Atherton • Belmont • Brisbane • Burlingame • Colma • Daly City • East Palo Alto • Foster City • Half Moon Bay • Hillsborough • Menlo Park
Millbrae • Pacifica • Portola Valley • Redwood City • San Bruno • San Carlos • San Mateo • San Mateo County • South San Francisco • Woodside

AGENDA

Congestion Management & Environmental Quality (CMEQ) Committee

Date: Monday, November 27, 2017
Time: 3:00 p.m.
Place: San Mateo City Hall
330 West 20th Avenue, San Mateo, California
Conference Room C (across from Council Chambers)

PLEASE CALL Jeff Lacap (650-599-1455) IF YOU ARE UNABLE TO ATTEND

1.	Public comment on items not on the agenda.	Presentations are limited to 3 mins	
2.	Issues from the November 2017 C/CAG Board meeting: • Approved – FY 2017/18 TDA Art. 3 Bike/Ped Program for $2.26M • Approved – Amended OBAG 1 Program to include a supplemental $225K to augment SRTS program	Information (Lacap)	No Materials
3.	Approval of minutes of August 28, 2017 meeting	Action (Garbarino)	Pages 1 - 4
4.	Review and approval of the 2018 CMEQ meeting calendar	Action (Lacap)	Pages 5
5.	Receive a presentation on the San Mateo County Safe Routes to School 16-17 Annual Report	Information (Vallez-Kelly)	No Materials
6.	Review and recommend approval of the Draft 2017 Congestion Management Program (CMP) and Monitoring Report	Action (Lacap)	Pages 6 - 48
7.	Review and recommend approval of the Call for Projects for the C/CAG and San Mateo County Transportation Authority Shuttle Program for Fiscal Year 18/19 & Fiscal Year 19/20	Action (Kalkin)	Pages 49 - 67
8.	Review and recommend approval of the proposed project funding list under the Safe Routes to School/Green Street Infrastructure Pilot Program	Action (Bogert)	Pages 68 - 70
9.	Executive Director Report	Information (Wong)	No Materials
10.	Member comments and announcements	Information (Garbarino)	
11.	Adjournment and establishment of next meeting date: **January 29, 2018**	Action (Garbarino)	

NOTE: All items appearing on the agenda are subject to action by the Committee. Actions recommended by staff are subject to change by the Committee.

NOTE: Persons with disabilities who require auxiliary aids or services in attending and participating in this meeting should contact Mima Guilles at 650 599-1406, five working days prior to the meeting date.
Other enclosures/Correspondence - None

CITY/COUNTY ASSOCIATION OF GOVERNMENTS COMMITTEE ON CONGESTION MANAGEMENTAND ENVIRONMENTAL QUALITY (CMEQ)

MINUTES
MEETING OF October 30, 2017

The meeting was called to order by Chair Garbarino in Conference Room C at City Hall of San Mateo at 3:00 p.m. Attendance sheet is attached.

1. Public comment on items not on the agenda.

None.

2. Issues from the October 2017 C/CAG Board meeting.

C/CAG Staff Jeff Lacap provided updates on items that were previously brought to the CMEQ committee and been brought to the Board meeting thereafter.

3. Approval of minutes of August 28, 2017 meeting (Action).

Motion: To approve the minutes of the August 28, 2017 meeting, Bonilla/Lee. Motion passes unanimously.

4. Receive a presentation of the Dumbarton Corridor Study (Information)

SamTrans Staff Melissa Reggiardo presented the Dumbarton Corridor Study that was released in August. The Dumbarton Corridor Study identifies short- and long-term strategies that reduce traffic congestion and improve mobility between Alameda, San Mateo and Santa Clara counties. The study will examine potential solutions to address both congestion on the Dumbarton Bridge (Highway 84) and connecting roadways, as well as the rehabilitation and repurposing of the Dumbarton rail bridge to the south. The feasibility study will not approve any future projects, but will instead provide local stakeholders with options to consider developing further. The study will go to the SamTrans Board for approval in December.

Committee members had questions about how the proposed improvements will be funded and had clarifying questions about the proposed improvements in the study. Members also discussed the challenges in trying to partner with cities outside San Mateo County to support the study.

5. Receive a presentation on Get Us Moving – San Mateo County (Information)

SamTrans Staff Jessica Epstein presented Get Us Moving – San Mateo County, a large-scale education and outreach program around funding for transit. The goal of the program is to construct an expenditure plan to be presented to the SamTrans Board for their choice whether to put a sales tax measure on the ballot in November 2018. Technical and stakeholder advisory groups have been formed to help identify the needs, goals, and priorities of transit funding. The next phase of the project is to work with the cities to identify specific projects to be incorporated into the expenditure plan. Project staff is also planning to do major community outreach through social media and grassroots campaigns.

Committee members had a discussion regarding the existing sales tax measures for transportation and transit and other proposed sales tax measures that are on upcoming ballots.

6. Receive a presentation on the project development process for the US 101 Managed Lane Project (Information)

C/CAG Executive Director Sandy Wong provided an update on the current process and schedule of the US-101 Managed Lane Project. The draft environmental document is planned to be released at the end of November. A 60-day public comment period along with two public outreach meetings (December 6 in Redwood City and December 11 in San Mateo) will follow.

In addition to the environmental document, the project staff is beginning the discussion of selecting who should be the owner and operator of the proposed toll facility in San Mateo County. Sandy presented examples of which entities are the owner and operators of other toll facilities in the Bay Area. Staff will spend the upcoming months conducting more in-depth discussions with the different stakeholders in San Mateo County about this topic. This decision will ultimately be decided upon together by the C/CAG Board and SMCTA Board.

7. Receive an update on the Carpool Incentive Program (Information)

C/CAG Staff John Hoang and Sara Muse presented results of the "Carpool in San Mateo County!", which launched on July 24th with the smartphone application Scoop. The program provides incentives to commuters who live and/or work in San Mateo County to carpool through the of use dynamic ride sharing smartphone apps. The incentive provides riders and drivers $2 per trip per person. C/CAG has provided $1 million dollars for the program over a one year period or until funds are exhausted.

