446	19				1138	14
PCE Adj: 1.				1.00	1.00		1.00		1.00		1.00
MLF Adj: 1.				1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume: 5				1242	446	19		166		1138	14
Saturation Flow					'	ı		ı	1		ı
Sat/Lane: 19			1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment: 0.	0.99	0.74	0.91	0.90	0.84	0.64	0.64	0.64	0.94	0.94	0.94
Lanes: 2.	00 1.00	3.00	2.00	3.00	1.00	0.06	2.42	0.52	1.00	1.97	0.03
Final Sat.: 34			3467	5135	1599	71	2940	638	1787	3522	45
		-									
Capacity Analys					,				'		
Vol/Sat: 0.			0.05	0.24	0.28	0.26	0.26	0.26	0.12	0.32	0.32
Crit Moves: **	* *				***		****		****		
Green/Cycle: 0.		0.32	0.08	0.26	0.26	0.20	0.20	0.20	0.30	0.49	0.49
Volume/Cap: 1.	15 0.06	0.87	0.58	0.93	1.07	1.30	1.30	1.30	0.39	0.66	0.66
Delay/Veh: 137	.4 27.1	43.5	54.2	53.2	107.8	191.4	191	191.4	32.3	23.0	23.0
User DelAdj: 1.	00 1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh: 137	.4 27.1	43.5	54.2	53.2	107.8	191.4	191	191.4	32.3	23.0	23.0
LOS by Move:	F C	D	D	D	F	F	F	F	С	C	С
HCM2kAvgQ:	18 1	18	4	20	24	22	22	22	6	16	16
Note: Queue rep	orted is	s the nur	mber	of ca	ars per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project PM

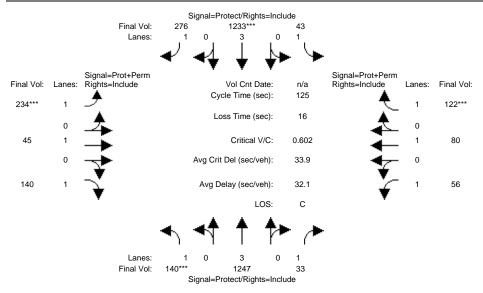
Intersection #2: Veterans & Brewster



Approach:	No	rth Boı	und	Sou	uth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T -			- T			- T		L -		- R
Min. Green:	: 7		10	1	10	10	 7		10	7		10
Y+R:		4.0	4.0		4.0			4.0	4.0			4.0
1+K•												
Volume Module			I	I		I	I		I	I		ļ
Base Vol:	136	1196	33	43	1197	250	195	45	131	56	80	122
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	1196	33	43	1197	250	195	45	131	56	80	122
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	136	1196	33	43	1197	250	195	45	131	56	80	122
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	136	1196	33	43	1197	250	195	45	131	56	80	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	1196	33	43	1197	250	195	45	131	56	80	122
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	136	1196	33	43	1197	250	195	45	131	56	80	122
	1											
Saturation F												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900		1900		1900	1900
Adjustment:	0.95	0.91	0.85	0.95	0.91	0.85	0.95	1.00	0.85	0.95	1.00	0.85
	1.00		1.00	1.00		1.00	1.00		1.00		1.00	1.00
Final Sat.:			1615		5187	1615	1805		1615		1900	1615
	1		1									
Capacity Ana	_											
Vol/Sat:		0.23	0.02	0.02	0.23	0.15		0.02	0.08	0.03	0.04	0.08
Crit Moves:	****				****		****					****
Green/Cycle:				0.11		0.41		0.19	0.19		0.13	0.13
Volume/Cap:			0.05	0.22		0.38		0.12	0.42		0.31	0.56
Delay/Veh:			20.1	51.7		26.0		41.8	45.2		49.6	54.0
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:			20.1	51.7		26.0	29.4		45.2		49.6	54.0
LOS by Move:			C	D	C	C		D	D	C		D
HCM2kAvgQ:	5		. 1	. 2	13	7	_	1	4	2	3	5
Note: Queue	report	ted is	the n	umber	oi ca	rs per	Lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative PM

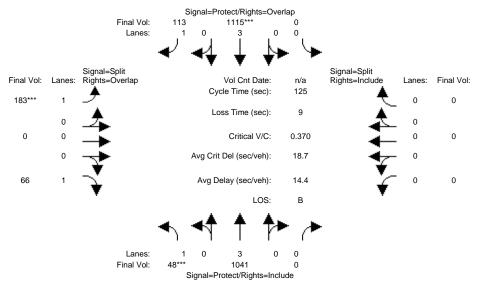
Intersection #2: Veterans & Brewster



Approach: Movement:	North Bound L - T - R								und – R		est Bo - T	
		10			10			10			10	
Y+R:		4.0				4.0			4.0		4.0	
Volume Module			1	1		1	1		'	1		1
		1196	33	43	1197	250	195	45	131	56	80	122
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	1196	33	43	1197	250	195	45	131	56	80	122
Added Vol:	4	51	0	0	36	26	39	0	9	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	140	1247	33	43	1233	276	234	45	140	56	80	122
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	1247	33	43	1233	276	234	45	140	56	80	122
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	1247	33	43	1233	276	234	45	140	56	80	122
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:						276		45	140	56	80	122
Saturation Fl	Low Mo	odule:										
Sat/Lane:		1900	1900	1900		1900		1900	1900		1900	1900
Adjustment:			0.85	0.95		0.85		1.00	0.85		1.00	0.85
	1.00		1.00	1.00	3.00	1.00		1.00	1.00		1.00	1.00
Final Sat.:			1615		5187	1615		1900	1615		1900	1615
Capacity Anal	-											
Vol/Sat:		0.24	0.02	0.02	0.24			0.02	0.09	0.03	0.04	0.08
Crit Moves:	****				****		****					****
Green/Cycle:				0.10		0.40		0.21	0.21		0.13	0.13
Volume/Cap:			0.05	0.24		0.43		0.11	0.42		0.33	0.60
Delay/Veh:			20.9		30.2	27.8		40.2	43.7		50.6	56.3
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			20.9	52.6		27.8		40.2	43.7		50.6	56.3
LOS by Move:			C	D		C	C	D	D	D		E
HCM2kAvgQ:			. 1	2	14	-	6		4	2	3	5
Note: Queue 1	repor	ted is	the n	umber	oi ca	rs per	⊥ane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project PM

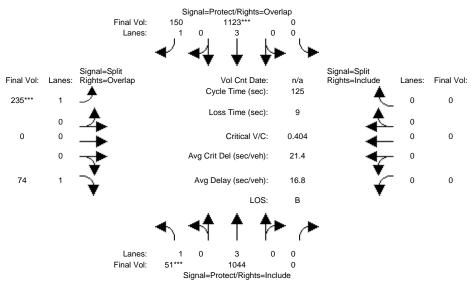
Intersection #3: Veterans & Middlefield



Approach: Movement:	North Bound L - T - R					und – R			und - R		st Bo	
Min. Green:	7	10	0	0	10	10	10	0	10	0	0	0
Y+R:		4.0				4.0		4.0			4.0	4.0
Volume Module	: :											
Base Vol:	48	1041	0	0	1115	113	183	0	66	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:		1041	0	0	1115	113	183	0	66	0	0	0
	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	48	1041	0	0	1115	113	183	0	66	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	48	1041	0	0	1115	113	183	0	66	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			0	0	1115	113	183	0	66	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	48	1041	0	0	1115	113	183	0	66	0	0	0
Saturation Fl	Low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	1.00	1.00	0.91	0.85	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:			0	0	5187	1615	1805	0	1615	0	0	0
Capacity Anal	lysis	Module	e:			·				•		
Vol/Sat:	0.03	0.20	0.00	0.00	0.21	0.07	0.10	0.00	0.04	0.00	0.00	0.00
Crit Moves:	****				***		****					
Green/Cycle:	0.07	0.65	0.00	0.00	0.58	0.86	0.27	0.00	0.35	0.00	0.00	0.00
Volume/Cap:	0.37	0.31	0.00	0.00	0.37	0.08	0.37	0.00	0.12	0.00	0.00	0.00
Delay/Veh:	57.1	9.4	0.0	0.0	14.0	1.4	37.1	0.0	27.9	0.0	0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.1	9.4	0.0	0.0	14.0	1.4	37.1	0.0	27.9	0.0	0.0	0.0
LOS by Move:	E	A	A	A	В	A	D	A	С	A	A	A
HCM2kAvgQ:	2	6	0	0	8	1	6	0	2	0	0	0
Note: Queue 1		ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative PM

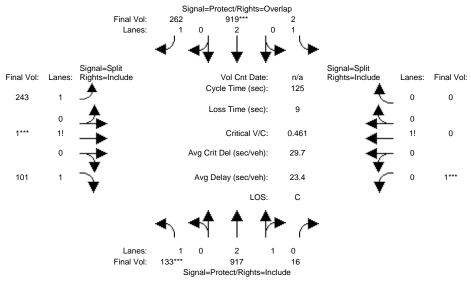
Intersection #3: Veterans & Middlefield



Approach:	No	rth Bo	und	Soi	ıth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T				- R		- T			- T	- R
Min. Green:	7	10	0	0	10	10	10	0	10	0	0	0
Y+R:		4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:		1041	0		1115	113	183	0	66	0	0	0
Growth Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
Initial Bse:		1041	0		1115	113	183	0	66	0	0	0
Added Vol:	3		0	0	8	37	52	0	8	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	51	1044	0	0	1123	150	235	0	74	0	0	0
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
		1044	0	0	1123	150	235	0	74	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	51	1044	0	0	1123	150	235	0	74	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:		1044	0			150	235	0	74	0	0	0
Saturation F												
Sat/Lane:	1900	1900	1900	1900	1900	1900		1900	1900		1900	1900
Adjustment:	0.95	0.91	1.00	1.00	0.91	0.85		1.00	0.85		1.00	1.00
Lanes:			0.00		3.00	1.00	1.00	0.00	1.00		0.00	0.00
Final Sat.:			0		5187	1615	1805	0	1615	0	0	0
Capacity Anal	-											
	0.03	0.20	0.00	0.00	0.22	0.09		0.00	0.05	0.00	0.00	0.00
CIIC MOVED.	****				****		****					
Green/Cycle:	0.07	0.61	0.00	0.00	0.54	0.86	0.32	0.00	0.39		0.00	0.00
Volume/Cap:			0.00	0.00		0.11		0.00	0.12		0.00	0.00
Delay/Veh:	57.7	12.2	0.0	0.0	17.3	1.4	33.5	0.0	24.3	0.0	0.0	0.0
User DelAdj:			1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.7	12.2	0.0	0.0	17.3	1.4	33.5	0.0	24.3	0.0	0.0	0.0
LOS by Move:			A	A	В	A	С	A	С	A	A	A
HCM2kAvgQ:	2		0	0	9	1	7	-	2	0	0	0
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project PM

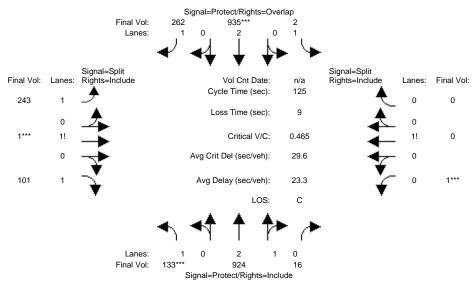
Intersection #4: Veterans & Jefferson



Approach:	No	rth Bo	und	Soi	ıth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:	L ·		- R		- T			- T			- T	- R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0
	I											
Volume Module		015			010	0.50	0.40	-	101		•	
Base Vol:	133	917	16	2	919	262	243	1	101	1	0	0
Growth Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		917	16	2	919	262	243	1	101	1	0	0
Added Vol:	0	0	0 0	0	0 0	0	0	0	0	0	0	0 0
Reassigned:	133	-	16	2	919	262	243	1	101	1	0	0
Initial Fut: User Adj:	1.00		1.00	1.00		1.00		1.00	1.00	_	1.00	1.00
PHF Adj:	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Volume:	133	917	1.00	2	919	262	243	1.00	101	1.00	0	0
Reduct Vol:	133	0	0	0	0	0	243	0	0	0	0	0
Reduced Vol:		917	16	2	919	262	243	1	101	1	0	0
PCE Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			16		919	262	243	1	101	1	0	0
Saturation F	low Mo	odule:	'	'		'	'		'	'		'
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.91	0.95	0.95	0.85	0.92	0.92	0.92	0.95	1.00	1.00
Lanes:	1.00	2.95	0.05	1.00	2.00	1.00	1.70	0.01	1.29	1.00	0.00	0.00
Final Sat.:			89		3610	1615	2987	10	2267	1805	0	0
	1											
Capacity Anal												
Vol/Sat:		0.18	0.18	0.00	0.25	0.16	0.08	0.10	0.04		0.00	0.00
Crit Moves:	****				****			****		****		
Green/Cycle:			0.50		0.51	0.70		0.20	0.20		0.00	0.00
Volume/Cap:			0.36	0.01		0.23		0.50	0.23		0.00	0.00
Delay/Veh:		19.3	19.3	44.7		6.7		45.4	42.4	52.9	0.0	0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:		19.3	19.3			6.7		45.4	42.4	52.9	0.0	0.0
LOS by Move:		В	В	D	C	A	D	D	D	D	A	A
HCM2kAvgQ:	5	8	8	0	12	3	5	6	3	0	0	0
Note: Queue	repor	tea is	the n	umber	oi ca	rs per	⊥ane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative PM

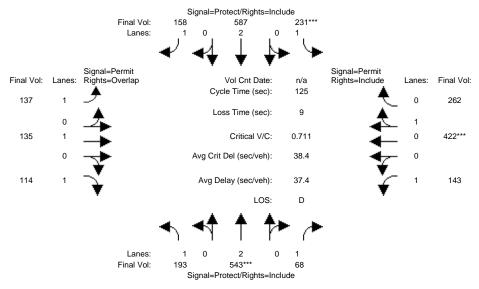
Intersection #4: Veterans & Jefferson



Approach:	No	rth Bo	und	Soi	ıth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:	L ·		- R		- T			- T			- T	- R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:	133	917	16	2	919	262	243	1	101	1	0	0
Growth Adj:	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		917	16	2	919	262	243	1	101	1	0	0
Added Vol:	0	7	0	0	16	0	0	0	0	0	0	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	133		16	2	935	262	243	1	101	1	0	0
User Adj:	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Adj:	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Volume:	133	924	16	2	935	262	243	1	101	1	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:		924	16	2	935	262	243	1	101	1	0	0
PCE Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			16		935	262	243	1	101	1	0	0
Gatanatian R	ı											
Saturation F			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
-	0.95		0.91		0.95	0.85		0.92	0.92		1.00	1.00
Lanes:	1.00		0.05 88		2.00	1.00	2987	0.01	1.29 2267		0.00	0.00
Final Sat.:					3610	1615		10		1805	0	0
Capacity Anal	1											
Vol/Sat:		0.18	0.18	0 00	0.26	0.16	Λ ΛΩ	0.10	0.04	0 00	0.00	0.00
Crit Moves:	****	0.10	0.10	0.00	****	0.10	0.00	****	0.01	****	0.00	0.00
Green/Cycle:		0.50	0.50	0 15	0.51	0.70	0 19	0.19	0.19		0.00	0.00
Volume/Cap:			0.36	0.13		0.70		0.51	0.23		0.00	0.00
Delay/Veh:		19.2	19.2	44.8		6.7		45.7	42.6	52.9	0.0	0.0
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:		19.2	19.2		20.5	6.7		45.7	42.6	52.9	0.0	0.0
LOS by Move:		В	в	D D	20.5 C	Α.	11.0 D	D D	12.0 D	52.5 D	0.0 A	0.0 A
HCM2kAvqQ:	5	8	8	0	12	3	5	6	3	0	0	0
Note: Queue						_	_	-	5	3	O	O
incre gacae i	- CP OI		0110 11	CI	J1 00	TO PCI		•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project PM

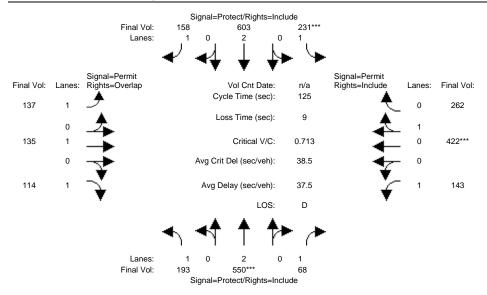
Intersection #5: Veterans / Maple



Street Name: Approach:		Verth Bo		s Blvo Soi	d uth Bo	und	E.a	ast Bo	Mapl	e St We	est Bo	und
Movement:	L ·	- T ·	- R	L -	- T	- R	L -	- T	- R	L -	- T	- R
Min. Green: Y+R:		10		7	10 4.0		10	10 4.0		10	10	
Volume Module			'	'		'	•		'	'		'
Base Vol:	193	543	68	231	587	158	137	135	114	143	422	262
Growth Adj:	1.00		1.00	1.00		1.00	1.00		1.00		1.00	1.00
Initial Bse:		543	68	231	587	158	137	135	114	143	422	262
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			68	231	587	158	137	135	114	143	422	262
User Adj:	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
PHF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	193	543	68	231	587	158	137	135	114	143	422	262
	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			68	231	587	158	137	135	114	143	422	262
PCE Adj:	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00	1.00	1.00	1.00
FinalVolume:			68	231		158	137	135	114	143	422	262
Saturation F												
Sat/Lane:		1900	1900	1900		1900		1900	1900		1900	1900
Adjustment:			0.85	0.95		0.85		1.00	0.85		0.94	0.94
Lanes:	1.00		1.00	1.00	2.00	1.00	1.00		1.00		0.62	0.38
Final Sat.:		3610	1615		3610	1615		1900	1615		1105	686
Capacity Ana	_		e:									
Vol/Sat:	0.11		0.04		0.16	0.10	0.35	0.07	0.07	0.12	0.38	0.38
Crit Moves:		****		****							****	
Green/Cycle:			0.21		0.24	0.24		0.54	0.69		0.54	0.54
Volume/Cap:			0.20	0.71		0.41		0.13	0.10		0.71	0.71
Delay/Veh:			40.9	55.4		41.2		14.5	6.4		24.2	24.2
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			40.9	55.4	46.0	41.2		14.5	6.4		24.2	24.2
LOS by Move:			D	E	D	D	C	В	A	В	С	С
HCM2kAvgQ:	7		2	9		5		2	1	3	20	20
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative PM

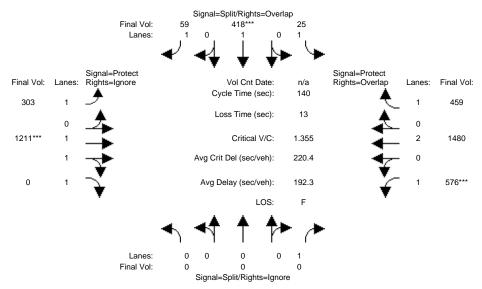
Intersection #5: Veterans / Maple



Street Name:		V	eteran	s Blv	i				Mapl	e St		
Approach:	No:	rth Bo	und	Sot	ıth Bo	und	Εá	ast Bo	und	We	est Bo	und
Movement:	L	- T	- R	L -	- T	- R	L ·	- T	- R	L ·	- T	- R
		10		7			•		10			
Y+R:	4.0				4.0			4.0		4.0		
Volume Module												
		543	68	231	587	158	137	135	114	143	422	262
Growth Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
Initial Bse:			68	231	587	158	137	135	114	143	422	262
Added Vol:			0	0	16	0	0	0	0	0		0
Reassigned:			0	0	0	0	0		0	0		0
Initial Fut:			68	231		158	137		114	143		262
User Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Volume:			68	231	603	158	137	135	114	143	422	262
Reduct Vol:	0	0	0	0	0	0	0	0	0	0		0
Reduced Vol:			68	231	603	158	137		114	143		262
		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			68		603	158		135	114	143		262
Saturation F				ı			1			1		ı
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:				0.95		0.85	0.20	1.00	0.85		0.94	0.94
		2.00	1.00	1.00	2.00	1.00	1.00	1.00	1.00	1.00	0.62	0.38
Final Sat.:	1805	3610	1615	1805	3610		388	1900	1615	1233	1105	686
Capacity Anal												'
	0.11			0.13	0.17	0.10	0.35	0.07	0.07	0.12	0.38	0.38
Crit Moves:		****		****							* * * *	
Green/Cycle:	0.15	0.21	0.21	0.18	0.24	0.24	0.54	0.54	0.69	0.54	0.54	0.54
Volume/Cap:	0.70	0.71	0.20	0.71	0.70	0.41	0.66	0.13	0.10	0.22	0.71	0.71
Delay/Veh:	57.8	48.8	40.6	55.6	45.9	40.8	28.6	14.6	6.6	15.4	24.4	24.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	57.8	48.8	40.6	55.6	45.9	40.8	28.6	14.6	6.6	15.4	24.4	24.4
LOS by Move:	E	D	D	E	D	D	С		А	В		С
HCM2kAvgQ:	7	10	2	9	11	5	5	2	1	3	20	20
Note: Queue			the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project PM

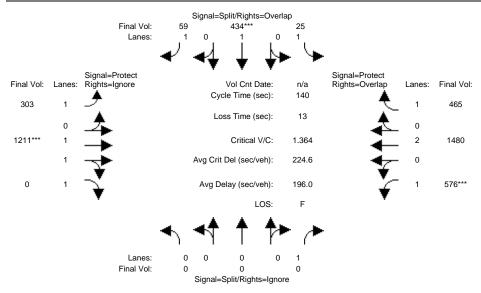
Intersection #6: Woodside Rd & Veterans BI



Street Name:	Mar	uth Da	Woodsi und	de Rd	.+b D-		Vet	terans	Bl (T	JS101 S	SB Ram	ips)
Movement:	L ·	- T	- R	L -	- T	- R	L ·	- T	- R	L ·	- T	- R
 Min. Green: Y+R:	0 4.0	0 4.0	0 4.0	10 4.0	10 4.0	10	7 4.0	10 4.0	10 4.0	7 4.0	10 4.0	10
 Volume Module												
Base Vol:		0	244	24	397	56	288	1150	105	547	1406	436
Growth Adj:		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	244	24	397	56	288	1150	105	547	1406	436
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	244	24	397	56	288	1150	105	547	1406	436
User Adj:		1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	0	0	0	25	418	59	303	1211	0	576	1480	459
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	25	418	59	303	1211	0	576	1480	459
PCE Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:		0	0		418	59		1211	0		1480	459
Saturation Fl												
		1900	1900	1900	1900	1900		1900	1900		1900	1900
3		1.00	1.00	0.83	0.97	0.83		0.92	0.95		0.46	0.41
		0.00	1.00	1.00	1.00	1.00		2.00	1.00		2.00	1.00
Final Sat.:		0	1900		1845	1568		3505	1805		1753	784
Capacity Anal			e:									
	0.00	0.00	0.00	0.02	0.23	0.04	0.17	0.35	0.00		0.84	0.59
Crit Moves:					****			****		****		
Green/Cycle:			0.00		0.17	0.29		0.25	0.00		0.61	0.78
Volume/Cap:			0.00		1.35	0.13		1.35	0.00		1.37	0.75
Delay/Veh:			0.0	49.5	238		255.9	219		210.5	202	13.2
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:		0.0	0.0	49.5			255.9	219		210.5		13.2
LOS by Move:			A	D	F	D	F	F	A	F	F	В
HCM2kAvgQ:	0	0	0	. 1	31	2	25	49	0	44	60	12
Note: Queue 1	repor	ted is	the n	umber	oi ca	rs per	Lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative PM