Results for July through August shows increases of 8-10% in the total number of registered users from month to month, an increase in the number of one-way trips that a driver or rider has taken, as well as the number of unique matched users. The overall program shows a 60% increase from pre-incentive levels. Because many of the trips observed were originating in Fremont, Staff is also planning to the reach out to neighboring counties to partner on future incentives. C/CAG Staff is also working to bring another smartphone application, Waze Carpool, on board to the program shortly.

Committee members had questions on obtaining additional rider data and commented that future outreach should be looked at through the number of riders per capita and the sustainability and future of the program.

8. Executive Director Report (Information).

C/CAG Executive Director Sandy Wong provided updates on Regional Measure 3 (RM 3). The RM 3 legislation has been passed and MTC is looking to bring the measure to voters in June 2018. They are planning to work with the nine CMA's in the county to do voter outreach over the next few months.

9. Member comments and announcements (Information).

Member Koelling requested an extended discussion on the US-101 Managed Lane Project be put on a future agenda.

10. Adjournment and establishment of next meeting date.

The meeting adjourned at 4:49 pm.
The next regular meeting was scheduled for November 27, 2017.

2017 C/CAG Congestion Management & Environmental Quality (CMEQ) Committee Attendance Report													
Agency	**Representative**	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**
Metropolitan Transportation Commission	Alicia Aguirre	x			x				x		x		
City of Redwood City	Shelly Masur	n/a	n/a		n/a		x		x		x		
Town of Atherton	Elizabeth Lewis	x	x		x				x		x		
City of San Bruno	Irene O'Connell		x		x		x				x		
City of Burlingame	Emily Beach	x	x		x		x		x		x		
Environmental Community	Lennie Roberts	x	x								x		
City of Pacifica	Mike O'Neill	x	x		x		x		x				
City of South San Francisco	Richard Garbarino	x	x		x				x		x		
Public	Josh Powell	x	x		x		x				x		
City of Millbrae	Wayne Lee	x	x		x				x		x		
City of San Mateo	Rick Bonilla	x	x		x		x		x		x		
City of Pacifica	John Keener	x	x		x		x		x		x		
Agencies with Transportation Interests	Adina Levin	x	x		x		x		x		x		
Business Community	Linda Koelling	x			x		x		x		x		
Peninsula Corridor Joint Powers Board (Caltrain)	Dave Pine	n/a	n/a		n/a				x		x		
San Mateo County Transit District (SamTrans)	Pete Ratto	n/a	n/a		n/a		x		x		x		

Staff and guests in attendance for the October 30, 2017 meeting:
Sandy Wong, John Hoang, Jeff Lacap, Jean Higaki, Susy Kalkin, Sara Muse - C/CAG Staff
Artisha Naidu - Sustainable San Mateo
Melissa Reggiardo, Jessica Epstein - SamTrans
David Burruto - San Mateo County BOS

C/CAG AGENDA REPORT

Date: November 27, 2017

To: Congestion Management and Environmental Quality (CMEQ) Committee

From: Jeff Lacap, Transportation Programs Specialist

Subject: Review and approval of the 2018 CMEQ meeting calendar.

(For further information or response to questions, contact Jeff Lacap at 650-599-1455)

RECOMMENDATION
That the CMEQ committee review and approve the regular meeting calendar for 2018.

FISCAL IMPACT
None

SOURCE OF FUNDS
N/A

BACKGROUND
The proposed meeting calendar for 2018 is as follows:

Congestion Management & Environmental Quality
Mondays 3:00 p.m. to 5:00 p.m.
January 29
February 26
March 26
April 30
May 21 (May 28 is Memorial Day)
June 25
July – No Meeting
August 27
September 24
October 29
November 26
December - No Meeting

All meetings are scheduled for the last Monday of the month except for May 21st. Also, following the CMEQ committee's decision for past years, staff recommend to not schedule meetings for the months of July and December.

Meetings begin at 3:00 p.m. and end at 5:00 p.m. and are typically held in Conference Room C, San Mateo City Hall, with occasional alternative locations to be announced.

ATTACHMENTS
None.

C/CAG AGENDA REPORT

Date: November 27, 2017

To: Congestion Management and Environmental Quality Committee (CMEQ)

From: Jeff Lacap, Transportation Programs Specialist

Subject: Review and recommend approval of the Draft 2017 Congestion Management Program (CMP) and Monitoring Report

(For further information contact Jeff Lacap at 650-599-1455)

RECOMMENDATION

That the CMEQ Committee review and recommend approval of the Draft 2017 Congestion Management Program (CMP) and Monitoring Report

FISCAL IMPACT

It is not anticipated that the changes in the 2017 CMP will result in any increase in the current fiscal commitment that C/CAG has made to the Program.

BACKGROUND/DISCUSSION

Overview

Every two years, C/CAG as the Congestion Management Agency for San Mateo County, is required to prepare and adopt a Congestion Management Program (CMP) for San Mateo County. The CMP is prepared in accordance with state statutes, which also establish requirements for local jurisdictions to receive certain gas tax subvention funds. The CMP's conformances with regional goals enable San Mateo County jurisdictions to qualify for state and federal transportation funding.

The Metropolitan Transportation Commission (MTC) also provides guidance for consistency and compatibility with the Regional Transportation Plan (RTP). MTC's findings for the consistency of CMPs focus on five areas:

- Goals and objectives established in the RTP,
- Consistency of the system definition with adjoining counties,
- Consistency with federal and state air quality plans,
- Consistency with the MTC travel demand modeling database and methodologies; and
- RTP financial assumptions.

2017 CMP Update

The Draft 2017 CMP includes updated information and changes from the adopted 2015 CMP. The majority of the document is unchanged from the 2015 CMP. Some key updates are highlighted below:

- Updated Chapter 4 – Performance Element
  - Includes discussion regarding SB 743 and future updates to the CMP

- Updated Chapter 5 – Trip Reduction and Travel Demand Element
  - Reflects the current Transportation Demand Element (TDM) and Transportation System Management (TSM) measures.