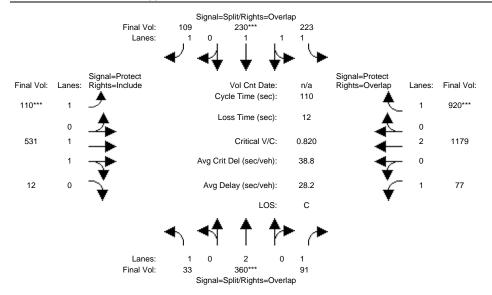
Intersection #6: Woodside Rd & Veterans BI



Street Name: Approach:			Woodsi	de Rd	South Bound			erans	Bl (t	JS101 S	SB Ram est Bo	_
	L -	- T	- R	L -	- T	- R	L ·	- T	- R	L -	- T	- R
	0	0	0	10	10	10	7	10	10	7	10	
Y+R: -		4.0			4.0				4.0		4.0	4.0
Volume Module:			I				1			11		
Base Vol:	0	0	244	24	397	56	288	1150	105	547	1406	436
Growth Adj: 1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	244	24	397	56	288	1150	105	547	1406	436
Added Vol:	0	0	0	0	15	0	0	0	0	0	0	6
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	0	244	24	412	56	288	1150	105	547	1406	442
User Adj: 1		1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
PHF Adj: C		0.95	0.00	0.95	0.95	0.95	0.95	0.95	0.00	0.95	0.95	0.95
PHF Volume:	0	0	0	25	434	59	303	1211	0	576	1480	465
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	0	0	25	434	59	303	1211	0	576	1480	465
PCE Adj: 1	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
MLF Adj: 1	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
FinalVolume:	0	0	0	25	434	59	303	1211	0	576	1480	465
-												
Saturation Flo							•					·
Sat/Lane: 1	L900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment: 1	1.00	1.00	1.00	0.83	0.97	0.83	0.92	0.92	0.95	0.46	0.46	0.41
Lanes: 0	0.00	0.00	1.00	1.00	1.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	0	0	1900	1568	1845	1568	1753	3505	1805	876	1753	784
Capacity Analy	ysis	Modul	e:									
Vol/Sat: 0	0.00	0.00	0.00	0.02	0.24	0.04	0.17	0.35	0.00	0.66	0.84	0.59
Crit Moves:					****			****		****		
Green/Cycle: 0	0.00	0.00	0.00	0.17	0.17	0.30	0.12	0.25	0.00	0.48	0.61	0.78
Volume/Cap: 0	0.00	0.00	0.00	0.09	1.36	0.13	1.38	1.36	0.00	1.36	1.38	0.76
Delay/Veh:	0.0	0.0	0.0	48.9	241	36.0	260.1	223	0.0	214.8	206	13.6
User DelAdj: 1	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	0.0	0.0	0.0	48.9	241	36.0	260.1	223	0.0	214.8	206	13.6
LOS by Move:			A	D	F	D	F	F	A	F	F	В
HCM2kAvgQ:			0	1	33	2	25	49	0	45	61	12
Note: Queue re	eport	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project PM

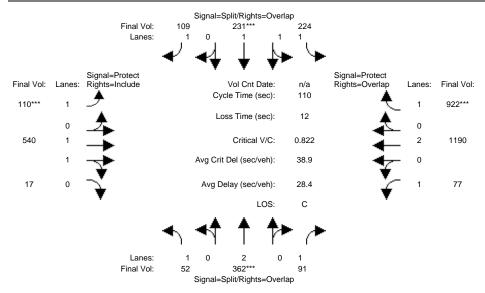
Intersection #7: Winslow/Whipple



	Winslow/inductrial North Bound South Bound											
Approach:	NO:	rtn Bo	una_	Sot	ith Bo	una_	_ E:a	ast Bo	una_	_ We		
Movement:											- T	
Min. Green:		10		10			•			7		10
Y+R:	4.0				4.0			4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:		260	91	223	230	109	110	го1	12	77	1170	920
	33						110	531			1179	
Growth Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
Initial Bse:			91	223	230	109	110	531	12		1179	920
Added Vol:		-	0	0	0	0	0	0	0	0	0	0
Reassigned :			0	0	0	0	0	0	0	0	0	0
Initial Fut:		360	91	223		109	110	531	12		1179	920
	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	33	360	91	223	230	109	110	531	12	77	1179	920
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	33	360	91	223	230	109	110	531	12	77	1179	920
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	33	360	91	223	230	109	110	531	12	77	1179	920
Saturation F	low M	odule:								•		'
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:			0.85	0.93	0.93	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Lanes:		2.00	1.00	1.48	1.52	1.00	1.00	1.96	0.04	1.00	2.00	1.00
Final Sat.:					2683				80		3610	1615
Capacity Ana				1			1		'	İ		I
		0.10	0.06	0.09	0.09	0.07	0.06	0.15	0.15	0.04	0.33	0.57
Crit Moves:		***			****		***					****
Green/Cycle:	0.12	0.12	0.32	0.10	0.10	0.18	0.07	0.47	0.47	0.20	0.59	0.69
Volume/Cap:			0.18	0.82		0.38		0.32	0.32		0.55	0.82
Delay/Veh:			27.2		57.7	40.5		18.5	18.5		14.1	17.0
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			27.2	57.7		40.5		18.5	18.5		14.1	17.0
LOS by Move:			27.2 C	57.7 E	57.7 E	40.5 D	60.I		10.5	37.4 D		17.0 B
HCM2kAvgQ:	ם 1		2	8	<u>г</u> 8	4	г 6		6	2	_	22
									О	2	12	22
Note: Queue :	repor	tea is	the n	umper	or ca	ırs per	_ane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative PM

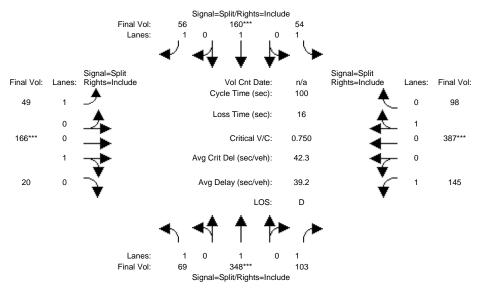
Intersection #7: Winslow/Whipple



Street Name:	No	Win	slow/i	nducti	rial	und	Whipple Ave East Bound West Bound					
Movement:	L	- T	- R	L ·	- T	- R	L -	- T	- R	L ·	- T	- R
Min. Green:				10						7		 10
Y+R:		10 4.0			4.0			4.0			4.0	4.0
Volume Module												
Base Vol:	33		91	223	230	109	110	531	12		1179	920
Growth Adj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
Initial Bse:			91	223	230	109	110	531	12		1179	920
Added Vol:	19		0	1	1	0	0	9	5	0	11	2
Reassigned :		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	52	362	91	224	231	109	110	540	17	77	1190	922
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	52	362	91	224	231	109	110	540	17	77	1190	922
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	52	362	91	224	231	109	110	540	17	77	1190	922
		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	52	362	91	224	231	109	110	540	17	77	1190	922
Saturation F	iow M	odule:								•		
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.93	0.93	0.85	0.95	0.95	0.95	0.95	0.95	0.85
Lanes:	1.00	2.00	1.00	1.48	1.52	1.00	1.00	1.94	0.06		2.00	1.00
Final Sat.:	1805	3610	1615	2602	2683	1615	1805	3482	110	1805	3610	1615
Capacity Ana	lysis	Modul	e: ˈ									'
Vol/Sat:	0.03	0.10	0.06	0.09	0.09	0.07	0.06	0.16	0.16	0.04	0.33	0.57
Crit Moves:		***			***		****					****
Green/Cycle:	0.12	0.12	0.32	0.10	0.10	0.18	0.07	0.47	0.47	0.19	0.59	0.69
Volume/Cap:			0.18		0.82	0.38	0.82		0.33		0.56	0.82
Delay/Veh:			27.4		57.8	40.5		18.4	18.4		14.2	17.1
User DelAdj:			1.00		1.00	1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:			27.4			40.5		18.4	18.4		14.2	17.1
LOS by Move:			C			D	F		В	D	В	В
-		9		8		4	6		6	2		23
Note: Queue										_		
	-11-					- 1						

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project PM

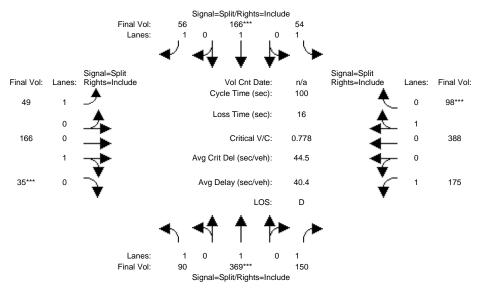
Intersection #8: Winslow & Brewster



Approach:	No	rth Boı	und			East Bound L - T - R			We	est Bo	und	
Movement:		- T -								L ·		- R
 Min. Green:	10	10	10	1	10	10	1	10	10	10		10
Y+R:	4.0		4.0		4.0			4.0	4.0			4.0
1+K•												
Volume Module			I	I		I	I		ı	I		ļ
Base Vol:	69	348	103	54	160	56	49	166	20	145	387	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	69	348	103	54	160	56	49	166	20	145	387	98
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:		348	103	54	160	56	49	166	20	145	387	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	69	348	103	54	160	56	49	166	20	145	387	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			103	54	160	56	49	166	20	145	387	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	69	348	103	54	160	56	49	166	20	145	387	98
Saturation F	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.98	0.98	0.95	0.97	0.97
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.89	0.11	1.00	0.80	0.20
Final Sat.:			1615		1900	1615		1669	201		1471	372
	1											
Capacity Ana												
Vol/Sat:		0.18	0.06	0.03	0.08	0.03	0.03	0.10	0.10	0.08	0.26	0.26
0110 110 100					****			****			****	
Green/Cycle:			0.24	0.11		0.11		0.13	0.13		0.35	0.35
Volume/Cap:			0.26	0.27		0.31		0.75	0.75		0.75	0.75
Delay/Veh:			30.9	41.3		41.8		53.8	53.8		33.5	33.5
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			30.9	41.3		41.8		53.8	53.8		33.5	33.5
LOS by Move:			C	D	Ε	D	D	D	D	C		C
HCM2kAvgQ:	2		3	. 2	7	_	1	-	7	3	13	13
Note: Queue	repor	ted is	the n	umber	oi ca	rs per	ıane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative PM

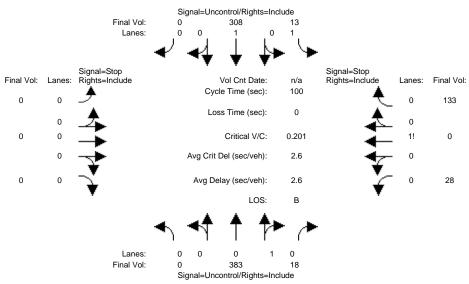
Intersection #8: Winslow & Brewster



Approach:								ast Bo		We	est Bo	und
Movement:		- T						- T		L -		- R
 Min. Green:	10	10	10	1	10	10	1	10	10	10		10
Y+R:	4.0		4.0		4.0			4.0	4.0			4.0
1+K•												
Volume Module			I	I		I	I		I	I		ļ
Base Vol:	69	348	103	54	160	56	49	166	20	145	387	98
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	69	348	103	54	160	56	49	166	20	145	387	98
Added Vol:	21	21	47	0	6	0	0	0	15	30	1	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	90	369	150	54	166	56	49	166	35	175	388	98
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	90	369	150	54	166	56	49	166	35	175	388	98
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	90	369	150	54	166	56	49	166	35	175	388	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	369	150	54	166	56	49	166	35	175	388	98
Saturation F	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.97	0.97	0.95	0.97	0.97
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.83	0.17	1.00	0.80	0.20
Final Sat.:			1615		1900	1615		1528	322	1805		372
	1											
Capacity Ana												
Vol/Sat:		0.19	0.09	0.03	0.09	0.03	0.03	0.11	0.11	0.10	0.26	0.26
0110 110 100					****				****			****
Green/Cycle:			0.25		0.11	0.11		0.14	0.14		0.34	0.34
Volume/Cap:			0.37	0.27		0.31		0.78	0.78		0.78	0.78
Delay/Veh:			31.6	41.3		41.8		55.5	55.5		35.9	35.9
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			31.6	41.3		41.8		55.5	55.5		35.9	35.9
LOS by Move:			C	D	E	D	D	E	E	C		D
HCM2kAvgQ:	2		4	. 2	7	2	1		8	4	14	14
Note: Queue	repor	ted is	the n	umber	oi ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) Cumulative No Project PM

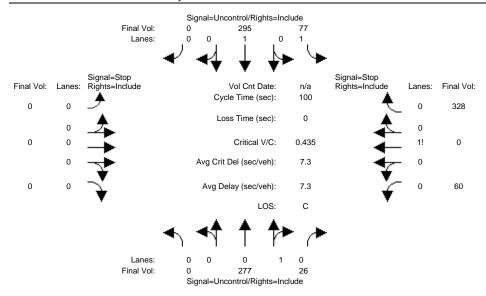
Intersection #9: Winslow & Driveway



			-		_							
Approach:	No	rth Bo	ound	Sot	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R	L ·	- T	- R
Volume Module	e:											
Base Vol:	0	383	18	13	308	0	0	0	0	28	0	133
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	383	18	13	308	0	0	0	0	28	0	133
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	383	18	13	308	0	0	0	0	28	0	133
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	383	18	13	308	0	0	0	0	28	0	133
Critical Gap	 Modu	le:		' '			' '			' '		'
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Modu	ule:											'
Cnflict Vol:	xxxx	xxxx	xxxxx	401	xxxx	xxxxx	xxxx	xxxx	xxxxx	726	726	392
Potent Cap.:					xxxx	xxxxx	xxxx	xxxx	xxxxx	394	354	661
Move Cap.:	xxxx	xxxx	xxxxx	1169	xxxx	xxxxx	xxxx	xxxx	xxxxx	391	350	661
Volume/Cap:	xxxx	xxxx	xxxx	0.01	xxxx	xxxx	xxxx	xxxx	xxxx	0.07	0.00	0.20
Level Of Serv	vice 1	Module	e:	' '			' '			' '		'
2Way95thQ:	xxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	8.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	А	*	*	*	*	*	*	*	*
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	590	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	1.1	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.4	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	В	*
ApproachDel:	x	xxxxx		x	xxxxx		x	xxxxx			13.4	
ApproachLOS:		*			*			*			В	
Note: Queue	repor	ted is	s the 1	number	of ca	ars pei	lane				_	
~ - ~	- I											

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative PM

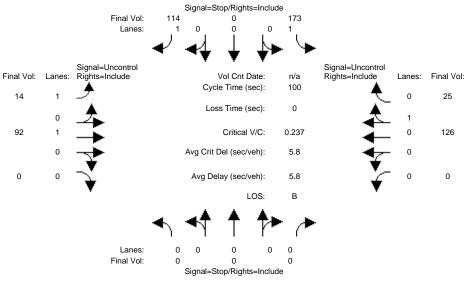
Intersection #9: Winslow & Driveway



Approach: North Bound South Bound East Bound	West Bound
Movement: $L - T - R$ $L - T - R$	
Volume Module:	
Base Vol: 0 383 18 13 308 0 0 0 0	28 0 133
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00 1.00 1.00
Initial Bse: 0 383 18 13 308 0 0 0 0	28 0 133
Added Vol: 0 0 7 51 0 0 0 0	21 0 89
Reassigned: 0 -106 1 13 -13 0 0 0 0	11 0 106
Initial Fut: 0 277 26 77 295 0 0 0	60 0 328
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00 1.00 1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00 1.00 1.00
PHF Volume: 0 277 26 77 295 0 0 0	60 0 328
Reduct Vol: 0 0 0 0 0 0 0 0	0 0 0
FinalVolume: 0 277 26 77 295 0 0 0	60 0 328
Critical Gap Module:	
Critical Gp:xxxxx xxxx xxxxx 4.1 xxxx xxxxx xxxxx xxxxx	6.4 6.5 6.2
FollowUpTim:xxxxx xxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxxx	3.5 4.0 3.3
Capacity Module:	
Cnflict Vol: xxxx xxxx xxxxx 303 xxxx xxxxx xxxx xx	739 739 290
Potent Cap.: xxxx xxxx xxxxx 1269 xxxx xxxxx xxxx xxxxx	388 347 754
Move Cap.: xxxx xxxx xxxxx 1269 xxxx xxxxx xxxx xxxxx	370 326 754
Volume/Cap: xxxx xxxx xxxx 0.06 xxxx xxxx xxxx xxxx	0.16 0.00 0.44
Level Of Service Module:	
2Way95thQ: xxxx xxxx xxxxx 0.2 xxxx xxxxx xxxx xxx	xxxx xxxx xxxxx
Control Del:xxxxx xxxx xxxxx 8.0 xxxx xxxxx xxxxx xxxxx xxxxx	xxxxx xxxx xxxxx
LOS by Move: * * * A * * * *	* * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT	LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxx xxxx	xxxx 650 xxxxx
SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx	xxxxx 4.0 xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx	
Shared LOS: * * * * * * * * *	* C *
ApproachDel: xxxxxx xxxxx xxxxxx	18.4
ApproachLOS: * * *	C
Note: Queue reported is the number of cars per lane.	

Level Of Service Computation Report 2000 HCM Unsignalized (Base Volume Alternative) Cumulative No Project PM

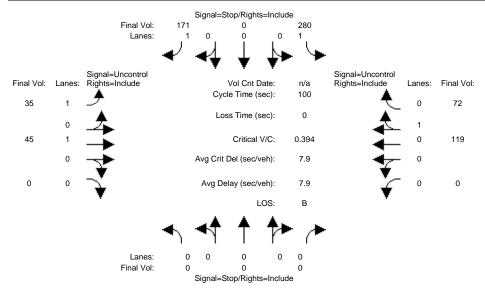
Intersection #10: Middlefield & Driveway



			Signa	ii=Stop/Rign	is=include							
Approach:	No	rth Bo	ound	Soi	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:												
Volume Module				' '			' '			' '		ı.
Base Vol:	0	0	0	173	0	114	14	92	0	0	126	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	173	0	114	14	92	0	0	126	25
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:			0	173	0	114			0	-		25
Reduct Vol:			0			0						0
FinalVolume:							14		-	0		
	1											
Critical Gap												
Critical Gp:												
FollowUpTim:	xxxxx	XXXX	XXXXX	3.5	xxxx	3.3						xxxxx
Capacity Mod												
Cnflict Vol:									xxxxx			
Potent Cap.:									xxxxx			XXXXX
Move Cap.:									xxxxx			XXXXX
Volume/Cap:					xxxx				XXXX			XXXX
	1											
Level Of Ser							0 0					
2Way95thQ:												
Control Del:									**	**	XXXX	xxxxx *
LOS by Move:						A						
Movement:												
Shared Cap.:												
SharedQueue:												
Shrd ConDel:	*	xxxx	xxxxx			*	xxxxx	xxxx	XXXXX	xxxxx	xxxx	xxxxx *
Shared LOS:												^
ApproachDel:		XXXXX *			10.7 B		X	XXXXX *		X	XXXXX *	
ApproachLOS:			a tho a	aumbara	_	220 200	r lana				^	
Note: Queue	repor	teu I	s the f	iuliber	OT G	ars be	т тапе	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative PM

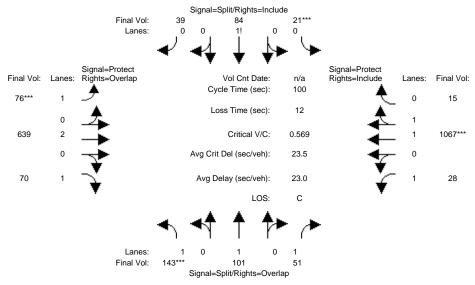
Intersection #10: Middlefield & Driveway



Approach:	No	rth Bo	ound	South Bound							est Bo	ound
Movement:											- T	- R
Volume Module												
Base Vol:	0	0	0	173	0	114	14	92	0	0	126	25
Growth Adj:		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	173	0	114	14	92	0	0	126	25
Added Vol:	0	0	0	60	0	15	17	0	0	0	0	40
Reassigned :	0	0	0	47	0	42	4	-47	0	0	-7	7
Initial Fut:	0	0	0	280	0	171	35	45	0	0	119	72
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	280	0	171	35	45	0	0	119	72
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	280	0	171	35	45	0	0	119	72
Critical Gap	Modu.	le:										
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	XXXXX	XXXXX	xxxx	XXXXX
FollowUpTim:										XXXXX		
Capacity Mod	ule:											
Cnflict Vol:	xxxx	xxxx	xxxxx	270	xxxx	155	191	xxxx	XXXXX	XXXX	xxxx	XXXXX
Potent Cap.:	xxxx	xxxx	xxxxx	724	xxxx	896	1395	xxxx	xxxxx	XXXX	xxxx	XXXXX
Move Cap.:	xxxx	xxxx	xxxxx	710	xxxx	896	1395	xxxx	xxxxx	XXXX	xxxx	XXXXX
Volume/Cap:	xxxx	xxxx	XXXX	0.39	xxxx	0.19	0.03	xxxx	XXXX	XXXX	xxxx	XXXX
Level Of Serv	vice D	Module	≘:									·
2Way95thQ:	xxxx	xxxx	xxxxx	1.9	xxxx	0.7	0.1	xxxx	xxxxx	XXXX	xxxx	XXXXX
Control Del:				13.3	xxxx	10.0	7.6	xxxx	xxxxx	xxxxx	xxxx	XXXXX
LOS by Move:	*	*	*	В	*	A	A	*	*	*	*	*
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT -	- LTR	- RT	LT -	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd ConDel:												
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	x	xxxxx			12.1		XX	xxxx		XX	xxxx	
ApproachLOS:		*			В			*			*	
Note: Queue	report	ted is	s the r	number	of ca	ars per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project PM