- Updated Chapter 7 – Deficiency Plan Guidelines
  - Reflects updated 2017 LOS Monitoring results

- Updated Chapter 8 – Seven Year Capital Improvement Program
  - Reflects the adopted OBAG 2 Program, 2018 State Transportation Improvement Program (STIP), and TDA Article 3 Program project lists.

- Appendices that were updated includes the following:
  - Appendix F - 2017 CMP Monitoring (Draft)
  - Appendix G - Status of Capital Improvement Projects
  - Appendix I - Land Use Guide and Updated List
  - Appendix J - San Mateo County Projects Included in Plan Bay Area 2040
  - Appendix M - Measure M Implementation Plan FY 2017-2021

2017 Traffic Level of Service and Performance Monitoring

C/CAG is required to measure the roadway segments and intersections on the Congestion Management Program roadway network to determine the change in LOS from one period to the next. As part of the 2017 CMP update, C/CAG has retained a consultant to monitor the roadway segments and intersections on the CMP roadway network. This year's study was conducted in the spring of 2017 with travel time data from INRIX being used between March and May of 2017. The most recent assessment prior to this study was performed in March - May 2015. The primary tasks completed as part of this study include conflation of travel time data to Level of Service monitoring network and Level of Service Analysis. As a result of this monitoring, C/CAG is required to determine what location(s), if any, has (have) exceeded the LOS standard that was established by C/CAG in 1991.

In determining conformance with the LOS standards, C/CAG historically excludes traffic impacts attributable to interregional travel based on the C/CAG Travel Demand Forecasting Model. To address deficiencies on the CMP network, C/CAG developed the San Mateo County Congestion Relief Plan (CRP). Originally adopted in 2002 and reauthorized in 2007,2011, and 2015 to be effective through July 2019, the CRP fulfills the requirement of a Countywide Deficiency Plan for all roadway segment and intersection deficiencies identified through the monitoring done for the 1999 through the current Congestion Management Programs. With the CRP in place, no jurisdiction will be required to develop a deficiency plan because of this monitoring report.

In calculating the LOS for the CMP roadway network, C/CAG identified 12 segments that are below the established LOS standard. They are as follows:

- SR-84 between SR 1 and Portola Road – PM Peak Hour
- SR-84 between I-280 and Alameda de las Pulgas – AM and Peak Hour
- SR-84 between Willow Road and University Avenue – AM and PM Peak Hour
- SR-92 between I-280 and US-101 – AM and PM Peak Hour
- SR-92 between US-101 and Alameda County Line – AM and PM Peak Hour
- US-101 between San Francisco County Line and I-380 – AM and PM Peak Hour
- US-101 between I-380 and Millbrae Avenue – PM Peak Hour
- US-101 between Millbrae Avenue and Broadway – PM Peak Hour
- US-101 between Broadway and Peninsula Avenue – AM and PM Peak Hour
- US-101 between SR-92 and Whipple Avenue – AM and PM Peak Hour
- I-280 between SR-1 (South) and San Bruno Avenue – AM and PM Peak Hour
- I-280 between SR-92 and SR-84 – AM and PM Peak Hour

It is noted that nine (9) of the twelve (12) CMP roadway segments had deficient level of service (without interregional travel exemptions) in both the AM and PM peak periods. Three (3) segments had deficient level of service in the PM peak period only.

The CMP-enabling legislation allows for the reduction in volume for those trips that are interregional. In this case, "interregional" are those trips that originate from outside the county. Based on the monitoring report and after the exclusions for interregional traffic was applied, two out of the 53 roadway segments exceeded the LOS standard. The segments in violation of the LOS Standard in 2017 are as follows:

- Westbound SR-84 between I-280 and Alameda de Las Pulgas – AM and PM Peak Hour
- Eastbound SR 92 between I-280 and US 101 – AM and PM Peak Hour
- Eastbound SR 92 between I-280 and US 101 – AM and PM Peak Hour

For the sixteen (16) intersections monitored, the 2017 traffic volumes, lane configurations, and signal phasing were used as inputs to the intersection level of service calculations. This year's monitoring as well as the 2015 monitoring used the 2000 Highway Capacity Manual method (average control delay) to calculate the LOS results.

All 16 CMP intersections are in compliance with the LOS Standard, similar to the 2015 LOS Monitoring results. A summary of the number of roadway segments (before deducting for interregional travel) and intersections with a LOS F (F designated the worse possible congestion) since the 2001 CMP are as follows:

Year	LOS F*		Year	LOS F*	
	Roadways	Intersections**		Roadways	Intersections**
2001	16	1	2011	14	2
2003	13	0	2013	12	2
2005	12	0	2015	10	0
2007	14	2	**2017**	**12**	**0**
2009	10	3			

* *Without Exemption*

** *Majority of intersections monitored are along Route 82 (El Camino Real)*

Average Travel Times on US-101

Travel times were also measured for the U.S. 101 corridor between the San Francisco and Santa Clara County Lines. The U.S. 101 corridor was selected because, in addition to mixed-flow lanes, it includes High Occupancy Vehicle (HOV) lanes, bus routes, and passenger rail.

The total travel time for carpools was estimated by adding the travel time in the HOV lanes between the Santa Clara County Line and Whipple Avenue to the travel time in the mixed-flow lanes between Whipple Avenue and the San Francisco County Line. Travel times for bus and passenger rail modes were estimated based on SamTrans and Caltrain published schedules. SamTrans bus route KX and 398 operates in the U.S. 101 corridor. This route provides service through San Mateo County from San Francisco to Palo Alto. Travel times were based on the average travel time between County lines during the commute hours. Travel time via Caltrain was calculated in a similar manner. Results for the 2017 travel time surveys are summarized below.