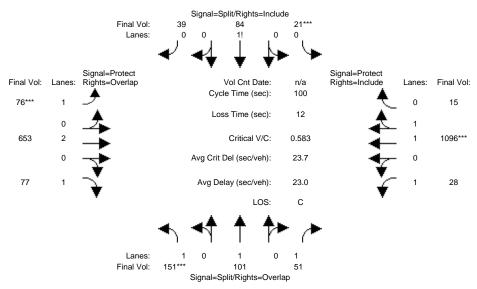
Intersection #11: Arguello & Whipple



Approach:	No	rth Boı	und	Sou	uth Bo	und				We	est Bo	und
Movement:		- T -			- T					L -		- R
 Min. Green:	10	10	10		10		7		10	7		10
Y+R:	4.0		4.0		4.0			4.0	4.0	4.0		4.0
Volume Module			1	ı		ı	I		ı	1		1
Base Vol:	143	101	51	21	84	39	76	639	70	28	1067	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	101	51	21	84	39	76	639	70	28	1067	15
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	143	101	51	21	84	39	76	639	70	28	1067	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:		1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00
PHF Volume:	143	101	51	21	84	39	76	639	70	28	1067	15
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:			51	21	84	39	76	639	70		1067	15
PCE Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			51	. 21	84	39		639	70		1067	15
	1											
Saturation F.			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.85	0.96		0.96		0.95	0.85		0.95	0.95
	1.00		1.00		0.58	0.27		2.00	1.00		1.97	0.03
Final Sat.:			1615		1060	492		3610	1615		3553	50 l
Capacity Anal	1											
Vol/Sat:		0.05	0.03	0 08	0.08	0.08	0 04	0.18	0.04	0 02	0.30	0.30
Crit Moves:	****	0.03	0.03	****	0.00	0.00	****	0.10	0.01	0.02	****	0.50
Green/Cycle:	0.14	0.14	0.31	0.14	0.14	0.14	0.07	0.43	0.57	0.17	0.53	0.53
Volume/Cap:			0.10		0.57	0.57		0.41	0.08		0.57	0.57
Delay/Veh:	43.3	40.1	24.7	43.3	43.3	43.3		19.8	9.7	35.1	16.4	16.4
User DelAdj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	43.3	40.1	24.7	43.3	43.3	43.3	50.5	19.8	9.7	35.1	16.4	16.4
LOS by Move:	D	D	C	D	D	D	D	В	A	D	В	В
HCM2kAvgQ:	5	3	1	5	5	5	2	7	1	1	12	12
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative PM

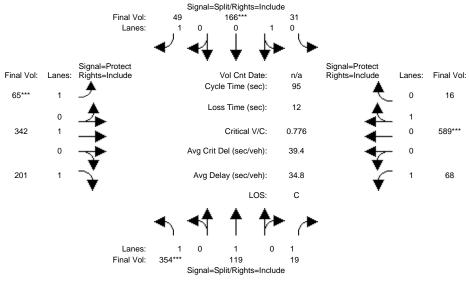
Intersection #11: Arguello & Whipple



Approach:	North Bound L - T - R				ıth Bo	und				We	est Bo	und
Movement:						- R					- T	
- Min. Green:	10	10	10		10		 7		10	7		10
Y+R:	4.0		4.0		4.0			4.0				4.0
Volume Module			ı	ı		ı	I		1	1		1
Base Vol:	143	101	51	21	84	39	76	639	70	28	1067	15
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	143	101	51	21	84	39	76	639	70	28	1067	15
	8	0	0	0	0	0	0	14	7	0	29	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	151	101	51	21	84	39	76	653	77	28	1096	15
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	151	101	51	21	84	39	76	653	77	28	1096	15
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	151	101	51	21	84	39	76	653	77	28	1096	15
PCE Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
FinalVolume:			51	21	84	39		653	77		1096	15
Saturation Flo												
		1900	1900	1900		1900	1900		1900		1900	1900
Adjustment:			0.85	0.96		0.96		0.95	0.85		0.95	0.95
Lanes:			1.00	0.15		0.27		2.00	1.00		1.97	0.03
Final Sat.:			1615		1060	492	1805		1615		3554	49
- Capacity Analy												
		0.05	0.03	0.08	0 00	0.08	0 04	0.18	0.05	0 02	0.31	0.31
	****	0.05	0.03	****	0.08	0.00	****	0.10	0.05	0.02	****	0.31
Green/Cycle:		0 1/	0.31		0.14	0.14		0.43	0.58	0 17	0.53	0.53
Volume/Cap:			0.10	0.58		0.58	0.58		0.08		0.58	0.58
Delay/Veh:			24.6	44.1		44.1		19.8	9.5		16.5	16.5
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
AdiDel/Veh:			24.6	44.1		44.1		19.8	9.5		16.5	16.5
LOS by Move:			Z 1.0	D	D		D	в).5 A	55.5 D	В	В
HCM2kAvq0:	5		1	5	5		2		1	1		12
Note: Queue re			_	-		_	_		_	_		

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project PM

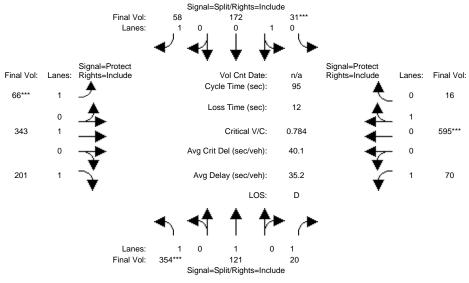
Intersection #12: Middlefield & Jefferson



Approach:	No	rth Bo	und	South Bound L - T - R			ast Bo	und	₩e	est Bo	und	
Movement:		- T ·						- T			- T	
Min. Green:		10			10			10		•	10	10
Y+R:		4.0			4.0				4.0		4.0	
Volume Modul												
Base Vol:	354			31		195	65		318	68	589	17
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:			53	31	166	195	65	342	318	68	589	17
Added Vol:			0	0	0	0	0	0	0	0	0	0
Reassigned :				0		0	0		0	0	0	0
Initial Fut:			53	31		195	65		318	68		17
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:			53	31	166	195	65	342	318	68	589	17
	0		34	0		146	0		117	0	0	1
Reduced Vol:			19	31		49	65	342	201	68	589	16
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00			1.00		1.00	1.00	1.00		1.00
FinalVolume:				31		49		342				16
	1											
Saturation F				1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:			1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.69	0.96		0.82		1.00	0.63	0.92		0.96
	1.00		1.00	0.16		1.00		1.00	1.00		0.97	0.03
Final Sat.:			1310		1536	1562		1900	1204	1745		48
Capacity Ana												
Vol/Sat:	_			0 11	0.11	0.03	0 04	0.18	0.17	0.04	U 33	0.33
	****	0.00	0.01	0.11		0.03	****	0.10	0.17	0.01	****	0.55
Green/Cycle:		0 25	0 25	0 13	0.13	0.13	0 07	0.34	0.34	0 14	0.41	0.41
Volume/Cap:			0.06		0.80	0.23		0.52	0.48	0.28		0.80
Delay/Veh:			27.0		56.9	37.3		25.6	25.4	37.1		30.7
User DelAdj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:				56.9		37.3		25.6	25.4		30.7	30.7
LOS by Move:					E		D			D D		C C
HCM2kAvgQ:				8		1	2			2		17
Note: Queue									3	_	- /	
~												

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative PM

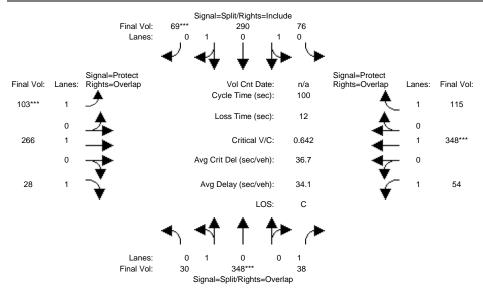
Intersection #12: Middlefield & Jefferson



Approach:				Sou	uth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T				- R					- T	
Min. Green:		 10		10				10		7		
Y+R:		4.0				4.0		4.0			4.0	
Volume Modul												
Base Vol:		119		31	166	195	65		318	68	589	17
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:			53	31	166	195	65	342	318	68	589	17
Added Vol:			1	0	6	9	1		0	2	6	0
Reassigned :				0		0	0		0	0	0	0
Initial Fut:			54	31	172	204	66		318	70		17
User Adj:		1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
PHF Volume:			54	31	172	204	66	343	318	70	595	17
Reduct Vol:			34	0		146	0		117	0	0	1
Reduced Vol:			20	31		58	66		201	70	595	16
PCE Adj:	1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00			1.00			1.00	1.00		1.00
FinalVolume:				31		58			201	70		16
	Į.											
Saturation F												
		1900	1900		1900			1900	1900	1900		1900
Adjustment:				0.96		0.82			0.63			0.96
Lanes:			1.00	0.15		1.00		1.00	1.00		0.97	0.03
Final Sat.:					1544	1562		1900	1204		1782	48
Capacity Ana				0 11	0 11	0 04	0 0 4	0 10	0 1 1	0 04	0 22	0 22
Vol/Sat:		0.07			0.11	0.04	0.04 ****	0.18	0.17	0.04		0.33
Crit Moves:		0 05		****	0 1 4	0 14			0 05	0 1 4	****	0 41
Green/Cycle:			0.25		0.14	0.14			0.35		0.41	0.41
Volume/Cap:			0.06	0.81		0.27		0.52	0.48		0.81	0.81
Delay/Veh:			27.2	57.5		37.4		25.6	25.3		31.2	31.2
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:							45.2		25.3	37.2		31.2
LOS by Move:							D		C	D		C
HCM2kAvgQ:			0	. 8					5	2	18	18
Note: Queue	repor	ted is	the n	umber	oi ca	ırs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project PM

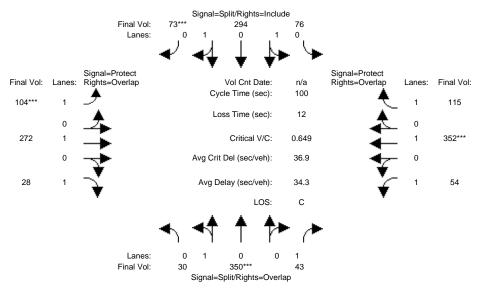
Intersection #13: Middlefield & Main



Approach: Movement:		rth Bo				und – R			und – R			
	10				10			10		•	10	10
Y+R:	4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:	30	348	38	76	290	69	103	266	28	54	348	115
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	30	348	38	76	290	69	103	266	28	54	348	115
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	30	348	38	76	290	69	103	266	28	54	348	115
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	30	348	38	76	290	69	103	266	28	54	348	115
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			38	76	290	69	103	266	28	54	348	115
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			38			69	103		28		348	115
Saturation Fl	Low Mo	odule:										
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
Adjustment:			0.85	0.92		0.92		1.00	0.85		1.00	0.85
		0.92	1.00		1.33	0.32	1.00	1.00	1.00		1.00	1.00
Final Sat.:			1615		2328	554		1900	1615		1900	1615
			- 1									
Capacity Anal	-											
	0.20		0.02	0.12	0.12	0.12		0.14	0.02	0.03	0.18	0.07
0110 110 100		****				****	****				****	
Green/Cycle:			0.44	0.19		0.19		0.25	0.56		0.29	0.48
Volume/Cap:			0.05	0.64		0.64		0.56	0.03		0.64	0.15
Delay/Veh:			16.3	39.2		39.2		34.3	9.8		33.9	14.7
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			16.3	39.2		39.2		34.3	9.8		33.9	14.7
LOS by Move:			В	D	D	D	D	C	A		С	В
HCM2kAvgQ:			_ 1	6	6	6	4	-	0	2	10	2
Note: Queue 1	repor	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative PM

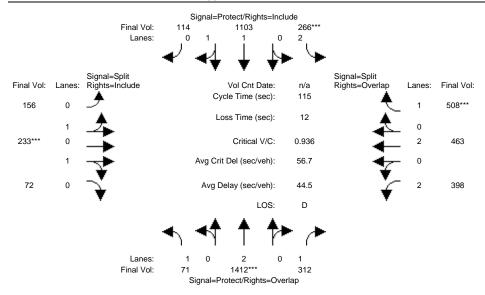
Intersection #13: Middlefield & Main



Approach:	No	rth Bo	und	South Bound L - T - R				ast Bo	und	West Bound L - T - R			
Movement:		- T						- T					
Min. Green:					10			10		•	10		
Y+R:		4.0			4.0			4.0			4.0		
Volume Modul	e:					·							
Base Vol:	30		38	76		69	103		28	54		115	
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Initial Bse:			38	76	290	69	103	266	28	54	348	115	
Added Vol:			5	0	4	4	1		0	0	4	0	
Reassigned :	0	0		0		0	0		0	0	0	0	
Initial Fut:			43	76		73	104		28	54		115	
User Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00	
PHF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00	
PHF Volume:		350	43	76	294	73	104		28	54	352	115	
Reduct Vol:			0	0		0	0		0	0	0	0	
Reduced Vol:			43	76		73	104		28	54		115	
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00	
MLF Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00	
FinalVolume:				76		73		272	28			115	
Saturation F	1												
	1900		1900	1000	1900	1900	1000	1900	1900	1900	1000	1900	
Adjustment:			0.85	0.92		0.92		1.00	0.85	0.95		0.85	
Lanes:			1.00			0.32		1.00	1.00	1.00		1.00	
Final Sat.:			1615			575		1900	1615	1805		1615	
Capacity Ana				I		I	ļ		I	İ		ļ	
Vol/Sat:			0.03	0.13	0.13	0.13	0.06	0.14	0.02	0.03	0.19	0.07	
Crit Moves:						***	****				***		
Green/Cycle:			0.43	0.20	0.20	0.20	0.09	0.25	0.56	0.12	0.29	0.48	
Volume/Cap:	0.65	0.65	0.06	0.65	0.65	0.65	0.65	0.57	0.03	0.24	0.65	0.15	
Delay/Veh:	32.4	32.4	16.6	39.2	39.2	39.2	53.0	34.3	9.8	40.2	34.1	14.6	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
AdjDel/Veh:	32.4	32.4	16.6	39.2	39.2	39.2	53.0	34.3	9.8	40.2	34.1	14.6	
LOS by Move:	С	C	В	D	D	D	D	-		D	С	В	
HCM2kAvgQ:	11	11	1	6	6	6	4	8	0	2	10	2	
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project PM

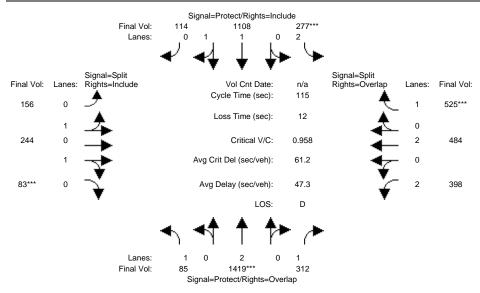
Intersection #14: El Camino Real and Whipple Av



Street Name:							Whipple Av East Bound West Bound					
Movement:	L ·	- T	- R	L -	- T	- R	Г -	- T	- R	L -	- T	
		10							10			
Y+R:		4.0			4.0			4.0				
Volume Module												
		1412	312	266	1103	114	156	233	72	398	463	508
Growth Adj:				1.00		1.00		1.00	1.00	1.00		1.00
Initial Bse:			312		1103	114	156	233	72	398	463	508
Added Vol:			0	0	0	0	0	0	0	0	0	0
Reassigned:				0	-		0		0	0		0
Initial Fut:			312		1103		156		72	398		508
User Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Adj:			1.00	1.00		1.00	1.00		1.00	1.00		1.00
PHF Volume:			312		1103	114	156	233	72	398	463	508
Reduct Vol:		0		0	0	0	0	0	0	0		0
Reduced Vol:	71	1412	312		1103		156	233	72			508
			1.00	1.00		1.00		1.00	1.00	1.00		1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
FinalVolume:			312			114	156		72	398		508
Saturation Fl				1			ı		'	1		1
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.94	0.94	0.91	0.91	0.91	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	2.00	1.81	0.19	0.68	1.01	0.31	2.00	2.00	1.00
Final Sat.:	1805	3610				333	1173	1752	541	3502	3610	1615
Capacity Anal												
Vol/Sat:	0.04	0.39	0.19	0.08	0.34	0.34	0.13	0.13	0.13	0.11	0.13	0.31
Crit Moves:		****		****				****				****
Green/Cycle:	0.08	0.42	0.67	0.08	0.42	0.42	0.14	0.14	0.14	0.25	0.25	0.34
Volume/Cap:	0.52	0.94	0.29	0.94	0.81	0.81	0.94	0.94	0.94	0.45	0.50	0.94
Delay/Veh:	54.8	43.3	7.8	89.2	32.4	32.4	74.4	74.4	74.4	36.4	37.1	60.9
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:			7.8	89.2	32.4	32.4	74.4	74.4	74.4	36.4	37.1	60.9
LOS by Move:	D	D	А				E			D	D	E
HCM2kAvgQ:	2	27	4	8	21	21	12	12	12	6	7	19
Note: Queue 1			the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative PM

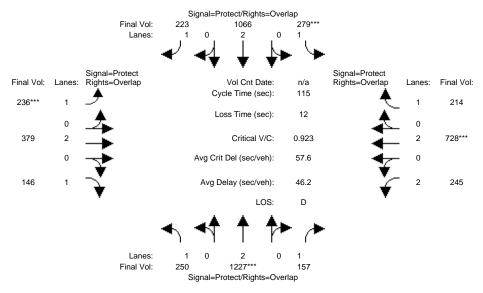
Intersection #14: El Camino Real and Whipple Av



Street Name: Approach:	No	E: rth Boi	l Cami:	no Rea Soi	al ith Bo	und	Whipple Av East Bound West Bound					
Movement:	L ·	- T ·	- R	ь -	- T	– R	L -	- T	– R	L -	- T	- R
Min. Green: Y+R:	7 4.0	10 4.0	10 4.0	7 4.0	10 4.0	10 4.0	10 4.0	10 4.0	10 4.0	10 4.0	10	10
Volume Module												
Base Vol:		1412	312	266	1103	114	156	233	72	398	463	508
Growth Adj:		1.00	1.00	1.00		1.00	1.00		1.00		1.00	1.00
Initial Bse:		1412	312		1103	114	156	233	72	398	463	508
Added Vol:	14		0	11	5	0	0	11	11	0	21	17
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			312		1108	114	156	244	83	398		525
User Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	85	1419	312	277	1108	114	156	244	83	398	484	525
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	85	1419	312	277	1108	114	156	244	83	398	484	525
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	85	1419	312	277	1108	114	156	244	83	398	484	525
Saturation F	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.95	0.85	0.92	0.94	0.94	0.91	0.91	0.91	0.92	0.95	0.85
Lanes:	1.00	2.00	1.00	2.00	1.81	0.19	0.65	1.01	0.34	2.00	2.00	1.00
Final Sat.:			1615			332		1748	595	3502	3610	1615
Capacity Anal	lysis	Module	e:									
Vol/Sat:	0.05	0.39	0.19	0.08	0.34	0.34	0.14	0.14	0.14	0.11	0.13	
Crit Moves:		****		****					****			***
Green/Cycle:	0.07	0.41	0.67	0.08	0.42	0.42	0.15	0.15	0.15	0.26	0.26	0.34
Volume/Cap:	0.63	0.96	0.29	0.96	0.82	0.82	0.96	0.96	0.96	0.44	0.52	0.96
Delay/Veh:	61.3		8.0	93.9	33.3	33.3	78.3	78.3	78.3	36.2	37.2	65.2
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			8.0	93.9		33.3	78.3	78.3	78.3	36.2	37.2	65.2
LOS by Move:			A	F	_	С	E	E	E	D		E
HCM2kAvgQ:			4	8	22	22	13		13	6	7	21
Note: Queue	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project PM

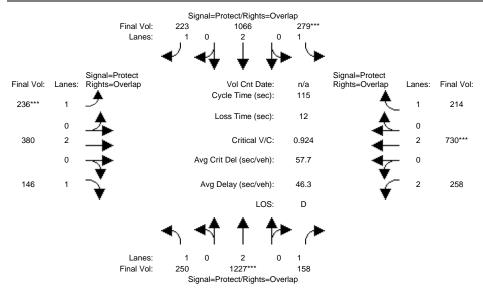
Intersection #15: El Camino Real and Jefferson Ave



		El Camino Real North Bound South Bound						Jefferson Ave					
											est Bo		
Movement:													
Min. Green:		10			 10						10		
Y+R:		4.0			4.0			4.0				4.0	
 Volume Module													
		1227	157	279	1066	223	236	379	146	245	728	214	
Growth Adj:				1.00		1.00		1.00	1.00		1.00	1.00	
Initial Bse:		1227	157		1066	223	236	379	146	245	728	214	
Added Vol:			0	0	0	0	0		0	0	0	0	
Reassigned:			0	0	-	0	0		0	0	-	0	
Initial Fut:					1066	223	236		146	245		214	
User Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00	
PHF Volume:			157		1066	223	236	379	146	245	728	214	
			0	0		0	0		0	0	0	0	
Reduced Vol:		1227	157		1066	223	236		146	245	-	214	
		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00	
MLF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00	
FinalVolume:				279		223	236		146	245		214	
Saturation Fl							1			1			
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	
Adjustment:	0.95	0.95	0.85	0.95	0.95	0.85	0.95	0.95	0.85	0.92	0.95	0.85	
Lanes:	1.00	2.00	1.00	1.00	2.00	1.00	1.00	2.00	1.00	2.00	2.00	1.00	
Final Sat.:	1805	3610	1615	1805	3610	1615	1805	3610	1615		3610	1615	
Capacity Anal						'	'		'	'		'	
Vol/Sat:	0.14	0.34	0.10	0.15	0.30	0.14	0.13	0.10	0.09	0.07	0.20	0.13	
Crit Moves:		****		****			****				****		
Green/Cycle:	0.17	0.37	0.51	0.17	0.36	0.51	0.14	0.22	0.39	0.14	0.22	0.39	
Volume/Cap:	0.81	0.92	0.19	0.92	0.81	0.27	0.92	0.49	0.23	0.49	0.92	0.34	
Delay/Veh:	60.6	45.6	15.3	79.6	36.8	16.4	85.0	40.0	23.9	46.0	60.3	25.3	
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	
AdjDel/Veh:			15.3	79.6		16.4		40.0	23.9		60.3	25.3	
LOS by Move:	E		В	E	D	В	F		С	D	E	С	
HCM2kAvgQ:	11	26	3	11	19	4	12	6	3	4	14	5	
Note: Queue 1	repor	ted is	the n	umber	of ca	rs per	lane						