Average Travel Time On US 101 Corridor (in minutes) - Between San Francisco and Santa Clara County Lines																
Mode	AM - Morning Commute Peak Period								PM - Evening Commute Peak Period							
	NB				SB				NB				SB			
	2017	2015	2013	2011	2017	2015	2013	2011	2017	2015	2013	2011	2017	2015	2013	2011
Auto - Single Occ.[3]	32	32	28	29	35	36	41	34	36	39	30	32	32	32	33	40
Carpool - HOV Lane[4]	32	32	32	28	34	35	37	30	36	42	37	30	32	32	32	35
Caltrain[1]	40	39	23	35	44	43	27	31	40	38	24	34	36	38	23	35
SamTrans Route KX[2]	80	80	68	76	-	-	73	81	-	-	72	81	91	91	74	78

[1] Baby Bullet b/n Palo Alto and Menlo and Approximate north county line near Bayshore Station - but not stop on Baby Bullet.

[2] Route KX b/n RWC and SF(AM NB Only, PM SB Only) & 398 (b/n Palo Alto and Redwood City).

[3] 2015 & 2017 Results based on Inrix avg speeds over each TMC for the full 3 and 2 month periods, respectively

[4] 2015 & 2017 HOV results are based on HOV field runs south of Whipple + Inrix avg speed for TMC north to SF county line

Transit Ridership

As shown in the table below, the 2017 transit ridership data indicates annual total ridership for SamTrans has decreased by 10% whereas Caltrain ridership increased by 3% when compared to the CMP update 2015. Annual total ridership for BART decreased by 4% at the Colma, Daly City, and SFO Extension stations. Overall annual total transit ridership decreased about 3% when compared with the previous 2015 CMP Update. Results for the 2017 transit ridership are summarized below.

Transit Agency	Annual Total		Average Weekday	
	2017	2015	2017	2015
SamTrans[1]	11,816,760	13,158,703	38,700	42,981
Caltrain[2]	18,743,189	18,156,173	59,132	58,429
BART (Colma & Daly City)[3]	7,818,023	8,155,340	25,269	28,050
BART (SFO Ext. Stations)[3]	12,102,872	12,614,731	39,989	40,741
Combined Transit	**50,480,844**	**52,084,947**	**163,090**	**170,201**

[1] Source: SamTrans End-of-Year Performance Report FY2017
[2] Source: Caltrain Website
[3] Source: BART Staff

The complete draft Monitoring Report is included in Appendix F of the Draft 2017 Congestion Management Program (A copy is attached to this staff report).

SB 743

Senate Bill 743 was signed into law in 2013 and aimed to replace the metric used to measure the transportation impact assessment in the California Environmental Quality Act (CEQA) process from a delay based metric such as traffic level of service (LOS) to another metric such as vehicle miles traveled (VMT).

The Governor's Office of Planning and Research (OPR) is responsible for identifying the alternative metric and updating the CEQA Guidelines on transportation impact analysist. OPR has identified VMT as the new metric but is currently still finalizing the technical guidance for impact analysis.

Until SB 743 implementation guidelines are adopted by OPR's effort, or if any other legislative efforts to amend the CMP legislation will occur, C/CAG did not do any major updates to the CMP and only made focused changes during this update to report on the work performed and progress made in implementing the CMP elements (Roadway System, Traffic LOS Standards, Performance Element, Trip Reduction and Travel Demand Element, Land Use Impact Analysis Program, and Seven-Year Capital Improvement Program) since the last update in 2015.

Since current CMP legislation requires the use of LOS metric, the Draft 2017 CMP has been prepared following current CMP guidelines. However, it is anticipated when SB 743 implementation guidelines are fully adopted by OPR, C/CAG, in coordination with the Metropolitan Transportation Commission and other Congestion Management Agencies in the Bay Area, will evaluate and recommend performance metrics for future CMP updates.

2017 CMP Approval Schedule (Tentative)

Date	Activity
November 16, 2017	Draft CMP to TAC
November 27, 2017	Draft CMP to CMEQ
December 14, 2017	Draft CMP to Board
*Draft CMP is released for public review and comment	
January 19, 2018	Final CMP to C/CAG TAC
January 29, 2018	Final CMP to C/CAG CMEQ
February 9, 2018	Final CMP to Board
March 2018	Final CMP to MTC

The C/CAG Congestion Management Program Technical Advisory Committee approved the 2017 Draft CMP at their meeting on November 16. It was further recommended that staff list the 12 deficient CMP roadway segments in the report and provide detail on the methodology in calculating the travel time speeds.

ATTACHMENT

- Draft Level of Service and Performance Measure Monitoring Report – 2017
- Draft 2017 San Mateo County CMP – Executive Summary
- Draft 2017 San Mateo County CMP & Appendix *(Available for download at: http://ccag.ca.gov/committees/congestion-management-and-environmental-quality-committee/*

Submitted to:

Level of Service and Performance Measure Monitoring Report - 2017

November 2017

Submitted by:
CoPLAN – *The Planning Collaborative*
5508 Sandalwood
McKinney, TX 75070

November 1, 2017

City/County Association of Governments of San Mateo County
County Office Building
555 County Center
Fifth Floor
Redwood City, California 94063
Attention: Jeffrey Lacap, Transportation Programs Specialist

Re: Level of Service and Performance Measure Monitoring Report - 2017

Dear Mr. Lacap:

CoPLAN, LLC. (CoPLAN) is pleased to submit the report for the 2017 LOS and Performance Measure Monitoring to support of the 2017 Congestion Management Program for the City/County Association of Governments of San Mateo County (C/CAG).

CoPLAN conducted the 2017 study for C/CAG utilizing the latest technology for performing CMP studies. Our extensive and unique experience provides a cost-effective and cutting edge process to obtain and analyze traffic data. CoPLAN has developed a methodology including GPS and GIS over the past 15 years with exciting results. The addition of GIS linear reference systems has added a component that is unique to CoPLAN for network analyses. Over the last 4 update cycles, CoPLAN staff have developed a comprehensive database for C/CAG that now is integrated in GIS for easy access and historic comparisons.

C/CAG has taken a major step forward in having the ability to take the GIS data, in addition to the historic tables, and integrate the digital data with your travel demand model. The speeds, roadway attributes, etc. can be conflated with the model to produce a very robust and comprehensive system. This was not available in the past because the methodology used with tables and charts did not produce the value-added products of this 2017 study. CoPLAN will continue to support C/CAG to produce the best value that not only meets the intended LOS monitoring requirements to allow historic comparisons of this project, but produces the results in a form that can be used by many other areas within the county and by its members.

Sincerely,
CoPLAN, LLC

Steve Taylor
Project Manager

TABLE OF CONTENTS

A. EXECUTIVE SUMMARY

The City/County Association of Governments of San Mateo County (C/CAG) has an established Congestion Management Program (CMP) to monitor the transportation network within the county. All roadways included in the CMP network are evaluated for conformity at least every two years.

The goal of the monitoring program is to improve the performance of the transportation system by identifying congested areas and related transportation deficiencies. This information is then used to help prioritize transportation funding decisions based on system performance, land use factors, multimodal characteristics, and other considerations.

This year's monitoring study was conducted in the spring 2017 with data collection between March and May including INRIX data on approximately 163.3 directional miles of freeways and arterials, 72-hour counts on 21 segments representing 301.4 centerline miles of arterials, and 16 intersection turning movement counts.

This is the second monitoring cycle during which the C/CAG has used commercially available travel speed data from INRIX integrated in a geographic information system (GIS) to monitor Level of Service (LOS) on the CMP network. The primary tasks completed as part of this study include:

- Conflation of travel time data to LOS Monitoring network
- LOS Analysis

With the 2017 monitoring cycle, C/CAG is calculating LOS based on two methodologies—Highway Capacity Manual (HCM) 1994 and HCM 2010. This dual reporting facilitates historical comparisons while also reporting LOS based on the more current methodology. For freeways, only HCM 1994 LOS is reported, as the HCM 2000 methodology requires traffic volume information for all unique freeway segments and ramps. The HCM 2010 criteria was used only for the intersection LOS using the collected peak period turning movement counts analyzed in Synchro. Collection of comprehensive freeway traffic volumes is beyond the scope of the CMP monitoring effort.

B. INTRODUCTION

History of the Congestion Management Program

C/CAG has an established Congestion Management Program (CMP) to monitor the transportation network within the county. All roadways included in the CMP network are evaluated for conformity at least every two years by the agency, which is the designated Congestion Management Agency (CMA) for San Mateo County. The goal of the monitoring program is to improve the performance of the transportation system by identifying congested areas and related transportation deficiencies. This information is then used to help prioritize transportation funding decisions in light of system performance, land use factors, multimodal characteristics, and other considerations.

This year's study was conducted in the spring of 2017 with travel time data from INRIX being used between April and May of 2017. The most recent assessment prior to this study was performed in March - May 2015. The primary tasks completed as part of this study include:

- Conflation of travel time data to LOS Monitoring network
- Level of Service Analysis

Study Background

This year's monitoring study was conducted in the spring 2017 with data sourced between April and May on approximately 163.3 directional miles of freeways and arterials, 72-hour counts on 21 segments representing 301.4 centerline miles of arterials, and 16 intersection turning movement counts. CMP legislation requires that state highways (including freeways) and principal arterials be included in the CMP network. The network must be useful to track the transportation impacts of land development decisions, as well as to help assess the congestion management implications of proposed transportation projects. C/CAG's network therefore includes numerous local thoroughfares since most urban traffic occurs on city arterials (rather than on the freeways). **Figure 1** shows the routes that were monitored.

All of the study roadways were evaluated during the AM and PM peak period between the hours of 7 AM - 9 AM and 4 PM - 7 PM. As in previous studies, both time periods are considered when determining the LOS to be reported. The directionality of the segment is not reported in many of the summary tables, but the worst LOS found for either direction for either AM or PM peak period is shown as the official result. In most cases, the PM period is the focus of the CMP since consistently, the PM period results in higher volumes, slower speeds, and more congestion. The methodology used included using INRIX travel time data, 72-hour traffic counts, and intersection turning movement counts.

The total directional miles and number of route segments for each roadway type are shown in **Table 1**.