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative PM

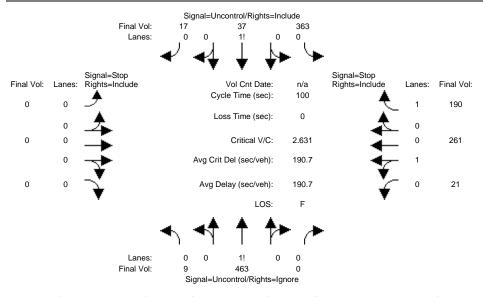
Intersection #15: El Camino Real and Jefferson Ave



Street Name: El Camino Real Jefferson Ave Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T - R L - T - R L - T - R
Min. Green: 7 10 10 7 10 10 7 10 10 7 10 10 7 10 10 Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Y+R: 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0 4.0
Volume Module: Base Vol: 250 1227 157 279 1066 223 236 379 146 245 728 214 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Base Vol: 250 1227 157 279 1066 223 236 379 146 245 728 214 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Initial Bse: 250 1227 157 279 1066 223 236 379 146 245 728 214
Added Vol: 0 0 1 0 0 0 1 0 13 2 0
Reassigned: 0 0 0 0 0 0 0 0 0 0 0
Initial Fut: 250 1227 158 279 1066 223 236 380 146 258 730 214
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Volume: 250 1227 158 279 1066 223 236 380 146 258 730 214
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Reduced Vol: 250 1227 158 279 1066 223 236 380 146 258 730 214
PCE Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
MLF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
FinalVolume: 250 1227 158 279 1066 223 236 380 146 258 730 214
Saturation Flow Module:
Sat/Lane: 1900 1900 1900 1900 1900 1900 1900 190
Adjustment: 0.95 0.95 0.85 0.95 0.95 0.85 0.95 0.95 0.85
Lanes: 1.00 2.00 1.00 1.00 2.00 1.00 2.00 1.00 2.00 2
Final Sat.: 1805 3610 1615 1805 3610 1615 1805 3610 1615 3502 3610 1615
Capacity Analysis Module:
Vol/Sat: 0.14 0.34 0.10 0.15 0.30 0.14 0.13 0.11 0.09 0.07 0.20 0.13
Crit Moves: **** **** ****
Green/Cycle: 0.17 0.37 0.52 0.17 0.36 0.51 0.14 0.21 0.38 0.15 0.22 0.39
Volume/Cap: 0.81 0.92 0.19 0.92 0.81 0.27 0.92 0.50 0.24 0.50 0.92 0.34
Delay/Veh: 60.7 45.7 15.0 79.7 36.9 16.5 85.1 40.4 24.3 45.8 60.4 25.3
User DelAdj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
AdjDel/Veh: 60.7 45.7 15.0 79.7 36.9 16.5 85.1 40.4 24.3 45.8 60.4 25.3
LOS by Move: E D B E D B F D C D E C
HCM2kAvqQ: 11 26 3 11 19 4 12 7 3 4 14 5
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative No Project PM

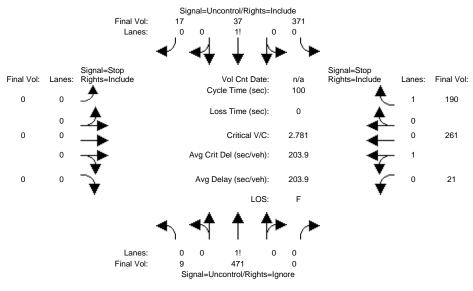
Intersection #16: Main & WB Woodside Ramps



Approach:	No	rth Bo	ound	Sou	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:												
Volume Module	e:											
Base Vol:	8	426	261	334	34	16	0	0	0	19	240	175
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	8	426	261	334	34	16	0	0	0	19	240	175
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	8	426	261	334	34	16	0	0	0	19	240	175
User Adj:	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.92	0.92	0.00	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
	9	463	0	363	37	17	0	0	0	21	261	190
Reduct Vol:			0	0	0	0	0	0	0	0	0	0
FinalVolume:	9	463	0	363	37	17	0	0	0	21	261	190
Critical Gap	Modu:	le:										
Critical Gp:	4.1	xxxx	xxxxx	4.1	XXXX	xxxxx	xxxxx	xxxx	XXXXX	6.4	6.5	6.2
FollowUpTim:	2.2	xxxx	xxxxx	2.2	XXXX	xxxxx	xxxxx	xxxx	XXXXX	3.5	4.0	3.3
Capacity Mod	ule:											
Cnflict Vol:	54	xxxx	xxxxx	463	XXXX	xxxxx	XXXX	xxxx	XXXXX	1252	1261	463
Potent Cap.:	1551	xxxx	xxxxx	1098	XXXX	xxxxx	XXXX	xxxx	XXXXX	190	170	599
Move Cap.:	1551	xxxx	xxxxx	1098	XXXX	xxxxx	XXXX	xxxx	XXXXX	128	99	599
Volume/Cap:	0.01	xxxx	XXXX	0.33	XXXX	XXXX	XXXX	xxxx	XXXX	0.16	2.63	0.32
Level Of Serv	vice D	Module	≘:									
2Way95thQ:	0.0	xxxx	xxxxx	1.5	XXXX	XXXXX	XXXX	xxxx	XXXXX	XXXX	XXXX	1.4
Control Del:				9.9					XXXXX			13.8
LOS by Move:	A	*	*	A	*	*	*	*	*	*	*	В
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	XXXX	XXXX	xxxxx	XXXX	xxxx	XXXXX	101	XXXX	XXXXX
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	xxxx	XXXXX	26.6	XXXX	XXXXX
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	XXXX	xxxxx	xxxxx	xxxx	XXXXX	899.6	XXXX	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	F	*	*
ApproachDel:	X	xxxxx		X			X			į	542.4	
ApproachLOS:		*			*			*			F	
Note: Queue	report	ted is	s the r	number	of ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative PM

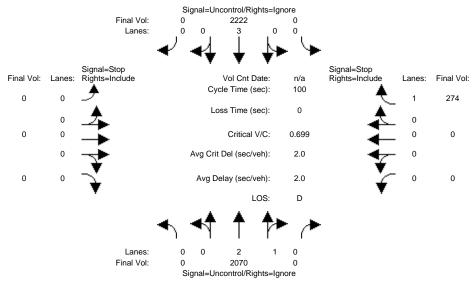
Intersection #16: Main & WB Woodside Ramps



Approach:											est Bo	
Movement:												
Volume Module								_	_			
Base Vol:		426		334			0		0			175
Growth Adj:			1.00		1.00	1.00		1.00			1.00	1.00
Initial Bse:			261	334	34	16	0	0	0	19	240	175
Added Vol:	0		0	7	0	0	0	0	0	0	0	0
Reassigned:			0	0	0	0	0	0	0	0	0	0
Initial Fut:			261	341	34	16	0	0	0	19	240	175
User Adj:	1.00		0.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		0.92	0.00		0.92	0.92		0.92	0.92		0.92	0.92
PHF Volume:			0	371	37	17	0	0	0	21	261	190
Reduct Vol:	_	-	0	0	0	0	0		0	0	0	0
FinalVolume:					37		0	-	0			190
Critical Gap												
Critical Gp:												6.2
FollowUpTim:												3.3
Capacity Mod				4.7.1						1000	1004	4.7.1
Cnflict Vol:											1284	471
Potent Cap.:											165	593
Move Cap.:						xxxxx			XXXXX		94	593
Volume/Cap:						XXXX			XXXX		2.78	0.32
Level Of Ser	1											
2Way95thO:				1 5								1.4
Control Del:									XXXXX			13.9
LOS by Move:									*		*	13.9 B
												_
Movement:			- RT									
Shared Cap.:												
SharedQueue:												XXXXX
Shrd ConDel:	XXXXX *							XXXX *		9/3.9 F	XXXX *	XXXXX *
Shared LOS:									*	-		*
ApproachDel:				X	XXXXX *		X	XXXXX *		;	586.8	
ApproachLOS:				,			-				F	
Note: Queue :	repor	ted is	s the r	number	oi ca	ars per	r lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative No Project PM

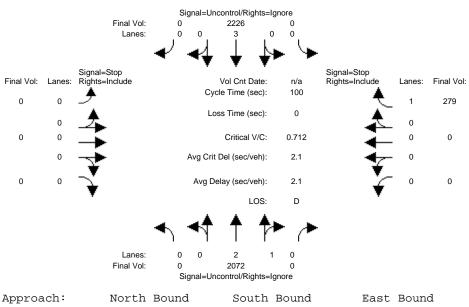
Intersection #17: El Camino Real & Laurel St



Approach: Movement:	-		ound - R			ound - R			ound - R		est Bo - T	
Volume Module	≘ :											
Base Vol:	-	2070	371	-	2222	0	0	0	0	0	0	274
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:	0	2070	371	0	2222	0	0	0	0	0	0	274
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned :		0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	2070	371	0	2222	0	0	0	0	0	0	274
User Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	2070	0	0	2222	0	0	0	0	0	0	274
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:		2070	0		2222	0	0	0	0	0	0	274
Critical Gap												
Critical Gp:>												6.9
FollowUpTim:3												3.3
Capacity Modu												
Cnflict Vol:						XXXXX			XXXXX		XXXX	690
Potent Cap.:						XXXXX			XXXXX		XXXX	392
Move Cap.:						XXXXX			XXXXX		XXXX	392
Volume/Cap:						XXXX			XXXX		XXXX	0.70
Level Of Serv												
2Way95thQ:												
Control Del:3												32.9
LOS by Move:			*	*	*	*	*	*	*	*	*	D
Movement:									- RT	LT -	- LTR	- RT
Shared Cap.:												XXXXX
SharedQueue:	XXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	XXXX	XXXXX	XXXXX	xxxx	XXXXX
Shrd ConDel:3												XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	X	xxxxx		XX	XXXXX		X	XXXXX			32.9	
ApproachLOS:		*			*			*			D	
Note: Queue 1	report	ted is	s the r	number	of ca	ars per	lane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative PM

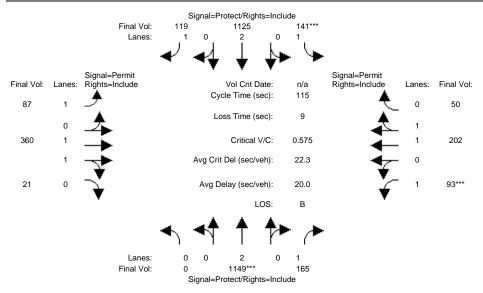
Intersection #17: El Camino Real & Laurel St



Approach: North Bound South Bound East Bound West Bound Movement: L - T - R L - T - R L - T	
Volume Module:	
Base Vol: 0 2070 371 0 2222 0 0 0 0 0	274
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00
Initial Bse: 0 2070 371 0 2222 0 0 0 0 0 0	274
Added Vol: 0 2 0 0 4 0 0 0 0 0	5
Reassigned: 0 0 0 0 0 0 0 0 0 0 0	0
Initial Fut: 0 2072 371 0 2226 0 0 0 0 0 0	279
User Adj: 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.0	1.00
PHF Adj: 1.00 1.00 0.00 1.00 1.00 0.00 1.00 1.0	1.00
PHF Volume: 0 2072 0 0 2226 0 0 0 0 0	279
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0	0
FinalVolume: 0 2072 0 0 2226 0 0 0 0 0 0	279
Critical Gap Module:	
Critical Gp:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx	6.9
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx	3.3
Capacity Module:	
Cnflict Vol: xxxx xxxx xxxxx xxxx xxxx xxxx xxxx	691
Potent Cap.: xxxx xxxx xxxxx xxxx xxxx xxxx xxxx	392
Move Cap.: xxxx xxxx xxxxx xxxx xxxx xxxx xxxx	392
Volume/Cap: xxxx xxxx xxxx xxxx xxxx xxxx xxxx x	0.71
Level Of Service Module:	
2Way95thQ: xxxx xxxx xxxxx xxxx xxxx xxxx xxxx	5.4
Control Del:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx	33.9
LOS by Move: * * * * * * * * * *	D
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR	- RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxx xxxx	XXXXX
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx	xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx	xxxxx
Shared LOS: * * * * * * * * * * *	*
ApproachDel: xxxxxx xxxxxx xxxxxx 33.9	
ApproachLOS: * * * D	
Note: Queue reported is the number of cars per lane.	

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project PM

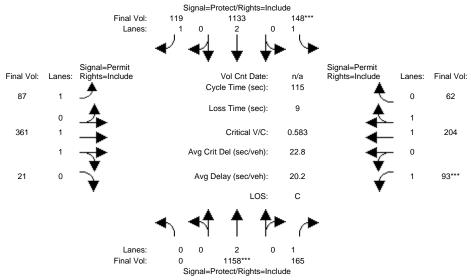
Intersection #18: El Camino Real & Brewster



Approach: Movement:	No	rth Bo	und	Sou	ıth Bo	ound	E	ast Bo	und	₩e	st Bo	und
Movement:												
Min. Green:												
Y+R:						4.0						
Volume Module				•						•		
Base Vol:	0	1149	165	141	1125	119	87	360	21	93	202	50
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	1149	165	141	1125	119	87		21	93	202	50
Added Vol:	0		0	0	0	0	0			0	0	0
Reassigned :	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	0	1149	165	141	1125	119	87	360	21	93	202	50
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	1149	165		1125	119	87	360	21	93	202	50
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	0	1149	165	141	1125	119	87	360	21	93	202	50
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:						1.00		1.00	1.00			1.00
FinalVolume:						119			21			50
Saturation Fl												
Sat/Lane:			1900		1900	1900		1900	1900			1900
Adjustment:			0.85	0.95		0.85		0.94	0.94			0.92
Lanes:			1.00	1.00		1.00		1.89	0.11			0.40
Final Sat.:			1615		3610				197			695
Capacity Anal					0 01			0 11	0 11	0 10		0 00
Vol/Sat:					0.31	0.07	0.09	0.11	0.11		0.07	0.07
Crit Moves:				****	0 60	0 60	0 00		0 00	****	0 00	0 00
Green/Cycle:						0.69		0.23	0.23	0.23		0.23
Volume/Cap:					0.45	0.11		0.46	0.46	0.57		0.31
Delay/Veh:			12.9			6.0		38.4	38.4	44.1		36.8
User DelAdj:				1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:	0.0	1/.2	12.9			6.0		38.4	38.4	44.1		36.8
LOS by Move: HCM2kAvgQ:	A	1.4	В	D	A	A 1	D	D	D 6			D
									6	4	4	4
Note: Queue 1	repor	tea is	tne n	umber	or ca	rs per	Tane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative PM

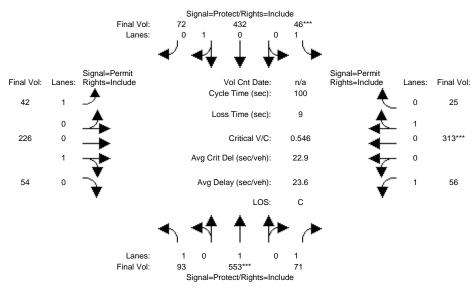
Intersection #18: El Camino Real & Brewster



Approach:	No	rth Bo	und	Soi	ıth Bo	und	Ea	ast Bo	und	We	est Bo	und
		- T				- R			- R			- R
Min. Green:	0	10	10	7	10	10	10	10		10	10	10
Y+R:		4.0			4.0			4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:		1149	165		1125	119	87	360	21	93	202	50
Growth Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:		1149	165		1125	119	87	360	21	93	202	50
Added Vol:	0		0	7	8	0	0	1	0	0	2	12
Reassigned :	0		0	0	0	0	0	0	0	0	0	0
Initial Fut:			165		1133	119	87		21	93	204	62
	1.00		1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:			165		1133	119	87	361	21	93	204	62
Reduct Vol:	0		0	0	0	0	0	0	0	0	0	0
Reduced Vol:			165		1133	119	87	361	21	93	204	62
PCE Adj:	1.00	1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00			1.00		1.00	1.00		1.00	1.00
FinalVolume:				148		119		361	21	93		62
			1									
Saturation Fl												
Sat/Lane:		1900			1900	1900		1900	1900		1900	1900
Adjustment:			0.85	0.95		0.85		0.94	0.94		0.92	0.92
Lanes:			1.00		2.00	1.00		1.89	0.11		1.53	0.47
Final Sat.:			1615		3610	1615		3384		692		812
Capacity Anal	-			0 00	0 01	0 00	0 00	0 11	0 11	0 10	0 00	0 00
Vol/Sat:			0.10	0.08 ****	0.31	0.07	0.09	0.11	0.11	0.13 ****	0.08	0.08
Crit Moves:			0 55		0 60	0 60	0 00	0 00	0 00		0 00	0 00
Green/Cycle:					0.69	0.69		0.23	0.23		0.23	0.23
Volume/Cap:			0.19		0.45	0.11		0.46	0.46		0.33	0.33
Delay/Veh:			13.0	49.7		6.0		38.5	38.5	44.7		37.1
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:			13.0			6.0		38.5	38.5		37.1	37.1
LOS by Move:			_	D		A	D	D	D	D	D	D
HCM2kAvgQ:			3	5	9		_		6	4	4	4
Note: Queue 1	report	tea is	the n	unper	or ca	rs per	ıane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative No Project PM

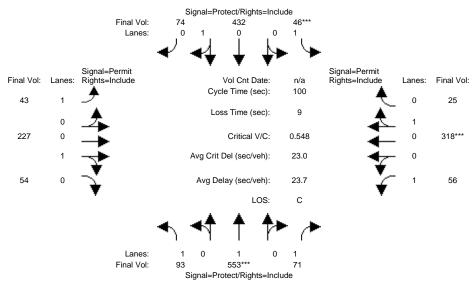
Intersection #19: Marshall St & Jefferson Ave



Approach:	No	rth Bo	und	Sou	uth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T				- R		- T			- T	
 Min. Green:		10		7		10		10	10	•	10	10
Y+R:		4.0	4.0		4.0			4.0				
1+K•												
Volume Module			I	I		I	I		ı	I		ļ
Base Vol:	93	553	71	46	432	72	42	226	54	56	313	25
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	93	553	71	46	432	72	42	226	54	56	313	25
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:			71	46	432	72	42	226	54	56	313	25
User Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	93	553	71	46	432	72	42	226	54	56	313	25
	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			71	46	432	72	42	226	54	56	313	25
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	93	553	71	46	432	72	42	226	54	56	313	25
Saturation F	low M	odule:	·			•			·			
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	0.98	0.98	0.33	0.97	0.97	0.41	0.99	0.99
Lanes:	1.00	1.00	1.00	1.00	0.86	0.14	1.00	0.81	0.19	1.00	0.93	0.07
Final Sat.:			1615		1594	266		1489	356		1740	139
	1											
Capacity Ana												
Vol/Sat:		0.29	0.04		0.27	0.27	0.07	0.15	0.15	0.07	0.18	0.18
0110 110 100				****							****	
Green/Cycle:			0.52		0.47	0.47		0.32	0.32		0.32	0.32
Volume/Cap:			0.08		0.58	0.58		0.47	0.47		0.56	0.56
Delay/Veh:			12.1		20.4	20.4		27.8	27.8		29.3	29.3
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:			12.1	46.2		20.4	25.2		27.8		29.3	29.3
LOS by Move:			В	D		C	С	С	С	С		С
HCM2kAvgQ:	3		1	2	12	12	1		7	1	9	9
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative PM

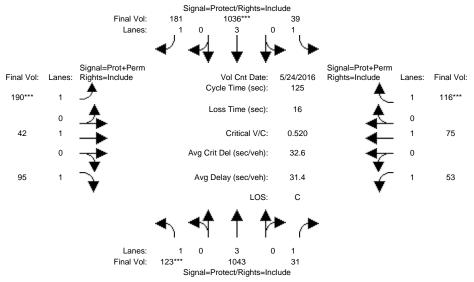
Intersection #19: Marshall St & Jefferson Ave



Approach:	No	rth Bo	und	Soi	ıth Bo	und	Ea	ast Bo	und	₩e	est Bo	und
Movement:		- T			- T			- T			- T	- R
Min. Green:	7	10	10	7	10	10	10	10	10	10	10	10
Y+R:		4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0
Volume Module												
Base Vol:	93	553	71	46	432	72	42	226	54	56	313	25
Growth Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
Initial Bse:		553	71	46	432	72	42	226	54	56	313	25
Added Vol:	0	0	0	0	0	2	1	1	0	0	5	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	93		71	46	432	74	43		54	56	318	25
User Adj:		1.00	1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:		1.00	1.00		1.00	1.00		1.00	1.00	1.00		1.00
PHF Volume:	93	553 0	71 0	46 0	432	74	43	227 0	54 0	56	318	25
Reduct Vol: Reduced Vol:	0 93		71	46	0 432	0 74	43	227	54	0 56	0 318	0 25
PCE Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
MLF Adj:			1.00		1.00	1.00		1.00	1.00	1.00		1.00
FinalVolume:		553	71		432	74	43		54	56		25
Saturation F	ı		I	I		I	I		ı	I		I
Sat/Lane:		1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
	0.95		0.85	0.95		0.98		0.97	0.97	0.41		0.99
Lanes:		1.00	1.00	1.00	0.85	0.15	1.00	0.81	0.19	1.00	0.93	0.07
Final Sat.:	1805	1900	1615	1805	1586	272	629	1490	355	779	1742	137
Capacity Ana	lysis	Modul	e:									
Vol/Sat:	0.05	0.29	0.04	0.03	0.27	0.27	0.07	0.15	0.15	0.07	0.18	0.18
Crit Moves:		****		****							****	
Green/Cycle:	0.12	0.52	0.52	0.07	0.47	0.47	0.32	0.32	0.32	0.32		0.32
Volume/Cap:			0.09	0.36		0.58		0.47	0.47	0.22		0.56
Delay/Veh:			12.3	46.2		20.6		27.6	27.6	25.1		29.2
User DelAdj:			1.00	1.00		1.00		1.00	1.00	1.00		1.00
AdjDel/Veh:			12.3	46.2		20.6		27.6	27.6	25.1		29.2
LOS by Move:			В	D	C	C	C	C	C	C	C	C
HCM2kAvgQ:	3		1	2	12	12	1	•	7	1	9	9
Note: Queue	repor	ted is	the n	umber	oi ca	rs per	ıane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj Alt Access PM