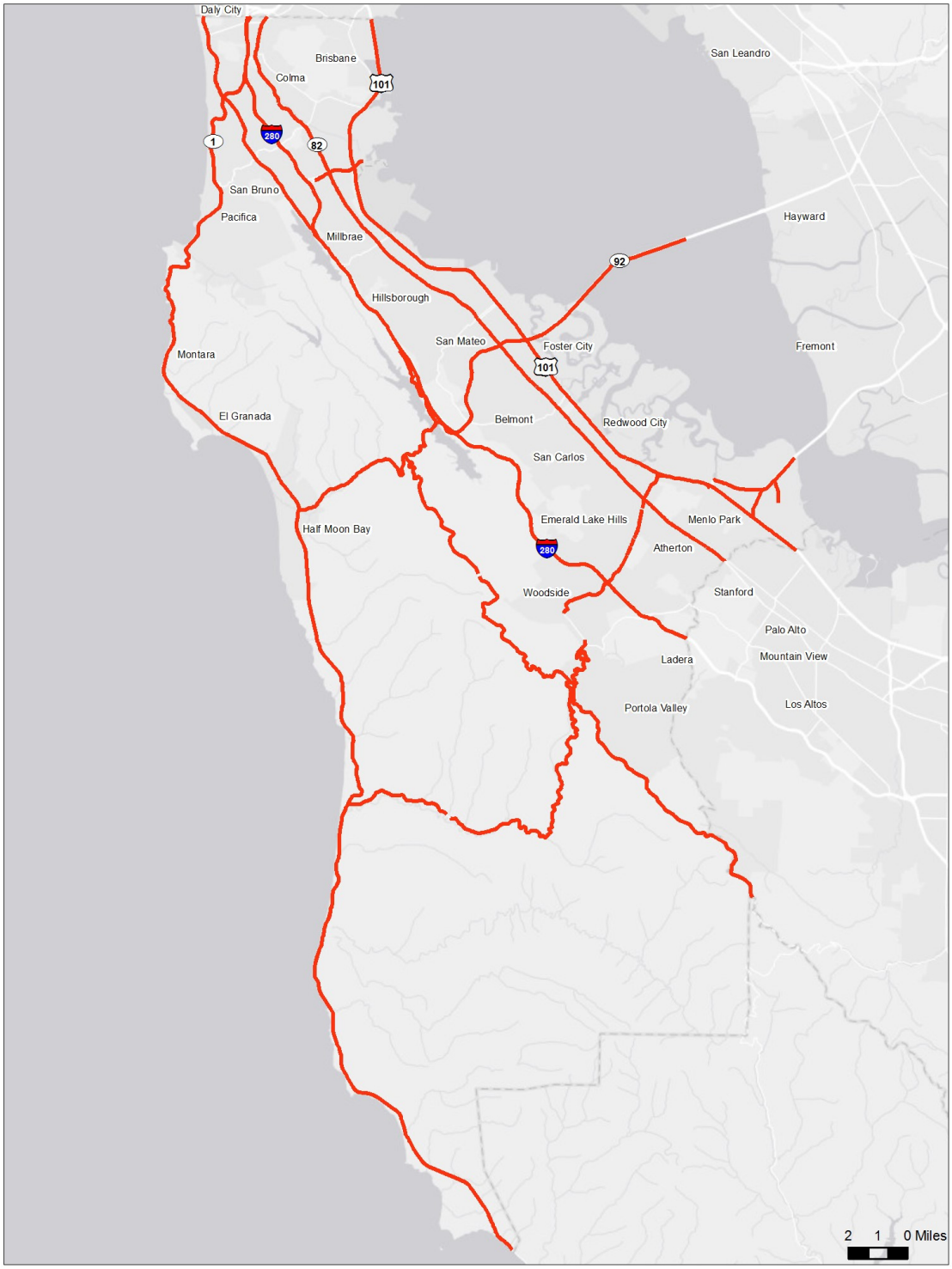

Figure 1 – Spring 2017 CMP Monitored Routes

Table 1 – Total Study Miles Summary

Roadway Type	Total Directional Miles
Arterial / State Routes	301.4
Freeway	163.3
Total	464.7

This monitoring report focused on the five performance measures established in the San Mateo County Congestion Management Program. These performance measures are:

1. Roadway Level of Service
   a: Travel Time – Average Speed
   b. 72-hour traffic counts – V/C for rural arterials
2. Intersection LOS
3. Travel Time for various modes (single occupant, carpools, and transit)
4. Pedestrian and Bicycle Improvements
5. Ridership / Person Throughput for Transit

As noted, the "Roadway Level of Service and Intersection LOS" are the primary CMP performance measures; therefore, a mitigation plan is required if the resulting LOS is below the established minimum standard.

The following sections focus on each of the above performance measures with emphasis on the Roadway and Intersection LOS. The other items are included to provide some alternative views to help explain the changes in performance and the opportunities for improvement.

C. METHODOLOGY

Mapping of CMP Network

Global Positioning System (GPS)

Historically, CMP travel time runs were done manually. CoPLAN staff introduced the use of GPS and GIS to C/CAG in 2011.

All the roadways in the network were mapped using GPS technology in 2011 and 2013. With the introduction of INRIX datasets in 2015, the network attributes were carried over from those past cycles.

As first introduced in 2015, the travel speed data collection process was made more efficient by using data from INRIX in place of a small sample size of GPS travel time runs.

Travel Time Data

Travel time data was assembled from INRIX and conflated to the LOS Monitoring network.

Travel time data was conflated for the morning and afternoon peak periods on all applicable roadway segments; data were only used on Tuesdays, Wednesdays, or Thursdays, and school district spring break periods were avoided.

D. EVALUATION

LOS Analysis – HCM 1994

The tables in the Appendix highlight the 2017 CMP route segments that had LOS lower than the established standard during the AM or PM Peak by HCM 1994 standards directly from the travel time data or 72-hour counts. The CMP enabling legislation allows for the reduction in volume for those interregional trips for those segments that have a LOS lower than the established standard; i.e. those trips that originate from outside the county and either pass through the county or have a destination within San Mateo County.

Other Performance Measures Results

Apart from average speeds aggregated to the CMP route segments level, intersection segment level average speeds were also calculated in 2017 for all routes. These results are available in the GIS tables provided to C/CAG.

With the use of INRIX data once again in this year's freeway travel time analyses, we have the opportunity to include various new performance measures for the region. In prior years, a small sample of travel time runs were made during a small window of time in the AM and PM peak period. One interesting new performance measure that can be evaluated is the **Duration of Congestion**, or amount of time below a certain speed / LOS within a segment. For example, **Figure 2** illustrates the 5-minute average speed for a 24-hour period between April and May of 2017. The red line depicts the average speed, while the vertical lines represent the minimum and maximum speeds for each respective time interval (showing the variability of speed for each time slice). Further, on the horizontal axis, the shaded regions depict the corresponding LOS for the average speed for the freeway section. Therefore, one can see that the average speed in the southbound US 101 segment between SR 92 and Whipple falls into the LOS F range in the morning period around 6:30 AM and remains at that LOS until around 9:00 AM. For the afternoon period, the average speed remains better than LOS F all afternoon, while at times over the 2 months, the minimum speed does drop to a very low speed around 9 mph.