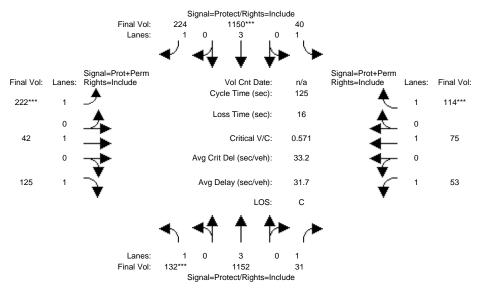
Intersection #2: Veterans & Brewster



Approach:	No	rth Bo	und	Sou	ıth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:	L ·		- R			- R		- T		. L -	- T	- R
						10	 7		 10			
Min. Green:	7		10 4.0		10 4.0	4.0			4.0	7	10	10
Y+R:		4.0						4.0		4.0		4.0
Volume Module						6 << 4						
Base Vol:	119	990	31	39	961	194	153	42	95	53	75	116
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Initial Bse:		990	31	39	961	194	153	42	95	53	75	116
Added Vol:	4	53	0	0	62	0	37	0	0	0	0	0
Reassigned:	0	0	0	0	13	-13	0	0	0	0	0	0
Initial Fut:	123	1043	31	39	1036	181	190	42	95	53	75	116
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	123	1043	31	39	1036	181	190	42	95	53	75	116
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			31	39	1036	181	190	42	95	53	75	116
PCE Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
MLF Adj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
FinalVolume:			31			181	190	42	95	53	75	116
Saturation Fl			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
Sat/Lane:		1900	1900	1900		1900		1900	1900		1900	1900
Adjustment: Lanes:	0.95	3.00	0.85	0.95		0.85		1.00	0.85		1.00	0.85 1.00
Final Sat.:			1615		5187	1.00 1615		1900	1615		1900	1615
Capacity Anal				I		ı	I		ı	1		ı
Vol/Sat:	-	0.20	0.02	0.02	0.20	0.11	0.11	0.02	0.06	0.03	0.04	0.07
	****	0.20	0.02	0.02	****	0.11	****	0.02	0.00	0.00	0.01	****
Green/Cycle:	0.13	0.41	0.41	0.11	0.39	0.39	0.38	0.20	0.20	0.28	0.14	0.14
Volume/Cap:			0.05	0.19	0.51	0.29		0.11	0.29		0.28	0.51
Delay/Veh:	52.2	27.4	22.2	50.6	29.1	26.3	27.4	40.6	42.5	33.2	48.6	51.6
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	52.2	27.4	22.2	50.6	29.1	26.3	27.4	40.6	42.5	33.2	48.6	51.6
LOS by Move:	D	С	C	D	С	C	С	D	D	C	D	D
HCM2kAvgQ:	5		1	1	11	5	5	_	3	1	3	5
Note: Queue 1	report	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj Alt Access PM

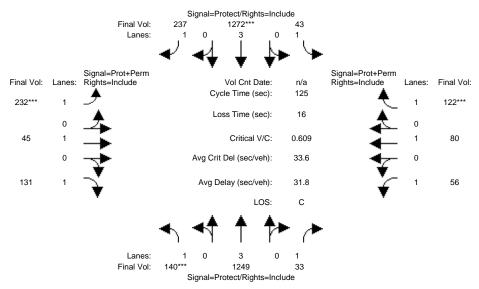
Intersection #2: Veterans & Brewster



Approach:	No	rth Boı	und	Sou	ıth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T -			- T			- T			- T	
Min. Green:		10		7		10	 7		10	7		10
Y+R:		4.0	4.0		4.0			4.0	4.0			4.0
Volume Module			1	ı		ı	I		1	1		1
Base Vol:	128	1099	31	40	1075	237	185	42	125	53	75	114
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	128	1099	31	40	1075	237	185	42	125	53	75	114
Added Vol:	4	53	0	0	62	0	37	0	0	0	0	0
Reassigned :	0	0	0	0	13	-13	0	0	0	0	0	0
Initial Fut:	132	1152	31	40	1150	224	222	42	125	53	75	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	132	1152	31	40	1150	224	222	42	125	53	75	114
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	132	1152	31	40	1150	224	222	42	125	53	75	114
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			31			224	222		125	53	75	114
	l .											
Saturation Fl												
Sat/Lane:		1900	1900	1900		1900	1900		1900		1900	1900
Adjustment:			0.85	0.95		0.85		1.00	0.85		1.00	0.85
	1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
Final Sat.:			1615		5187	1615	1805		1615		1900	1615
	1											
Capacity Anal	_				0 00	0 14	0 10	0 00		0 00	0 0 1	0 0 0
Vol/Sat:		0.22	0.02	0.02	0.22 ****	0.14	0.12 ****	0.02	0.08	0.03	0.04	0.07 ***
Crit Moves:	****	0 10		0 11		0 40		0 00			0 10	
Green/Cycle:				0.11		0.40		0.20	0.20		0.13	0.13
Volume/Cap:			0.05	0.21		0.35	0.40		0.38		0.31	0.56
Delay/Veh:		27.2	21.4	51.6		26.8		40.7	43.7		50.5	54.9
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			21.4	51.6		26.8		40.7	43.7		50.5	54.9
LOS by Move:			C	D 2	C	C	C		D 4	C		D 5
HCM2kAvgQ:	5		1	_	13	6	-	1	4	2	3	5
Note: Queue 1	repor	Lea IS	the n	umper	or ca	rs per	_ane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative Alt Access PM

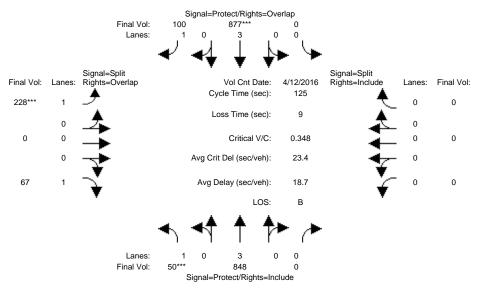
Intersection #2: Veterans & Brewster



Approach:	No	rth Boı	und	Sou	uth Bo	und	Ea	ast Bo	und	We	est Bo	und
Movement:		- T -			- T			- T			- T	
Min. Green:		10		7		10	 7		10	7		10
Y+R:		4.0	4.0		4.0			4.0	4.0			4.0
1+K•												
Volume Module			ı	I		I	I		I	I		ļ
Base Vol:	136	1196	33	43	1197	250	195	45	131	56	80	122
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	136	1196	33	43	1197	250	195	45	131	56	80	122
Added Vol:	4	53	0	0	62	0	37	0	0	0	0	0
Reassigned :	0	0	0	0	13	-13	0	0	0	0	0	0
Initial Fut:	140	1249	33	43	1272	237	232	45	131	56	80	122
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	140	1249	33	43	1272	237	232	45	131	56	80	122
	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	140	1249	33	43	1272	237	232	45	131	56	80	122
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	140	1249	33	43	1272	237	232	45	131	56	80	122
Saturation Fl	Low Mo	odule:	·	•		•						
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	0.85	0.95	0.91	0.85	0.95	1.00	0.85	0.95	1.00	0.85
Lanes:	1.00	3.00	1.00	1.00	3.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Sat.:	1805	5187	1615	1805	5187	1615	1805	1900	1615	1805	1900	1615
Capacity Anal	_											
Vol/Sat:		0.24	0.02	0.02	0.25	0.15		0.02	0.08	0.03	0.04	0.08
Crit Moves:	****				****		****					****
Green/Cycle:			0.43		0.41	0.41	0.37	0.20	0.20		0.13	0.13
Volume/Cap:			0.05	0.24		0.36		0.12	0.41		0.34	0.60
Delay/Veh:			20.5		29.7	26.2		41.1	44.4		50.8	56.9
User DelAdj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			20.5		29.7	26.2		41.1	44.4	35.2	50.8	56.9
LOS by Move:			C	D		C	С		D	D		E
	6		1	2	14	6	6		4	2	3	5
Note: Queue 1	report	ted is	the n	umber	of ca	rs per	lane					

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj Alt Access PM

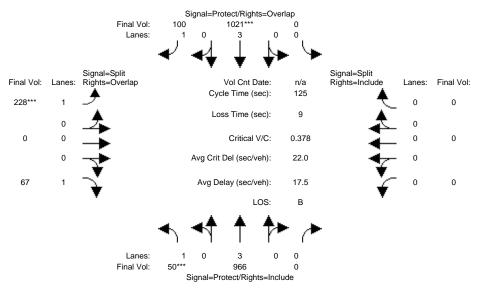
Intersection #3: Veterans & Middlefield



Approach:	No	rth Bo	und	Sou	ıth Bo	ound	Ea	ast Bo	und	We	est Bo	und
Movement:	L ·		- R			- R		- T		L -	- T	- R
Min. Green:	: 7		0		10	10	10	0	10	0	0	0
Y+R:	4.0	4.0	4.0		4.0	4.0		4.0	4.0	4.0	-	4.0
1 + K •												
Volume Module	Į.									I		I
Base Vol:	46	845	0	0	865	107	174	0	63	0	0	0
Growth Adj:			1.00	-	1.00	1.00		1.00	1.00	-	1.00	1.00
Initial Bse:		845	0	0	865	107	174	0	63	0	0	0
Added Vol:	4	3	0	0	12	0	54	0	4	0	0	0
Reassigned:	0	0	0	0	0	-7	0	0	0	0	0	0
Initial Fut:	50	848	0	0	877	100	228	0	67	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	848	0	0	877	100	228	0	67	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	50	848	0	0	877	100	228	0	67	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:		848	0		877	100	228	0	67	0	0	0
Saturation F												
Sat/Lane:		1900	1900		1900	1900		1900	1900		1900	1900
-	0.95		1.00	1.00		0.85		1.00	0.85		1.00	1.00
Lanes:		3.00	0.00		3.00	1.00		0.00	1.00		0.00	0.00
Final Sat.:			0		5187	1615	1805	0	1615	. 0	0	0
	1		I									
Capacity Anal					0 1 1	0 06	0 10		0 0 1		0 00	0 00
Vol/Sat:	0.03 ***	0.16	0.00	0.00	0.17	0.06	0.13 ****	0.00	0.04	0.00	0.00	0.00
Crit Moves:		0 55	0 00	0 00		0 05		0 00	0 44	0 00	0 00	0 00
Green/Cycle:			0.00		0.49	0.85		0.00	0.44		0.00	0.00
Volume/Cap:		0.29 14.2	0.00	0.00	20.0	0.07 1.6		0.00	0.09		0.00	0.00
Delay/Veh: User DelAdj:			1.00	1.00		1.00	29.4	0.0	1.00	0.0	0.0	1.00
AdiDel/Veh:				0.0		1.00	29.4	0.0	20.3	0.0	0.0	0.0
LOS by Move:			0.0 A	0.0 A		1.0 A	29.4 C		20.3 C	0.0 A	0.0 A	0.0 A
HCM2kAvqQ:	2		0	0	7	1	6	0	1	0	0	0
Note: Queue				-	-		-	-		U	J	J
1.00c. Queue I	CPOL	ccu ib	CIIC II	aDCI	01 00	TD PCI		•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj Alt Access PM

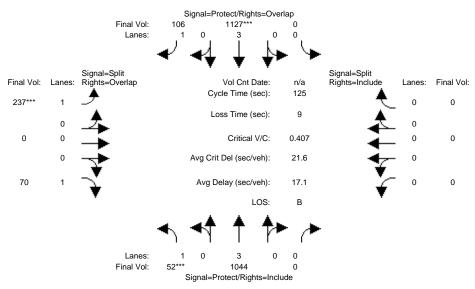
Intersection #3: Veterans & Middlefield



Approach:						und		ast Bo		We	est Bo	und
Movement:		- T -			- T	- R 		- T			- T	- R
Min. Green:	7		0		10	10		0	10	0	0	0
Y+R:	4.0		4.0		4.0			4.0	4.0			4.0
Volume Module	e :		·			•			·			
Base Vol:	46	963	0	0	1009	107	174	0	63	0	0	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	46	963	0	0	1009	107	174	0	63	0	0	0
Added Vol:	4		0	0	12	0	54	0	4	0	0	0
Reassigned :			0	0	0	-7	0	0	0	0	0	0
Initial Fut:	50	966	0	0	1021	100	228	0	67	0	0	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	50	966	0	0	1021	100	228	0	67	0	0	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			0	0	1021	100	228	0	67	0	0	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	50	966	0	0	1021	100	228	0	67	0	0	0
Saturation F	low Mo	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	0.91	1.00	1.00	0.91	0.85	0.95	1.00	0.85	1.00	1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Final Sat.:			0		5187	1615	1805	0	1615	0	0	0
	1											
Capacity Anal												
Vol/Sat:		0.19	0.00	0.00	0.20	0.06	0.13	0.00	0.04	0.00	0.00	0.00
Crit Moves:	****				****		****					
Green/Cycle:			0.00	0.00	0.52	0.85	0.33		0.41		0.00	0.00
Volume/Cap:			0.00	0.00		0.07	0.38	0.00	0.10	0.00	0.00	0.00
Delay/Veh:			0.0		18.0	1.4	32.1	0.0	23.0	0.0	0.0	0.0
User DelAdj:			1.00	1.00		1.00	1.00		1.00		1.00	1.00
AdjDel/Veh:			0.0	0.0		1.4	32.1	0.0	23.0	0.0	0.0	0.0
LOS by Move:			A	A		A	С		С	А	A	A
HCM2kAvgQ:	2		0	0	8	1	7		2	0	0	0
Note: Queue	report	ted is	the n	umber	of ca	ırs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative Alt Access PM

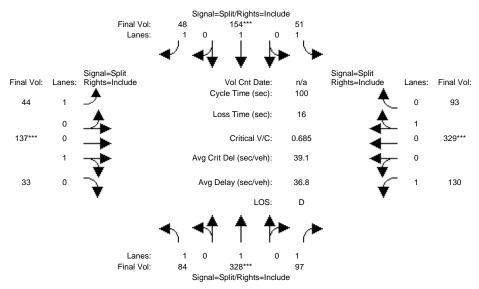
Intersection #3: Veterans & Middlefield



Approach:											
Movement:		- T				- R			- R		
		10		0				0		0 (
Y+R:	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0 4.0	4.0
Volume Module			_	_				_			
Base Vol:		1041	0		1115	113	183	0	66	0 (
Growth Adj:			1.00	1.00		1.00		1.00	1.00	1.00 1.00	
Initial Bse:			0		1115	113	183	0	66	0 (
Added Vol:	4	3	0	0	12	0	54	0	4	0 (
Reassigned :	0	0	0		0	-7	0	0	0	0 (
Initial Fut:			0		1127	106	237		70	0 (
User Adj:		1.00	1.00	1.00		1.00		1.00	1.00	1.00 1.00	
PHF Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
PHF Volume:			0	0	1127	106	237	0	70	0 (0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0 (0
Reduced Vol:	52	1044	0	0	1127	106	237	0	70	0 (0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
FinalVolume:	52	1044	0	0	1127	106	237	0	70	0 (0
Saturation F	iow M	odule:		•		•	•				
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900 1900	1900
Adjustment:	0.95	0.91	1.00	1.00	0.91	0.85	0.95	1.00	0.85	1.00 1.00	1.00
Lanes:	1.00	3.00	0.00	0.00	3.00	1.00	1.00	0.00	1.00	0.00 0.00	0.00
Final Sat.:			0	0	5187	1615	1805	0	1615	0 (0
	1										
Capacity Ana	lysis	Modul	e:								
Vol/Sat:	0.03	0.20	0.00	0.00	0.22	0.07	0.13	0.00	0.04	0.00 0.00	0.00
Crit Moves:	****				****		****				
Green/Cycle:	0.07	0.61	0.00	0.00	0.53	0.86	0.32	0.00	0.39	0.00 0.00	0.00
Volume/Cap:	0.41	0.33	0.00	0.00	0.41	0.08	0.41	0.00	0.11	0.00 0.00	0.00
Delay/Veh:	57.7	12.3	0.0	0.0	17.4	1.4	33.5	0.0	24.1	0.0 0.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00 1.00	1.00
AdjDel/Veh:	57.7	12.3	0.0	0.0	17.4	1.4	33.5	0.0	24.1	0.0 0.0	0.0
LOS by Move:	E	В	A	A	В	A	С	A	С	A A	
HCM2kAvgQ:		7	0	0			7	0	2		0
Note: Queue		ted is	the n	umber	of ca						

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Existing + Proj Alt Access PM

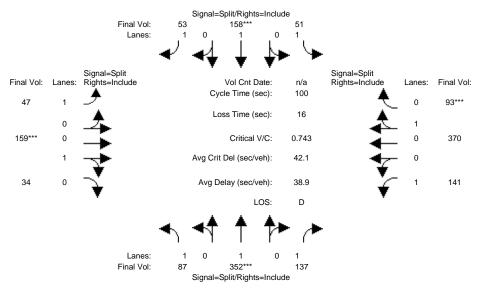
Intersection #8: Winslow & Brewster



Approach:						und			und	We	est Bo	und
Movement:		- T -				- R		- T			- T	
 Min. Green:	10		10	1	10	10	1	10	10	1	10	10
Y+R:	4.0		4.0		4.0			4.0				
Volume Module			1	ı		ı	I			1		1
Base Vol:	63	307	60	51	148	48	44	137	18	127	328	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	63	307	60	51	148	48	44	137	18	127	328	93
Added Vol:	21	21	37	0	6	0	0	0	15	3	1	0
Reassigned:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	84	328	97	51	154	48	44	137	33	130	329	93
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	84	328	97	51	154	48	44	137	33	130	329	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	84	328	97	51	154	48	44	137	33	130	329	93
PCE Adj:			1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			97		154	48		137	33		329	93
	I											
Saturation F												
Sat/Lane:		1900	1900	1900		1900		1900	1900		1900	1900
Adjustment:			0.85	0.95		0.85		0.97	0.97		0.97	0.97
	1.00		1.00		1.00	1.00		0.81	0.19		0.78	0.22
Final Sat.:			1615		1900	1615		1487	358		1432	405
	1											
Capacity Ana												
Vol/Sat:		0.17	0.06	0.03	0.08	0.03	0.02	0.09	0.09	0.07	0.23	0.23
0220 110100					****			****			****	
Green/Cycle:			0.25	0.12		0.12		0.13	0.13		0.34	0.34
Volume/Cap:			0.24	0.24		0.25		0.69	0.69		0.69	0.69
Delay/Veh:			30.1		50.8	40.8		49.0	49.0		31.9	31.9
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			30.1	40.6		40.8		49.0	49.0		31.9	31.9
LOS by Move:			C	D	D	D	D	D	D	C		C
HCM2kAvgQ:	2		2	. 2	6	2	1		6	3	11	11
Note: Queue	repor	ted is	the n	umber	oi ca	rs per	ıane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Bkgd + Proj Alt Access PM

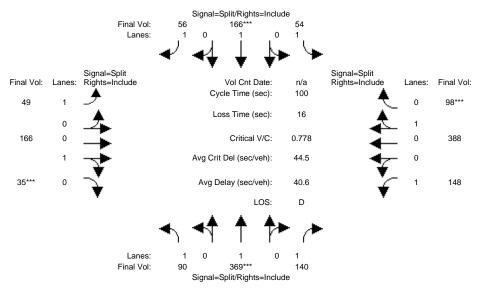
Intersection #8: Winslow & Brewster



Approach:						und		ast Bo		We	est Bo	und
Movement:		- T ·			- T			- T			- T	
 Min. Green:	10		10	1	10	10	1	10	10	10		10
Y+R:	4.0		4.0		4.0			4.0	4.0			4.0
1 + K •												
Volume Module			ı	I		I	I		ı	I		ļ
Base Vol:	66	331	100	51	152	53	47	159	19	138	369	93
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	66	331	100	51	152	53	47	159	19	138	369	93
Added Vol:	21	21	37	0	6	0	0	0	15	3	1	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	87	352	137	51	158	53	47	159	34	141	370	93
User Adj:		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	87	352	137	51	158	53	47	159	34	141	370	93
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			137	51	158	53	47	159	34	141	370	93
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:			137	51	158	53	47	159	34	141	370	93
Saturation F	low M	odule:	·	•			•		•	•		·
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.95	1.00	0.85	0.95	1.00	0.85	0.95	0.97	0.97	0.95	0.97	0.97
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.82	0.18	1.00	0.80	0.20
Final Sat.:			1615		1900	1615		1525	326		1473	370
	1											
Capacity Anal												
Vol/Sat:	0.05	0.19	0.08	0.03	0.08	0.03	0.03	0.10	0.10	0.08	0.25	0.25
Crit Moves:		****			***			****				****
Green/Cycle:			0.25		0.11	0.11		0.14	0.14		0.34	0.34
Volume/Cap:			0.34	0.25		0.29		0.74	0.74		0.74	0.74
Delay/Veh:			31.3		56.2	41.7		52.2	52.2		34.0	34.0
User DelAdj:			1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:			31.3	41.2	56.2	41.7		52.2	52.2		34.0	34.0
LOS by Move:			C	D	E	D	D	D	D	С	С	С
HCM2kAvgQ:	2		4	2	6	_	1	-	7	3	13	13
Note: Queue	repor	ted is	the n	umber	of ca	rs per	lane	•				

Level Of Service Computation Report 2000 HCM Operations (Future Volume Alternative) Cumulative Alt Access PM

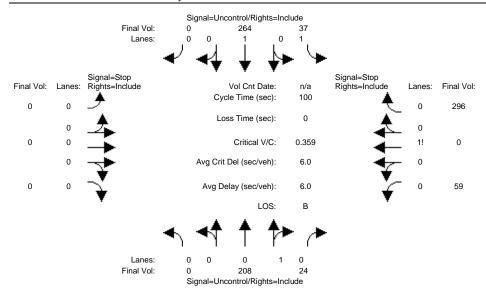
Intersection #8: Winslow & Brewster



Approach:	No	rth Bo	und								est Bo	und
Movement:						- R					- T	
Min. Green:				10					10			
Y+R:						4.0					4.0	
Volume Modul	•											
Base Vol:			103	54	160	56	49	166	20	145	387	98
Growth Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
Tnitial Boo:	69		103	54	160	56	49	166	20	145	387	98
Added Vol:	21		37	0	6	0	0		15	3		0
Reassigned:	0		0	0		0	0		0	0	0	0
Initial Fut:	90	369	140	54		56	49		35	148		98
User Adi:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Adj:			1.00		1.00	1.00		1.00	1.00		1.00	1.00
PHF Volume:		369	140	54	166	56	49	166	35	148	388	98
Reduct Vol:		0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:			140	54		56	49		35	148	388	98
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
FinalVolume:	90	369	140	54	166	56	49	166	35	148	388	98
Saturation F	low M	odule:										
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900		1900	1900
Adjustment:			0.85	0.95		0.85		0.97	0.97		0.97	
Lanes:			1.00		1.00	1.00		0.83	0.17		0.80	0.20
Final Sat.:			1615		1900	1615		1020	322		1471	372
Capacity Ana												
Vol/Sat:			0.09		0.09	0.03	0.03	0.11	0.11	0.08	0.26	0.26 ***
Crit Moves:				0 11		0 11	0 14	0 14		0 24	0 24	
Green/Cycle:			0.25		0.11	0.11		0.14	0.14		0.34	0.34
Volume/Cap:			0.35	0.27		0.31		0.78	0.78		0.78	0.78
Delay/Veh: User DelAdj:			31.4	41.3		41.8 1.00		55.5	55.5 1.00		35.9 1.00	35.9 1.00
AdiDel/Veh:			31.4					55.5	55.5		35.9	35.9
LOS by Move:				41.3 D			30.4 D			24.0 C		35.9 D
HCM2kAvqQ:			4				1			3		14
Note: Queue :									0	3	14	1.4
Noce gadae	r cbor	ccu is	C11C 11	LALIDCE	01 00	TP DCT	Tane	•				

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing + Proj Alt Access PM

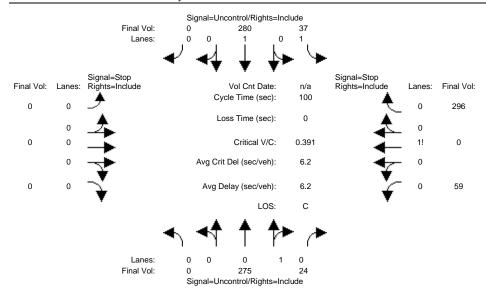
Intersection #9: Winslow & Driveway



Approach:	No	rth Bo	ound	Sou	ath Bo	ound	Ea	ast Bo	ound	We	est Bo	ound
Movement:											- T	- R
Volume Modul	e:											
Base Vol:	0	300	17	12	277	0	0	0	0	27	0	126
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	300	17	12	277	0	0	0	0	27	0	126
Added Vol:	0	0	7	25	0	0	0	0	0	21	0	78
Reassigned :	0	-92	0	0	-13	0	0	0	0	11	0	92
Initial Fut:	0	208	24	37	264	0	0	0	0	59	0	296
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
	0	208	24	37	264	0	0	0	0	59	0	296
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	208	24	37	264	0	0	0	0	59	0	296
Critical Gap	Modu.	le:										
Critical Gp:	xxxxx	xxxx	xxxxx	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.4	6.5	6.2
FollowUpTim:	xxxxx	xxxx	xxxxx	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	4.0	3.3
Capacity Mod	ule:											
Cnflict Vol:	xxxx	xxxx	xxxxx	232	xxxx	xxxxx	XXXX	xxxx	xxxxx	558	558	220
Potent Cap.:	xxxx	xxxx	xxxxx	1348	xxxx	xxxxx	XXXX	xxxx	xxxxx	494	441	825
Move Cap.:	xxxx	xxxx	xxxxx	1348	xxxx	xxxxx	XXXX	xxxx	xxxxx	484	429	825
Volume/Cap:	xxxx	xxxx	XXXX	0.03	xxxx	XXXX	XXXX	xxxx	XXXX	0.12	0.00	0.36
Level Of Ser	vice D	Module	e:									·
2Way95thQ:	xxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
Control Del:	xxxxx	xxxx	xxxxx	7.7	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	A	*	*	*	*	*	*	*	*
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	738	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	2.6	xxxxx
Shrd ConDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	14.3	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	В	*
ApproachDel:	x	xxxxx		x	xxxxx		x	xxxxx			14.3	
ApproachLOS:		*			*			*			В	
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Bkgd + Proj Alt Access PM

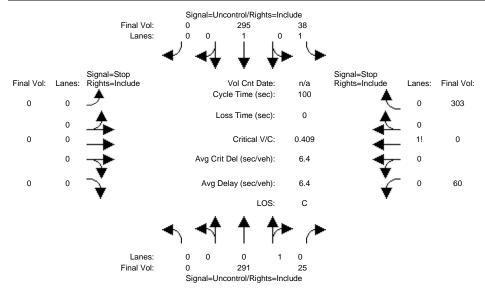
Intersection #9: Winslow & Driveway



Movement: L T R L
Volume Module: Base Vol: 0 367 17 12 293 0 0 0 0 0 27 0 126 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Base Vol: 0 367 17 12 293 0 0 0 0 0 27 0 126 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Initial Bse: 0 367 17 12 293 0 0 0 0 0 27 0 126 Added Vol: 0 0 7 25 0 0 0 0 0 0 21 0 78 Reassigned: 0 -92 0 0 -13 0 0 0 0 11 0 92 Initial Fut: 0 275 24 37 280 0 0 0 0 59 0 296 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Added Vol: 0 0 7 25 0 0 0 0 0 21 0 78 Reassigned: 0 -92 0 0 -13 0 0 0 0 11 0 92 Initial Fut: 0 275 24 37 280 0 0 0 59 0 296 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Reassigned: 0 -92 0 0 -13 0 0 0 0 0 11 0 92 Initial Fut: 0 275 24 37 280 0 0 0 0 59 0 296 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Fut: 0 275 24 37 280 0 0 0 0 59 0 296 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Volume: 0 275 24 37 280 0 0 0 59 0 296 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 275 24 37 280 0 0 0 0 59 0 296
Critical Gap Module:
Critical Gp:xxxxx xxxxx xxxxx 4.1 xxxx xxxxx xxxxx xxxxx xxxxx 6.4 6.5 6.2
FollowUpTim:xxxxx xxxxx xxxxx 2.2 xxxx xxxxx xxxxx xxxxx xxxxx 3.5 4.0 3.3
Capacity Module:
Cnflict Vol: xxxx xxxxx xxxxx 299 xxxx xxxxx xxxxx xxxxx xxxxx 641 641 287
Potent Cap.: xxxx xxxxx xxxxx 1274 xxxx xxxxx xxxxx xxxxx xxxx 442 395 757
Move Cap.: xxxx xxxxx xxxxx 1274 xxxx xxxxx xxxxx xxxxx xxxxx 432 384 757
Volume/Cap: xxxx xxxx xxxx 0.03 xxxx xxxx xxxx xxxx
Level Of Service Module:
2Way95thQ: xxxx xxxxx xxxxx 0.1 xxxx xxxxx xxxx xx
Control Del:xxxxx xxxxx xxxxx 7.9 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
LOS by Move: * * * A * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx
Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
Shared LOS: * * * * * * * * * C *
ApproachDel: xxxxxx xxxxxx xxxxxx 16.2
ApproachLOS: * * * C
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative Alt Access PM

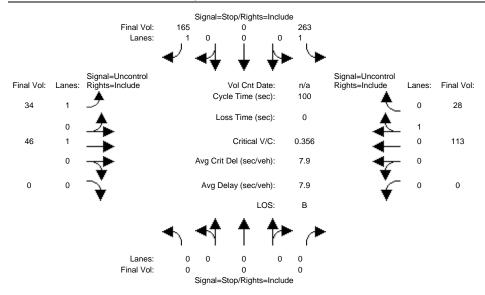
Intersection #9: Winslow & Driveway



Movement: L - T - R L - T - R L - T - R L - T - R L - T - R
Volume Module: Base Vol: 0 383 18 13 308 0 0 0 0 0 28 0 133 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Base Vol: 0 383 18 13 308 0 0 0 0 0 28 0 133 Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Initial Bse: 0 383 18 13 308 0 0 0 0 0 28 0 133 Added Vol: 0 0 7 25 0 0 0 0 0 0 21 0 78 Reassigned: 0 -92 0 0 -13 0 0 0 0 11 0 92 Initial Fut: 0 291 25 38 295 0 0 0 0 0 60 0 303 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Added Vol: 0 0 7 25 0 0 0 0 0 21 0 78 Reassigned: 0 -92 0 0 -13 0 0 0 0 11 0 92 Initial Fut: 0 291 25 38 295 0 0 0 0 60 0 303 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Reassigned: 0 -92 0 0 -13 0 0 0 0 11 0 92 Initial Fut: 0 291 25 38 295 0 0 0 0 0 60 0 303 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
Initial Fut: 0 291 25 38 295 0 0 0 0 0 60 0 303 User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0
PHF Volume: 0 291 25 38 295 0 0 0 0 60 0 303 Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
FinalVolume: 0 291 25 38 295 0 0 0 0 60 0 303
Critical Gap Module: Critical Gp:xxxxx xxxx xxxx 4.1 xxxx xxxxx xxxx xxxx
Critical Gp:xxxxx xxxx xxxx 4.1 xxxx xxxxx xxxx xxxx
FollowUpTim:xxxxx xxxx xxxx 2.2 xxxx xxxxx xxxx xxx
Capacity Module: Cnflict Vol: xxxx xxxx xxxx 316 xxxx xxxxx xxxx xxxx
Cnflict Vol: xxxx xxxx xxxx 316 xxxx xxxxx xxxx xxxx
Detant Con : 1256 1256 1270 741
Potent Cap.: xxxx xxxxx xxxxx 1256 xxxx xxxxx xxxxx xxxxx xxxxx 423 378 741
Move Cap.: xxxx xxxx xxxxx 1256 xxxx xxxxx xxxxx xxxxx xxxxx 413 367 741
Volume/Cap: xxxx xxxx xxxx 0.03 xxxx xxxx xxxx xxxx
Level Of Service Module:
2Way95thQ: xxxx xxxx xxxxx 0.1 xxxx xxxxx xxxx xxx
Control Del:xxxxx xxxx xxxxx 8.0 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
LOS by Move: * * * A * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxx xxxx
SharedQueue:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
Shrd ConDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx
Shared LOS: * * * * * * * * * C *
ApproachDel: xxxxxx xxxxx xxxxx 17.1
ApproachLOS: * * C
Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Existing + Proj Alt Access PM

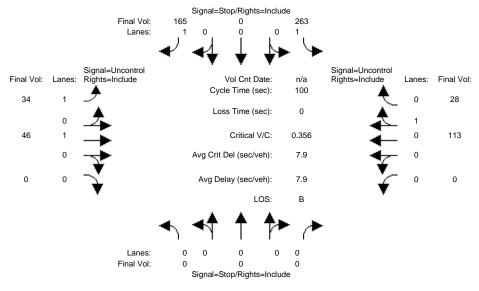
Intersection #10: Middlefield & Driveway



Approach: Movement:										We		
Volume Module				1 1			1			1 1		'
Base Vol:	0	0	0	164	0	108	13	87	0	0	120	24
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	164	0	108	13	87	0	0	120	24
Added Vol:	0	0	0	58	0	15	17	0	0	0	0	4
Reassigned :	0	0	0	41	0	42	4	-41	0	0	-7	0
Initial Fut:	0	0	0	263	0	165	34	46	0	0	113	28
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	263	0	165	34	46	0	0	113	28
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:	0	0	0	263	0	165	34	46	0	0	113	28
Critical Gap	Modu.	le:				,						
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	XXXXX
FollowUpTim:										xxxxx		
Capacity Mod	ule:											
Cnflict Vol:	XXXX	xxxx	xxxxx	241	xxxx	127	141	xxxx	xxxxx	XXXX	xxxx	XXXXX
Potent Cap.:	xxxx	xxxx	xxxxx	752	xxxx	929	1455	xxxx	xxxxx	XXXX	xxxx	xxxxx
Move Cap.:	XXXX	xxxx	xxxxx	738	xxxx	929	1455	xxxx	xxxxx	XXXX	xxxx	XXXXX
Volume/Cap:	XXXX	xxxx	XXXX	0.36	xxxx	0.18	0.02	xxxx	XXXX	XXXX	xxxx	XXXX
Level Of Ser	vice 1	Module	≘:									
2Way95thQ:	XXXX	xxxx	xxxxx	1.6	xxxx	0.6	0.1	xxxx	xxxxx	XXXX	xxxx	XXXXX
Control Del:				12.5	xxxx	9.7		xxxx	xxxxx	XXXXX	xxxx	XXXXX
LOS by Move:	*	*	*	В	*	A	A	*	*	*	*	*
Movement:	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT ·	- LTR	- RT	LT -	LTR	- RT
Shared Cap.:	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	xxxxx	XXXX	xxxx	XXXXX
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	XXXXX
Shrd ConDel:	xxxxx	XXXX	XXXXX	xxxxx	XXXX	XXXXX	xxxxx	xxxx	XXXXX	XXXXX	xxxx	XXXXX
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	X	xxxxx			11.5		X	xxxxx		XX	xxxx	
ApproachLOS:		*			В			*			*	
Note: Queue reported is the number of cars per lane.												

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Bkgd + Proj Alt Access PM

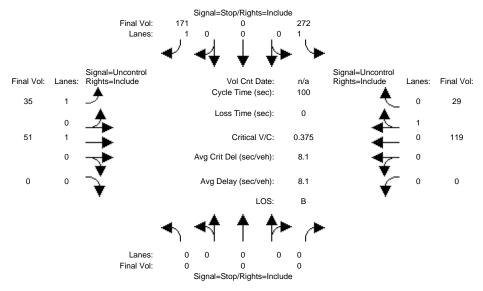
Intersection #10: Middlefield & Driveway



Approach: North Bound South Bound East Bound West E	ound
$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	- R
Volume Module:	
Base Vol: 0 0 0 164 0 108 13 87 0 0 120	
Growth Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	
Initial Bse: 0 0 0 164 0 108 13 87 0 0 120	
Added Vol: 0 0 0 58 0 15 17 0 0 0	4
Reassigned: 0 0 0 41 0 42 4 -41 0 0 -7	0
Initial Fut: 0 0 0 263 0 165 34 46 0 0 113	28
User Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00
PHF Adj: 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.0	1.00
PHF Volume: 0 0 0 263 0 165 34 46 0 0 113	28
Reduct Vol: 0 0 0 0 0 0 0 0 0 0	0
FinalVolume: 0 0 0 263 0 165 34 46 0 0 113	28
Critical Gap Module:	
Critical Gp:xxxxx xxxxx xxxxx 6.4 xxxx 6.2 4.1 xxxx xxxxx xxxxx xxxxx	XXXXX
FollowUpTim:xxxxx xxxxx xxxxx 3.5 xxxx 3.3 2.2 xxxx xxxxx xxxxx xxxxx	
Capacity Module:	
Cnflict Vol: xxxx xxxx xxxxx 241 xxxx 127 141 xxxx xxxxx xxxx xxxx	XXXXX
Potent Cap.: xxxx xxxxx xxxxx 752 xxxx 929 1455 xxxx xxxxx xxxx xxxx	XXXXX
Move Cap.: xxxx xxxxx xxxxx 738 xxxx 929 1455 xxxx xxxxx xxxx xxxx	XXXXX
Volume/Cap: xxxx xxxx xxxx 0.36 xxxx 0.18 0.02 xxxx xxxx xxxx xxxx	XXXX
Level Of Service Module:	•
2Way95thQ: xxxx xxxxx xxxxx 1.6 xxxx 0.6 0.1 xxxx xxxxx xxxx xxxx	XXXXX
Control Del:xxxxx xxxxx xxxxx 12.5 xxxx 9.7 7.5 xxxx xxxxx xxxxx xxxxx	XXXXX
LOS by Move: * * * B * A A * * * *	*
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR	- RT
Shared Cap.: xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxx	xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx	xxxxx
Shrd ConDel:xxxxx xxxx xxxxx xxxxx xxxxx xxxxx xxxxx	
Shared LOS: * * * * * * * * * * * *	*
ApproachDel: xxxxxx 11.5 xxxxxx xxxxxx	
ApproachLOS: * B * *	
Note: Queue reported is the number of cars per lane.	

Level Of Service Computation Report 2000 HCM Unsignalized (Future Volume Alternative) Cumulative Alt Access PM

Intersection #10: Middlefield & Driveway



Approach: Movement:	L ·	- T	- R	L ·	- Т	- R	L ·	- Т	- R		- Т	ound - R
Volume Module												
Base Vol:	0	0	0	173	0	114	14	92	0	0	126	25
Growth Adi:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	173	0	114	14	92	0	0	126	25
Added Vol:	0	0	0	58	0	15	17	0	0	0	0	4
Reassigned:	0	0	0	41	0	42	4	-41	0	0	-7	0
Initial Fut:	0	0	0	272	0	171	35	51	0	0	119	29
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Volume:	0	0	0	272	0	171	35	51	0	0	119	29
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
FinalVolume:		0	0	272	_	171	35	51	0	0	119	29
Critical Gap												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx			xxxx	XXXXX	XXXXX	xxxx	XXXXX
FollowUpTim:										xxxxx		
	•											
Capacity Mod												
Cnflict Vol:					XXXX	134	148	XXXX	XXXXX	XXXX	xxxx	XXXXX
Potent Cap.:					XXXX	921			XXXXX		xxxx	XXXXX
Move Cap.:					XXXX	921			XXXXX			XXXXX
Volume/Cap:					xxxx				XXXX			XXXX
Level Of Serv												
2Way95thQ:										XXXX		
Control Del:					xxxx					xxxxx		
LOS by Move:				В		A			*	*	*	*
Movement:			- RT							LT -		
Shared Cap.:												XXXXX
SharedQueue:												
Shrd ConDel:		XXXX	**	*****		**	**	XXXX	**	**	XXXX	xxxxx *
Shared LOS:	*		*	*		*			*			*
ApproachDel:	X	XXXXX *			11.7		X	XXXXX *		XX	XXXXX *	
ApproachLOS:				,	В		,				*	
Note: Queue	repor	ted is	s the r	number	oi ca	ars pei	r lane	•				

San Mateo County Government Center Campus Development Project

Appendix G: Draft EIR Notice of Availability and Distribution List

Appendix G		
	This page deliberately left bla	nk.



NOTICE OF AVAILABILITY DRAFT ENVIRONMENTAL IMPACT REPORT

TO: California State Clearinghouse, CEQA Responsible and Trustee Agencies, federal

agencies, San Mateo County Clerk, and interested individuals and organizations

SUBJECT: Notice of Availability of a Draft Environmental Impact Report (DEIR) for the

County of San Mateo Government Center Development Project, State

Clearinghouse No. 2017092039

LEAD AGENCY: San Mateo County Manager's Office, Project Development Unit (PDU)

1402 Maple Street, Redwood City, CA 94063

Contact: Deborah Bazan, Director

Notice is hereby given that the County Manager's Office, PDU has prepared a DEIR for the project identified above and is requesting comments on the content of this DEIR.

PROJECT LOCATION: County of San Mateo Government Center Campus, Redwood City, CA 94063

PROJECT DESCRIPTION: Project is development of a new County office building (5 to 7 levels; 121,000 to 156,000 sq. ft.) and parking structure (850 to 1,200 stalls) on the 8-block County Government Center Campus in downtown Redwood City. Purpose of the project is to consolidate dispersed, related County functions into a single location to improve operational efficiency and service delivery, and provide financial benefits. Project involves relocation of the historic Lathrop House 200 feet south on Hamilton Street, demolition of two vacant buildings (First American Title Company and Lebsack), and demolition of the existing traffic court building and relocation of that function to the Hall of Justice.

ANTICIPATED SIGNIFICANT ENVIRONMENTAL EFFECTS: The DEIR identifies categories of potentially significant impacts associated with the proposed project (air quality, climate change, biology, cultural/tribal/historical resources, noise, and traffic). All impacts except for cumulative traffic impacts at the Main Street/Woodside Road Westbound Ramp intersection can be reduced to less than significant through mitigation measures. The project's contribution to cumulative traffic impacts at this intersection is significant unavoidable.

REQUEST FOR COMMENTS: The DEIR is available for public review and comment for 45 days, beginning January 18, 2018. Your response must be sent at the earliest possible date, but no later than March 5, 2018. Please send your written response to Deborah Bazan, Director, at the address shown above, or to krodgers@smcgov.org.

A public hearing on the Draft EIR will be held by the County of San Mateo Board of Supervisors on February 13, 2018 at 9 a.m. at the County Chambers located at 400 County Center Drive in Redwood City, California for the purpose of receiving public comment on the Draft EIR.

DOCUMENT AVAILABILITY: The EIR and all documents referenced in the EIR are available for review at the address shown above. The DEIR may also be reviewed or downloaded at www.smcgov.org under the 'Public Notifications' tab.