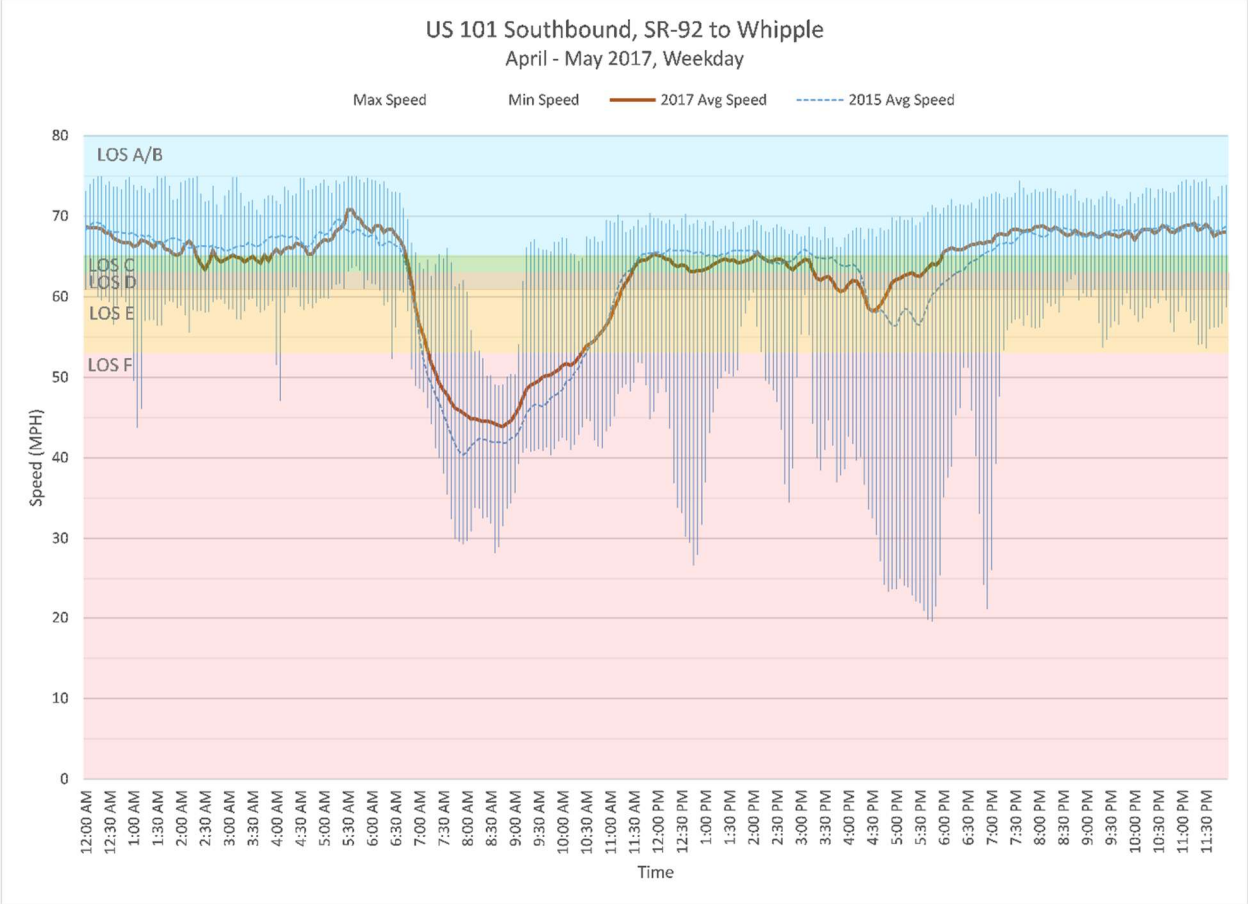

Figure 2 – Spring 2017 Duration of Congestion

E. ROADWAY LEVEL OF SERVICE (LOS)

Traffic Flow

The Highway Capacity Manual (HCM) defines capacity as "…the maximum hourly rate at which persons or vehicles reasonably can be expected to traverse a point or a uniform section of a lane or roadway during a given time period under prevailing roadway, traffic, and control conditions."

The vehicle capacity and operational characteristics of a roadway are a function of a number of elements including: the number of lanes and lane widths, shoulder widths, roadway alignment, access, traffic signals, grades, and vehicle mix. Generally, roadways with wider travel lanes, fewer traffic control devices, straight alignments, etc. allow faster travel speeds and therefore greater vehicle flow per unit time.

Level of Service

The HCM defines level of service (LOS) as "…a quality measure describing operational conditions within a traffic stream, generally in terms of such service measures as speed and travel time, freedom to maneuver, traffic interruptions, and comfort and convenience."

"Six LOS are defined for each type of facility that has analysis procedures available. Letters designate each level, from A to F, with LOS A representing the best operating conditions and LOS F the worst. Each level of service represents a range of operating conditions and the driver's perception of those conditions."

In accordance with CMP legislation, the county and city governments are required to show that all CMP route segments within their jurisdiction are operating at or above the CMP traffic LOS standard. Section 65089(b)(1)(B) of the California Government Code states that "In no case shall the LOS standards established be below the LOS E or the current level, whichever is farthest from LOS A. When the level of service on a segment or at an intersection fails to attain the established level of service standard, a deficiency plan shall be adopted pursuant to section 65089.4."

All freeway segments in the network, as included in **Figure 3**, were monitored using the INRIX travel time data, which allows for determination of LOS on the basis of average operating speed. C/CAG primarily uses the 1994 and 2000 HCM methodology to monitor LOS on the CMP network, as this methodology was utilized in the baseline monitoring cycle and is necessary to maintain historical comparisons, identify exempt segments, and monitor potential network deficiencies. The specific methodologies used for monitoring freeway and arterial segments are listed below per HCM definitions:

- **Freeway Segments (HCM 1994 - Chapter 3)** – All freeway segments were evaluated using the "basic freeway sections" methodology of HCM 1994 where the LOS for each freeway segment was determined using its average travel speed.

Freeway LOS was not calculated based on HCM 2000 methodology. In order to evaluate all freeway segments using the HCM 2000 methodology, the volumes on all freeway sections (mainline) with distinct characteristics (e.g., quantity of lanes), as well as on entrances and exits would be required. Changes to the methodology will be considered along with the next update cycle when the HCM 2010 may be incorporated. Until then, the methodology of previous updates was followed to maintain the historical context for comparisons of the results.

- **Multilane, Two-Lane and Arterial Segments (HCM 1994 – Chapters 7, 8, and 11)** – All non-freeway surface street segments were evaluated based on the volume to capacity ratio (V/C) dependant on the local free-flow speed, cross-section, number of lanes, % no-passing zones, and functional class.

  Multilane and Two-Lane highways were evaluated primarily based on the current volumes as measured through 72-hour traffic counts at 21 locations throughout the county. These counts and resulting V/C were then compared to the applicable criteria in the HCM 1994 to determine the respective LOS.