San Mateo County County Government Center Campus Development Project EIR Public Notice Distribution List

Public Agencies

County of San Mateo

Board of Supervisors Dave Pine - dpine@smcgov.org

Carole Groom - cgroom@smcgov.org
Don Horsley - dhrsley@smcgov.org
Warren Slocum - wslocum@smcgov.org
David Canepa - dcanepa@smcgov.org

Office of County Counsel Tim Fox - tfox@smcgov.org

Adam Ely - aely@smcgov.org

Office of Sustainability

Jim Eggemeyer - jeggemeyer@smcgov.org

Heritage Resource Advisory Committee

Dave Holbrook - dholbrook@smcgov.org

Mitch Postal - mitch@historysmc.org

Building Department

Clerk's Office

General email - plnbldg@smcgov.org

City of Redwood City

Planning Commission General email - planning-commission@smcgov.org

Planning Department Steve Turner – Planning Manager – sturner@redwoodcity.org

Karen Vaughn - Principal Planner - kvaughn@redwoodcity.org

Manager's Office Arron Aknin – Asst City Mngr/Com Dev Director - aaknin@redwoodcity.org

General email - mail@redwoodcity.org

Fire Department secretaries@redwoodcity.org

Heritage Resource Advisory Board James Gernand – Chair – jgernand@redwoodcity.org

Lindamarie Rodriguez Roche – Vice Chair – Iroche@redwoodcity.org

Jeffery Rhoads - jrhoads@redwoodcity.org

Kenneth Rolandelli – krolandelli@redwoodcity.org

Dee Eva - deva@redwoodcity.org

City of San Carlos

Manager's Office Jeff Maltbie – City Manager – jmaltbie@cityofsancarlos.org

Local Agency Formation Commission (LAFCo)

Martha Payatos mpoyatos@smcgov.org

Bay Area Air Quality Management District

Planning Alison Kirk – Sr Environmental Planner – akirk@baaqmd.gov

Organizations

Carpenters 46 Counties Conf. Board

Attn: Project Tracking alantsberg@nccrc.org and info@nccrc.org

Individuals

Lennie Roberts Lennie@darwin.ptvy.ca.us

Irving Jackson	Ignacio Dominguez	Randolph Craven
418 Alden St	426 Alden Ct	21 Barbara Lane
Redwood City, CA 94063-0000	Redwood City, CA 94063-3953	San Carlos, CA 94070
Shawna Sue Smith	McArthur Johnson	Joseph & Paola Quilici
Po Box 119	634 Brewster Ave	1050 Ralston Ave
Wellington, NV 89444-0119	Redwood City, CA 94063-1506	Belmont, CA 94002
John Paplos	Jose Curiel	Maria Navarrete
1979 47th Ave	510 Alden St	Po Box 2832
San Francisco, CA 94116	Redwood City, CA 94063-1305	Redwood City, CA 94064
Robert Barns	June Martinson	Mike Cordero
Po Box 4369	Po Box 4369	528 Alden St
Houston, TX 77210-4369	Houston, TX 77210-4369	Redwood City, CA 94063-1305
558 Brewster Llc	Kj-Camden Llc	Bradford Investments Llc
P O Box 2493	245 Lytton Avenue Ste 150	399 Bradford St 3rd Flr
Danville, CA 94506	Palo Alto, CA 94302	Redwood City, CA 94063
San Mateo County Bar Assoc	James & Joanne Thompson	County Of San Mateo
333 Bradford St	600 Allerton St	455 County Center-5th Fl
Redwood City, CA 94063-1529	Redwood City, CA 94063-1826	Redwood City, CA 94063-0000
Fuller Street Partners Llc	El Centro De Libertad	Stephen Cohn
125 Willow Road	500 Allerton St 2nd Floor	1408 Chapin Ave Ste 4
Menlo Park, CA 94025	Redwood City, CA 94063	Burlingame, CA 94010
611 Middlefield Road Associates Llc	605 Middlefield Llc	Dorinda Uy
145 Addison Ave	605 Middlefield Rd	200 Canterbury Ave
Palo Alto, CA 94301	Redwood City, CA 94063-1625	Daly City, CA 94015
Habitat For Humanity	Richard Keyes	
500 Washington St Ste 250	1573 Mariposa Ave	
San Francisco, CA 94111	Palo Alto, CA 94306-1025	
601 Marshall Street Owner Llc	Palo Alto Investment Group I Llc	Black Mountain Holdings Llc
145 Addison Ave	3105 Woodside Rd	975 Industrial Rd Ste A
Palo Alto, CA 94301	Redwood City, CA 94062	San Carlos, CA 94070

Winston Chow	Samir Halteh	Thomas & Lynn Finnegan
2 Wilburn Avenue	2266 Kenry Way	611 Veterans Blvd #214
Atherton, CA 94027	So San Francisco, CA 94080	Redwood City, CA 94063
Anagnostou Investments Ii Llc	Boris Zats	City Of Redwood City
2317 Broadway Ste 300	196 Austin Avenue	1017 Middlefield Rd
Redwood City, CA 94063	Atherton, CA 94027	Redwood City, CA 94063-1993
County Of San Mateo	Jpmorgan Chase Bank	Premia Downtown Holdings Llc
455 County Center-5th Fl	Po Box 810490	801 Hamilton St
Redwood City, CA 94063	Dallas, TX 75381	Redwood City, CA 94063
Franceschini Family	George Anagnostou	2215 Broadway Rwc Llc
1480 Holt Ave	2317 Broadway Ste 300	965 Page Mill Road
Los Altos, CA 94024	Redwood City, CA 94063	Palo Alto, CA 94304
Hamilton & Winslow Properties Llc	Century Theatres Inc Lessee	City Of Redwood City
2055 Woodside Road Ste 250	Rreef Dept #207 P O Box 4900	1017 Middlefield Rd
Redwood City, CA 94061	Scottsdale, AZ 85261-4900	Redwood City, CA 94063
City Of Redwood City	County Of San Mateo	The Service League Of S M Cnty
1017 Middlefield Rd	455 County Center-5th Fl	727 Middlefield Rd
Redwood City, CA 94063	Redwood City, CA 94063	Redwood City, CA 94063-1626
Mortgage Investors I Llc Tr	William Owen	Mortgage Investors li Llc
3105 Woodside Road	3511 Leonardo Way	3105 Woodside Rd
Woodside, CA 94062	El Dorado, CA 95762	Woodside, CA 94062
Harvard Investment Co	849 Veterans Rwc Llc	Edward Nissan
805 Veterans Blvd Ste 200	901 Mariners Island Blvd Ste 700	100 Cutter Mill Rd 4b
Redwood City, CA 94063-1736	San Mateo, CA 94404	Great Neck, NY 11021
Eugenio Espiritu	Lawrence & Margaret Elrod Lawrence	Indigo Aimco
1065 Continental Dr	120 Hidden Valley Rd	675 Bradford St
Menlo Park, CA 94025	Hollister, CA 95023	Redwood City, CA 94063
San Mateo Credit Union	Aimco Indigo Lp	Jessica Drazba
350 Convention Way	675 Bradford St	532 Brewster Ave
Redwood City, CA 94063-1704	Redwood City, CA 94063	Redwood City, CA 94063

Christopher Yin 534 Brewster Ave Redwood City, CA 94063 Rohan Mehra 14000 Shadow Oaks Way Saratoga, CA 95070 John Damele 538 Brewster Ave Redwood City, CA 94063

Vytautas Valancius 540 Brewster Ave Redwood City, CA 94063 Roberto Kong 11300 Kley Rd Vandalia, OH 45377

The Occupant The Occupant The Occupant 830 Middlefield Rd 825 Middlefield Rd 820 Veterans Blvd Redwood City, CA 94063 Redwood City, CA 94063 Redwood City, CA 94063 The Occupant The Occupant The Occupant 805 Veterans Blvd 801-823 Hamilton St 727 Middlefield Rd Redwood City, CA 94063 Redwood City, CA 94063 Redwood City, CA 94063 The Occupant The Occupant The Occupant 710 Hamilton St 705 Veterans Blvd 700 Winslow St Redwood City, CA 94063 Redwood City, CA 94063 Redwood City, CA 94063 The Occupant The Occupant The Occupant 700 Jefferson Ave 695 Veterans Blvd 690 Veterans Blvd Redwood City, CA 94063 Redwood City, CA 94063 Redwood City, CA 94063 The Occupant The Occupant 690 Bradford St 634 Brewster Ave Redwood City, CA 94063 Redwood City, CA 94063 The Occupant The Occupant 626 Jefferson Ave 620 Jefferson Ave

The Occupant

611 Middlefield Rd

Redwood City, CA 94063

Redwood City, CA 94063

Redwood City, CA 94063

The OccupantThe OccupantThe Occupant600 Brewster Ave600 Allerton St558 Brewster AveRedwood City, CA 94063Redwood City, CA 94063Redwood City, CA 94063

Redwood City, CA 94063

Redwood City, CA 94063

The Occupant

542 Brewster Ave

Redwood City, CA 94063

The Occupant

540 Brewster Ave

Redwood City, CA 94063

The Occupant	The Occupant	The Occupant
538 Brewster Ave	536 Brewster Ave	534 Brewster Ave
Redwood City, CA 94063	Redwood City, CA 94063	Redwood City, CA 94063
The Occupant	The Occupant	The Occupant
532 Brewster Ave	528 Alden St	525 Middlefield Rd
Redwood City, CA 94063	Redwood City, CA 94063	Redwood City, CA 94063
	The Occupant	The Occupant
	518 Alden St	510 Alden St
	Redwood City, CA 94063	Redwood City, CA 94063
The Occupant	The Occupant	
504 Alden St	500 Allerton St	
Redwood City, CA 94063	Redwood City, CA 94063	
The Occupant	The Occupant	The Occupant
488 Winslow St	463 Brewster Ave	432 Alden St
Redwood City, CA 94063	Redwood City, CA 94063	Redwood City, CA 94063
The Occupant	The Occupant	The Occupant
426 Alden St	418 Alden St	401 Warren St
Redwood City, CA 94063	Redwood City, CA 94063	Redwood City, CA 94063
The Occupant		The Occupant
399 Bradford St		333 Bradford St
Redwood City, CA 94063		Redwood City, CA 94063
The Occupant	The Occupant	The Occupant
330 Bradford St	310 Winslow St	2400-2420 Broadway
Redwood City, CA 94063	Redwood City, CA 94063	Redwood City, CA 94063
The Occupant	The Occupant	The Occupant
2397 Broadway	2361 Broadway	2323 Broadway
Redwood City, CA 94063	Redwood City, CA 94063	Redwood City, CA 94063
The Occupant	The Occupant	The Occupant
2317 Broadway	2301 Broadway	2300 Broadway
D 10" 04.04060	D	B

Redwood City, CA 94063

Redwood City, CA 94063

Redwood City, CA 94063

The Occupant 2215 Broadway Redwood City, CA 94063

The Occupant 2205-2201 Broadway Redwood City, CA 94063

The Occupant 2200-2210 Broadway Redwood City, CA 94063

The Occupant 2120 Broadway

2114 Broadway

The Occupant

Redwood City, CA 94063

Redwood City, CA 94063

San Mateo County Government Center Campus Development Project

Appendix H: County Government Center Campus
Parking Study

Appendix H		
	This page deliberately left blank.	





Memorandum



Date: May 10, 2018

To: Mr. Jim Mosier, San Mateo County Project Development Unit

From: Michelle Hunt

Subject: Parking Study for the Proposed San Mateo County Government Center Campus

Improvement Plan in Redwood City, California

Hexagon Transportation Consultants, Inc. has completed a parking study for the proposed San Mateo County Government Center Campus Improvement Plan in Redwood City, California. The proposed campus improvement project includes the construction of County Office Building #3 (COB3) with 121,000 to 156,000 square feet (s.f.), a new parking structure with 850 to 1,200 stalls, the relocation of the Lathrop House, the demolition of the Traffic Court and vacant Credit Union buildings, and the closure of two public streets to create a public plaza and promenade. The proposed street closures include Hamilton Street between Bradford Street and Marshall Street, and County Center between Hamilton Street and Middlefield Road.

The purpose of this parking analysis is to evaluate the adequacy of the existing and proposed parking structures to meet the future parking demand for the County Government Center.



The County Government Center currently has one parking garage, below-grade parking in the 555 County Center basement, and numerous surface parking lots serving the existing campus (see Figure 1). The parking garage and 555 County Center Basement provide a total of 981 parking spaces including 859 spaces reserved for County employees and fleet vehicles, and 122 public spaces. The surface parking lots provide 588 total parking spaces, including 329 spaces for County employees, fleet vehicles, and loading; 31 public spaces; 16 child care spaces; and 212 jury spaces. In total, the County Government Center has 1,569 parking spaces.

Based on data provided by the County, 2,265 employees currently work at the County Government Center including 1,600 daytime workers and 665 nighttime workers.

Counts

Parking occupancy counts were conducted at the County Government Center to document existing parking conditions without the proposed new COB3. Parking was counted twice during a typical weekday, once at 11 AM and again at 2 PM. These times were selected as they typically represent the peak parking time for government office buildings. Most of the Government Center Parking facilities were counted on Wednesday, November 29, 2017. A few surface parking lots were counted on Wednesday, March 21, 2018. The 555 County Center Basement was not counted because it has assigned parking accessible only to judges, select Court employees, and fleet vehicle parking limited to sheriff and maintenance vehicles. Likewise, designated sheriff (fleet) vehicle parking in the Credit Union Lot was not counted because it was inaccessible. Lastly, the San Mateo County Regional Operations Center (ROC) is under construction, thus, the ROC lot could not be counted.

















Figure 1 Existing County Government Center Parking





Existing Demand

The maximum parking occupancy at the Government Center was estimated by taking the maximum number of parked vehicles at either of the two count times. In summary, the County Government Center experiences a peak parking occupancy of 95 percent occupied spaces for public spaces, 89 percent occupied spaces for employee parking, and 78 percent occupied spaces for jury parking (see Table 1). Both the employee and public parking areas within the existing parking structure are near or at capacity for most of the day. Excluding jury parking, the peak parking occupancy at the County Government Center (1,219 vehicles) divided by the existing daytime employees (1,600) yields a rate of approximately 0.76 parked vehicles on site per employee.

County Government Center staff report that employees and visitors often park in other off-site public parking locations because they cannot locate an available parking space within the County Government Center. The high occupancy rates shown in Table 1 are consistent with this observation. While the parking surveys show a small number of employee and visitor spaces are not used during the peak periods, they are likely to be restricted spaces (assigned to a specific employee or fleet vehicle, accessible spaces, motorcycle spaces, loading zone spaces, etc.) such that they are not available for most employees or visitors.

The existing unmet parking demand was estimated based on the parking ratios published in the ITE *Parking Generation Manual, 4th Edition.* According to ITE, Government Office Buildings generate a peak parking demand of 0.83 vehicles per employee. Based on a breakdown of office parking users contained in the Urban Land Institute 's *Shared Parking, 2nd Edition*, it is estimated that this rate includes approximately 0.76 spaces per employee for employee parking and 0.07 spaces per employee for visitor parking. Based on historic data, visitor parking for the Hall of Justice and Maguire Correctional Facility is substantially greater than for the other office buildings in the County Government Center. Thus, visitor parking needs for these uses were estimated assuming 0.15 spaces per employee for visitor parking. As shown on Table 2, the County Government Center is estimated to have an unmet peak parking demand of approximately 282 spaces including 257 employee spaces and 26 visitor spaces.

Proposed Project Parking

The proposed COB3 is expected to be occupied by a total of 616 employees including 216 employees relocated from the Hall of Justice (HOJ) and County Office Building #1 within the County Government Center, and 400 employees relocated from existing facilities outside the County Government Center. The vacated Hall of Justice space will be reoccupied by the Traffic Court and other departments in the HOJ building that are currently undersized. Overall, the proposed project would result in 400 additional employees working on the campus.

Future Parking Supply

The proposed project includes the development of a new parking structure located adjacent to the existing parking structure. This new structure will include 850 to 1,200 parking stalls serving jury, public, and employee parking, and will replace all of the jury parking lot and a large portion of the employee and fleet vehicle parking in the childcare center parking lot. The footprint of the new parking structure and the COB3 would result in an estimated 505 total displaced parking spaces (see Table 3). All of these parking spaces would be replaced within the new parking garage. The future parking supply was calculated based on the existing parking supply (1,569 spaces) less 505 displaced spaces plus an assumed new 1,100-space parking structure. Thus, the project would increase the on-site parking supply at the Government Center from 1,569 to 2,164 spaces.



Table 1
Existing County Government Center Parking Occupancy

		Pι	ıblic Pa	rking			Employe	e/Fleet	t/Childo	are/Loa	ding P	arking		Jury	Parkin	ıg		
	Total	Occ. S	paces	9,	√ Occ.		Total	Occ. S	paces		% Occ.		Total	Occ. S	paces	0	% Occ.	
Parking Location	Spaces	11 AM	2 PM	11 AM	2 PM	Avg.	Spaces	11 AM	2 PM	11 AM	2 PM	Avg.	Spaces	11 AM	2 PM	11 AM	2 PM	Avg.
Surface Parking																		
County Center/Hamilton ¹	31	26	27	84%	87%	86%	73	40	44	55%	60%	58%						
Law Library Lot							28	21	21	75%	75%	75%						
History Museum Lot							29	15	17	52%	59%	56%						
BOS/CMO/Courts Lot (Credit Union side lot)							24	10	11	42%	46%	44%						
Credit Union Rear Lot ²							39	22	23	56%	59%	58%						
Childcare Center/Jury Parking Lots							86	63	59	73%	69%	71%	212	165	128	78%	60%	69%
Bradford Street Lot (leased off-site spaces)							30	28	26	93%	87%	90%						
Lathrop House							11	9	10	82%	91%	87%						
ROC Lot ³							25	25	25	100%	100%	100%						
Surface Parking Total	31	26	27	84%	87%	86%	345	233	236	68%	68%	68%	212	165	128	78%	60%	69%
Existing Parking Structure & 555 County	Center Ba	sement	•															
Level B - Rest. Govt. Parking ⁴							225	196	212	87%	94%	91%						
Level G - Public Parking	122	119	114	98%	93%	96%												
Level 2 Employee							173	173	173	100%	100%	100%						
Level 3 Employee							162	162	161	100%	99%	100%						
Level 4 Employee							156	154	153	99%	98%	99%						
Level 5 Employee							143	141	139	99%	97%	98%						
Parking Structure Total	122	119	114	98%	93%	96%	859	826	838	96%	98%	97%						
Total Parking Demand	153	145	141	95%	92%	94%	1204	1059	1074	88%	89%	89%	212	165	128	78%	60%	69%

Notes

Parking data from counts conducted in November 2017 and March 2018 on a typical weekday.



¹ Includes 14 loading spaces.

² Occupied spaces assume full occupancy of sheriff (fleet) vehicle parking (19 spaces).

³ Occupied spaces assume full occupancy of assigned County employee parking (25 spaces).

⁴ Occupied spaces assume full occupancy of assigned County employee and fleet vehicle parking in 555 County Center Basement (53 spaces).

Table 2
Existing County Government Center Parking Demand Versus Supply

		Parking Demand								
	Daytime	Employee/F	leet/Childcare	Visitor	(Public)	Jury ¹	Total			
Parking Location	Employees	Rate	Vehicles	Rate	Vehicles	Vehicles	Vehicles			
Existing Uses										
Hall of Justice/Maguire Correctional Facility	835	0.76	635	0.15	125	212	972			
Other Government Office (COB1, COB2)	765	0.76	581	0.07	54		635			
Less Assigned Employee Parking	-144	0.76	-109				-109			
Assigned Employee Parking	144	1.00	144				144			
Fleet Vehicle Parking ¹			194				194			
Childcare Center Parking ¹			16				16			
Total Parking Demand	1,600		1,461		179	212	1,851			
Existing Parking Supply			1,204		153	212	1,569			
Deficit/Surplus			-257		-26	0	-282			

Notes:



¹ Assume no change from existing for fleet vehicle parking, childcare center parking, and jury parking.

Table 3
Existing Displaced Parking

	Displaced Parking					
Location	Public	Employee*	Jury	Total		
County Center/Hamilton Street	31	73	0	104		
BOS/CMO/Courts Lot	0	24	0	24		
Credit Union Lot	0	39	0	39		
Lathrop House Lot	0	11	0	11		
Childcare Center/Jury Lots	0	67	212	279		
Bradford Lot ¹	0	30	0	30		
History Museum Lot ²	0	18	0	18		
Total Displaced	31	262	212	505		

^{*} includes employee parking, fleet vehicle parking, and loading zone spaces.

Future Parking Demand

As for existing, the future parking demand generated by the County Government Center was estimated using the published ITE rates per employee for Government Office Buildings. The number of assigned employee spaces, fleet vehicle spaces, childcare spaces, and jury spaces is assumed to be unchanged from existing conditions. The new parking garage would need to provide adequate parking to accommodate the unmet existing parking demand, the new parking demand associated with COB3, and the existing parking spaces displaced by the project. In addition, the County has committed to provide 150 additional public parking spaces. As shown in Table 4, without any new TDM measures, the County Government Center is expected to have a peak parking demand of 2,333 spaces (including the 150 new public parking spaces). Construction of a new 1,100-space parking structure is estimated to fall 169 spaces short of meeting the projected future parking demand.

The County is proposing to implement a variety of new TDM measures that are estimated to reduce the County employee parking demand by 23 percent. With the proposed new TDM measures, the County Government Center is expected to have a peak parking demand of 2,009 spaces (including the 150 new public parking spaces). Under this scenario, the County Government Center parking supply would exceed the estimated future parking demand by 155 spaces indicating that the new parking structure could be reduced from the assumed 1,100 spaces to only 945 spaces. It should be noted that the new TDM measures would need to reduce County employee parking demand by only 12 percent in order to avoid a parking deficit with the assumed 1,100-space parking structure. Alternatively, TDM measures would need to reduce County employee parking demand by only five percent if the project constructed a parking structure of 1,200 spaces rather than 1,100 spaces as previously assumed.

¹ Per Nelson/Nygaard memo dated 4/6/18.



¹ County expected to terminate lease of off-site spaces after construction of new parking structure.

² Spaces lost due to relocation of Lathrop House.

Table 4
Future County Government Center Parking Demand Versus Supply

				Parking D	emand			Parking	Delta
	Daytime	Employee/F	leet/Childcare	Visito	r (Public)	Jury ¹	Total	Supply ³	Deficit/Surplus
Parking Location Er	Employees	Rate	Vehicles	Rate	Vehicles	Vehicles	Vehicles	Spaces	Spaces
Proposed Uses (no new TDM measures)									
Hall of Justice/Maguire Correctional Facility	835	0.76	635	0.15	125	212	972		
Other Government Office (COB1, COB2)	765	0.76	581	0.07	54		635		
Less Assigned Employee Parking	-144	0.76	-109				-109		
Assigned Employee Spaces	144	1.00	144				144		
COB3 (net new employees)	400	0.76	304	0.07	28		332		
Additional Public Parking ²					150		150		
Fleet Vehicle Parking ¹			194				194		
Childcare Center Parking ¹			16				16		
Total	2,000	4.04	1,765	0%	357	212	2,333	2,164	-169
Proposed Uses (with proposed TDM mea	sures)								
Hall of Justice/Maguire Correctional Facility	835	0.76	635	0.15	125	212	972		
Other Government Office (COB1, COB2)	765	0.76	581	0.07	54		635		
Less Assigned Employee Parking	-144	0.76	-109				-109		
Assigned Employee Spaces	144	1.00	144				144		
COB3 (net new employees)	400	0.76	304	0.07	28		332		
TDM Reduction ⁴	-23%		-324				-324		
Additional Public Parking ²					150		150		
Fleet Vehicle Parking ¹			194				194		
Childcare Center Parking ¹			16				16		
Total	2,000	4.04	1,440	0%	357	212	2,009	2,164	155

Notes:



Assume no change from existing for fleet vehicle parking, childcare center parking, and jury parking.

² Per agreement with the City of Redwood City.

³ Parking supply with proposed uses reflects loss of existing parking (505 spaces) and construction of a 1,100-space new parking structure.

⁴ Per Nelson/Nygaard memo dated 4/6/18, proposed TDM measures can reduce employee parking demand by 23 percent.

Conclusion

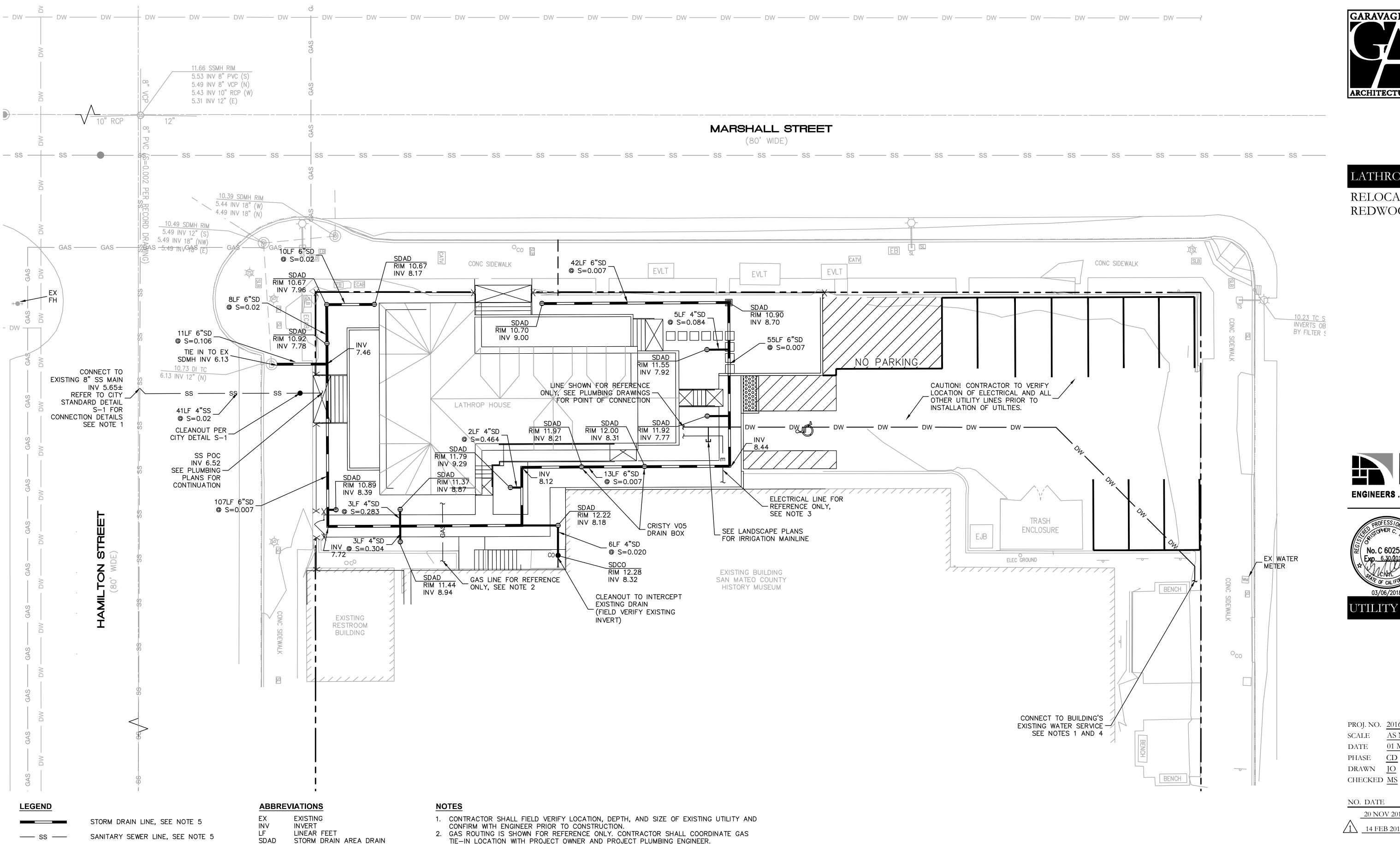
The parking counts conducted in November 2017 and March 2018 show that the existing parking at the County Government Center is occupied at or near its capacity during peak periods. It is estimated that the existing Government Center uses result in an unmet parking demand of 282 spaces. The proposed project would result in an increased parking demand of 332 spaces associated with the new COB3 building and 505 displaced parking spaces. In addition, the County has committed to provide 150 additional public parking spaces. In order to meet the estimated future parking demand, the County would need to construct 1,100 spaces in the proposed new parking structure and implement new TDM measures that would reduce County employee parking demand by at least 12 percent. Alternatively, the County could construct 1,200 spaces in the proposed new parking structure and implement new TDM measures that would reduce County employee parking demand by at least five percent. The County is proposing TDM measures that are estimated to reduce County employee parking by 23 percent. With this level of TDM reduction, the proposed new parking structure would need only 945 spaces to meet the estimated future parking demand.



San Mateo County Government Center Campus Development Project

Appendix I: Lathrop House Relocation Plan

Appendix I			
	This page deliberately left	t blank.	



3. ELECTRICAL ROUTING IS SHOWN FOR REFERENCE ONLY. CONTRACTOR SHALL COORDINATE

4. CONTRACTOR SHALL CONFIRM LOCATION AND CONDITION OF EXISTING WATER SERVICE TO

5. ALL STORM DRAIN PIPES TO BE PVC SDR 35. ALL SANITARY SEWER PIPES TO BE PVC

6. DRAINS ARE TO HAVE ATRIUM GRATES IN LANDSCAPED AREAS AND ADA

BUILDING PRIOR TO CONSTRUCTION

SDR 26. DOMESTIC WATER PIPES TO BE PVC SDR 26.

COMPLIANT/HEEL-PROOF GRATES IN PAVED AREAS.

ELECTRICAL TIE-IN LOCATION WITH PROJECT OWNER AND PROJECT ELECTRICAL ENGINEER.

STORM DRAIN MANHOLE

SANITARY SEWER CLEANOUT

SDMH

STORM DRAIN AREA, SEE NOTE 6

SEE MEP DRAWINGS)

ONLY, SEE MEP DRAWINGS)

— DW —

—— GAS ——

2" DOMESTIC WATER LINE, SEE NOTE 5

GAS LINE (SHOWN FOR REFERENCE ONLY,

ELECTRIC LINE (SHOWN FOR REFERENCE



582 MARKET STREET SUITE 1800 SAN FRANCISCO, CA 94104 T: 415.391.9633 F: 415.391.9647 www.garavaglia.com

LATHROP HOUSE

RELOCATION REDWOOD CITY, CA 94063



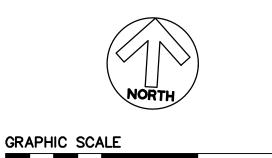


UTILITY PLAN

PROJ. NO. 2016 - 105 SCALE AS NOTED 01 MARCH 2018 PHASE $\overline{\text{CD}}$ DRAWN <u>Jo</u>

NO. DATE REVISION 20 NOV 2017 PERMIT SET

14 FEB 2018 PERMIT RESUBMITTAL



SHEET NO.



582 MARKET ST. SUITE 1800 SAN FRANCISCO, CA 94104

T: 415.391.9633 F: 415.391.9647

www.garavaglia.com

MEMORANDUM

Date: December 15, 2017

To: Jay Correia, Supervisor

Cultural Resources Management,

California State Parks Office of Historic Preservation

1725 23rd Street, Suite 100 Sacramento, CA 95816 Jay.Correia@parks.ca.gov

Project: Lathrop House Relocation, Project No. 2016105

Re: Relocation of a Property Listed in the National Register of Historic Places

Via: Email

The purpose of this memo is to present the proposal to move the Lathrop House from its current location (donor site) at 627 Hamilton Street in Redwood City, CA, to the proposed location (receiver site) at 701 Hamilton Street, in Redwood City, CA. This memo includes the following information required to relocate properties listed in the National Register [National Historic Preservation Act of 1966, as amended, 16 U.S.C. 470 et seq., and E.O. 11593, *Code of Federal Regulations*, title 36 (2012): 334]:

The documentation shall discuss:

- (i) The reasons for the move
- (ii) The effect on the property's historical integrity
- (iii) The new setting and general environment of the proposed site, including evidence that the proposed site does not possess historical or archeological significance that would be adversely affected by the intrusion of the property
- (iv) Photographs showing the proposed location

The Lathrop House is currently listed in the National Register of Historic Places (NRHP), the California Register of Historical Resources (CRHR), and is designated by Redwood City as a historic landmark (Resolution No. 9051, 1982).

Donor Site: 627 Hamilton Street, Redwood City, CA 94063

Receiver Site: 701 Hamilton Street, Redwood City, CA at the intersection of Marshall and

Hamilton Streets

NRHP Resource Information

Title: Lathrop House

ID: 73000448

Applicable Criteria: Architecture/Engineering

Architectural Style: Gothic Revival

Areas of Significance: Architecture **Period of Significance:** 19th Century (originally constructed in 1863, moved to

current site in 1905)

Published: 1973 (1972 Nomination Form)

(i) The reasons for the move:

The Lathrop House at 627 Hamilton Street is currently under threat of demolition to allow for the construction of several San Mateo County civic buildings. The receiver site at the San Mateo County Courthouse property (NR ID No. 77000340) is approximately 200 feet south of the donor site. At the donor site, the Lathrop House, currently operating as a house museum, has a low public profile and hosts approximately 30 visitors per month. At the receiver site, the Lathrop House will be adjacent to, and be run by, the San Mateo County History Museum, which hosts approximately 3,700 visitors per month, encouraging visitors to give their patronage to both.

(ii) The effect on the property's historical integrity

The relocation of the Lathrop House will not have an impact of the current level of historical integrity of its Design, Materials, Workmanship, Association, and Feeling. The building will be moved in its entirety, with no change to the design, materials, and workmanship. A rehabilitation process will begin after the building is relocated, which will be done in a manner consistent with the Secretary of the Interior's *Standards for the Treatment of Historic Properties*. The association and feeling of the building will be retained, as the relationship of the building to the San Mateo County Courthouse will not be diminished.

The building was originally constructed in 1863, and moved to the donor site in 1905. The current setting has been significantly altered since 1905, as surrounding homes have been demolished and the surrounding land has been in-filled with commercial and civic buildings and parking lots. The current setting of the donor site is similar to the setting at the time of the 1972 NRHP nomination. The setting of the receiver site is not significantly different than the setting at the donor site.

The Lathrop House will have the same orientation to Hamilton Street at the receiver site as it does on the donor site, and the front setback and height-to-grade will be the same. The south facade of the building is currently exposed except for a wall of large shrubs, and the north facade is obliquely visible from the street at the donor site. At the receiver site the north facade will be exposed and the south facade will be obliquely visible from the street.

(iii) The new setting and general environment of the proposed site, including evidence that the proposed site does not possess historical or archeological significance that would be adversely affected by the intrusion of the property

At the donor site, the house is surrounded by: a five-story building and one-story building at the northwest corner of the block; a parking lot immediately to the south and east; and a one-story building on the southeast corner of the block. At the receiver site, the San Mateo County Courthouse sits to the south, and a parking lot sits to the east, which will abut the house. The dome on the courthouse is currently visible looking southeast from the house, and will still be obliquely visible from the house once at the receiver site (see Figures 1 to 3)-.

The relocation of the Lathrop House at the receiver site will not have an adverse effect on the property, as stated in the conclusion of the *Lathrop House Receiver Site: San Mateo County Courthouse Square* report by Richard Brandi, Architectural Historian:

The relocation of the Lathrop House onto the lot in close proximity to the courthouse will not have an impact on the historic integrity of the courthouse, and will not cause an adverse impact under CEQA.¹

¹ Richard Brandi, Lathrop House Receiver Site: San Mateo County Courthouse Square, (MIG | TRA, Inc., 2017), 27.

There is currently no evidence to suggest that the relocation of the Lathrop House at the receiver site will have an adverse effect on any archeological significance at the property. A memo prepared by MIG archaeologist Robert Templar recommends mitigation measures to ensure the protection of potential archeological resources at the receiver site:

The receiver site is part of the parcel of the historic Redwood Courthouse. The car park [parking lot] which would be the location of the relocated Lathrop House overlies native soils and is in a historically significant area – downtown Redwood City. There is a moderate potential for the discovery of historic, and/or prehistoric remains in the proposed excavation. Mitigation measures are recommended for the excavation of the foundations to safeguard potential, unknown, archaeological resources.²

(iv) Photographs showing the proposed location



Figure 1. View from the Lathrop House at the donor site with the Courthouse dome in the background (Google Maps, 2017)

² Robert Templar, memo to Jim Mosier, November 9, 2017



Figure 2. View of the dome of the Courthouse from the receiver site. (Garavaglia Architecture, Inc., 2017)



Figure 3. View of the receiver site from Marshall Street, looking southeast. (Garavaglia Architecture, Inc., 2017)



Figure 4. View past the existing restroom at the receiver site, looking north towards Marshall Street. Note the Lathrop House and donor site at the center of the photo. (Garavaglia Architecture, Inc., 2017)



Figure 5. View looking north past the Lathrop House, at right, with surrounding civic and commercial buildings (Google Maps, 2017)

cc: File

encl: Brandi, Richard. Lathrop House Receiver Site: San Mateo County Courthouse Square. MIG | TRA, Inc., 2017.

Templar, Robert (Archaeologist). Memo to Jim Mosier, November 9, 2017.

 $\label{eq:continuous} \emph{file:} \qquad 000\mbox{-} Architecture-NAS: 2016105\mbox{-} Lathrop\ House: Reports: 171214\mbox{-} Relocation\ Request: 1-Working\ Draft-Lathrop\ House\ Relocation\ Memo_2. docx$

San Mateo County Government Center Campus Development Project

Appendix J: Shading Study

Appendix J		
	This page deliberately left blank.	

San Mateo County Government Center Campus Development Project Shadow Study

A shadow modeling study was completed by Atelier Ten, LLC, to evaluate the Project's potential effects on the Project site and in the Project vicinity. The study specifically evaluates the impact of the proposed County Office Building #3 (COB3) and parking garage on the sensitive receptors identified in Table 4-2 of the Draft EIR. The shadow analysis presented below examines the potential impacts of shadows cast by buildings that would be developed with the Project. New shading could occur on existing and proposed open space, and adjacent buildings.

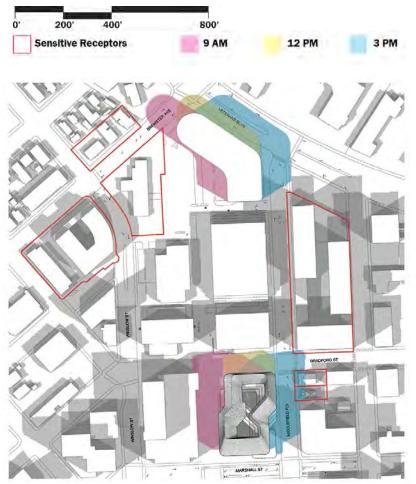


Figure 1 - New Shadows from Proposed Parking Garage & COB3 - Equinox

March 21/September 21 - Equinox

The proposed parking garage and COB3 have limited impacts on shade conditions on the sensitive receptor parcels identified in the diagram above. On the equinox day, considered the mid-point between high summer and low winter sun conditions, impact is limited to 605/611 Middlefield Road. The COB3 casts a shadow during late afternoon hours across these parcels. See Appendix for



Figure 2 - New Shadows from Proposed Parking Garage & COB3 Buildings - December 21

December 21 - Winter Solstice

The winter solstice represents the most overshadowed conditions in the year, due to the low sun altitude. Many of the sensitive receptor sites have existing shaded conditions on this day. The new parking garage and COB3 buildings impact 605/611 Middlefield Road and the Indigo Apartments, shading portions of these parcels during late afternoon hours. It should be noted that 605 and 611 Middlefield Road are already overshadowed for most of this day by the adjacent building on Marshall Street.

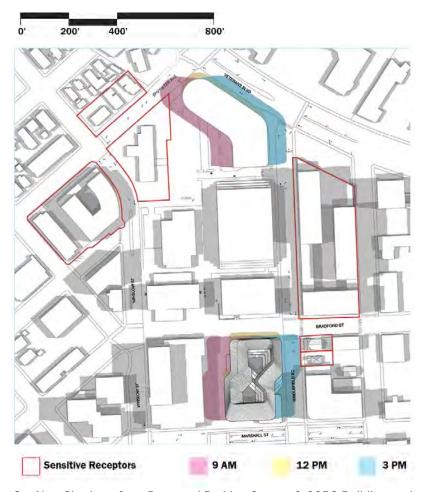


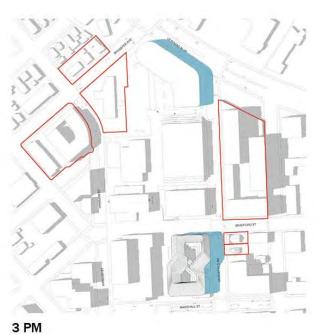
Figure 3 - New Shadows from Proposed Parking Garage & COB3 Buildings - June 21

June 21 - Summer Solstice

The summer solstice represents the least overshadowed conditions in the year, due to the high altitude sun. There are minimal shadow impacts of the new parking garage and COB3 during this period. Shading of the 605 and 611 Middlefield Rd. parcels will occur after 3 pm. Partial shading of the Marin Day School parcel will occur from the parking lot before 9 am.

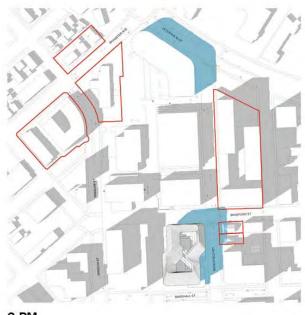










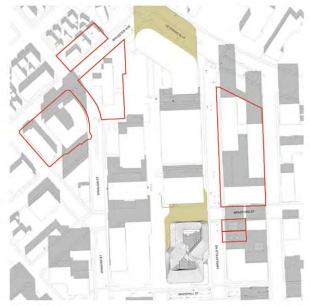


3 РМ

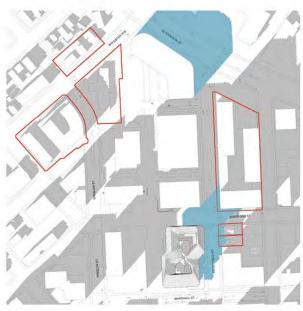
Appendix - December 21







9 AM 12 PM



3 PM

San Mateo County Government Center Campus Development Project

Appendix K: COB3 Design Concept

Appendix K			
	This page deliberately left blank	<i>k</i> .	
0	our Development Dusingt		Cin al EID

San Mateo County Government Center Campus Development Project

11

"



SAN MATEO COUNTY OFFICE BUILDING 3

Redwood City, California

Concept Design Narrative Submitted April 6, 2018



0.2 CONTRACT SCOPE CATEGORIES

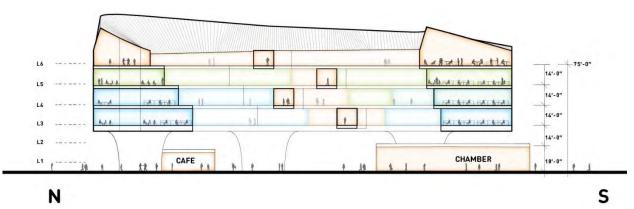
0.2.1 COB3 BUILDING

The COB3 Building will be a new construction building located on the southeast corner of the existing 6-block San Mateo County government campus in Redwood City, California. The site for COB3 is approximately 200 feet by 300 feet. The building form consists of four levels of building mass elevated approximately 32'-0" over the ground. Below the elevated portion of the building will be two levels of program closely connected to the ground-level Public Plaza. Level 1 will be occupied by Pavilions, and Level 2 will be open-air terraces.

The building will be 6 Levels tall total, with its highest occupied floor no higher than 75'-0" above ground level. The building will function primarily as offices for County employees and will have some publicly accessible program on Level 1.

The building will consist of three pavilions at Level 1 containing the building's Lobby/Press/Ceremony space, Board Chamber, One-Stop Kiosks, County Information Center and a Café. Surrounding the pavilions on Level 1 will be the Public Plaza which will be adjacent to the campus' landscaped Promenade.

Level 2 will consist of two open-air green roof terraces on top of the Level 1 pavilions. Levels 3 through 5 will house employee offices and shared office-focused amenities. Level 6 will contain building-wide shared program such as Conference Rooms, Gym, Cafeteria and Terrace.



N-S Building Section, Facing East

The goals of the new COB3 building are to:

- Create a strong public identity
- Encourage creative government
- Connect citizens to their government
- Consolidate various government facilities to:
 - o Optimize government efficiency
 - Minimizing required facility maintenance
 - o Improve wellness for both government workers and the citizens

The architectural solutions to these challenges are outlined in the COB3 Final Concept Book and Project Narrative. As an overview, the architectural response consists of the following main components:

- Ease access to services via a porous, inviting Level 1 with:
 - o Lobby / Press / Ceremony
 - o Board Chambers
 - o One-Stop Kiosks
 - Information Center
 - o Café
- Provide inviting spaces to gather
 - Inviting public plaza and terraces
 - o Café and outdoor dining areas
 - o Urban furniture and features that encourage citizens to spend time at the Government Campus
- Provide transparency
 - o Exciting views and access into Board Chambers
 - o Dynamic views of government offices from the public plaza
- Provide tech-level amenities
 - o High-tech office work environment
 - o Offices with views
 - Rooftop dining areas
 - o In-house gym
- Promote wellness
 - o Natural ventilation
 - Daylighting
 - Walkability
 - o Easy outdoor access
- Encourage collaboration
 - o Fewer floors, more chance encounters
 - o High-tech meeting areas
 - o Team huddle areas
 - Diverse types of work areas

How do you encourage Creative Government?

Attract tech-level talent and provide spaces to collaborate.

- Provide tech-level amenities
 - o High-tech office work environment
 - o Offices with views
 - Rooftop dining areas
 - o In-house gym
- Promote wellness
 - Natural ventilation
 - Daylighting
 - Walkability
 - o Easy outdoor access
- Encourage collaboration
 - o Fewer floors, more chance encounters
 - o High-tech meeting areas
 - o Team huddle areas
 - Diverse types of work areas

How do you connect Citizens to their Government?

Lessen physical barriers between citizens and their government.

- Ease access to services via a porous, inviting Level 1 with:
 - o Lobby / Press / Ceremony
 - o Board Chambers
 - o One-Stop Kiosks
 - o Information Center
- Provide inviting spaces to gather
 - o Inviting public plaza and terraces
 - o Café and outdoor dining areas
 - Urban furniture and features that encourage citizens to spend time at the Government Campus
- Provide transparency
 - o Exciting views and access into Board Chambers
 - o Dynamic views of government offices from the Public Plaza

2.2 DESIGN DRIVERS

CONNECTIVITY "Creative Government"

- Minimum number of floors to maximize chance encounters between employees
- Generous shared/collaborative spaces
 - o Shared top floor with conference suite for staff use
 - Shared central areas per floor with pantries, small meeting rooms and open space for informal meeting
- Highly visually connected office areas (courtyard) for visibility across departments and from ground.

HIGH PERFORMANCE

- Floor plate depth 60' for maximum light + ventilation
- Solar carved roof (with PV)
- Environmentally conscious materials

URBAN SCALE

- Maximize openness at Plaza
- Key program @ ground for government / public interface
- Gestures towards urban moments (NW + SE)

VISIONARY WORK SPACE

- Raised floors for maximum data, power, MEP flexibility
- Integrated (hidden) technical rooms
- Outdoor meeting areas
- Highly visually connected office areas (courtyard)
- Advances typical workplace environment for government employees

TAKE ADVANTAGE OF LOCAL CLIMATE "Climate Best by Government Test"

- Generous access to varied comfortable outdoor areas (Balconies, Terrace, Roof Decks, operable windows)
- Shaded Plaza