  Many arterial segments used by C/CAG for CMP purposes (called "CMP Segments") span several blocks and include multiple signals and/or stop controlled intersections. If an Intersection Segment is defined as a segment from one controlled intersection to the next, the CMP segments are a collection of consecutive Intersection Segments. INRIX segmentation, known as TMC segments, are many times longer or shorter than the desired limits for the CMP Segments. CoPLAN methodology of travel time estimation can calculate average speeds at the Intersection Segment level and these data can be aggregated to calculate the average speeds at the CMP segment level. The average speed on each CMP segment is computed as the ratio of total length of the segment to the sum of average travel time on each individual intersection segment within the CMP segment. The average travel time on each intersection segment is computed as the arithmetic mean of travel times of accumulated data within the TMC segment. The average speed thus accounts for time in motion and time spent at the signals or stop signs.

Table 2 shows the relationship between average travel speed and level of service for basic freeways according to HCM 1994. There are four (4) freeway categories based on the free-flow speed of the facility (ranging from 55-70 mph).

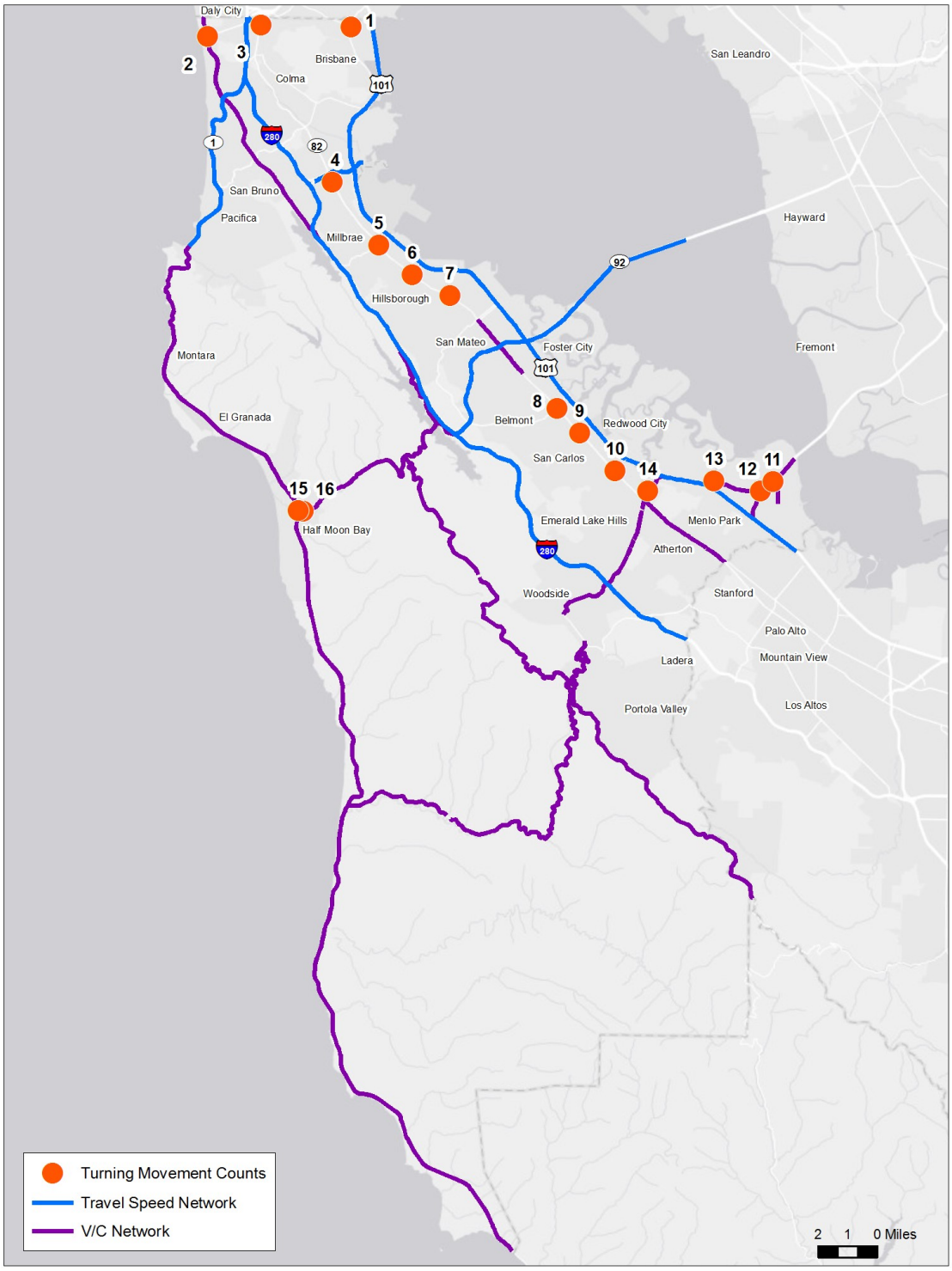

Figure 3 –2017 Routes and LOS Methodologies

Table 2 – Example LOS from Freeway with Free-Flow Speed of 65 mph (HCM 1994)

Roadway Type	Basic Freeway
Free Flow Speed (mph) Range	**65**
A	≥ 65
B	≥ 65
C	≥ 64.5
D	≥ 61
E	≥ 56/53
F	< 56

Roadway Segment LOS Analysis Results

Table 3 summarizes the current year roadway segment LOS. Additionally, **Figures 4, 5, 6, and 7** illustrate the results graphically. As highlighted in **Table 3**, there are 12 segments (plus the US 101 HOV segment between Whipple and SC County Line) found to be below the established minimum in each of the AM and PM peak periods. **Table 3** includes a summary of the historic results since 1999. All results included in this update have consistently used the HCM 1994 for all roadway types and the HCM 2000 for the intersections. Variations in the LOS results may be explained through capital improvements, construction, or use of transit and other modes. The values included in Table 3 reflect the lowest LOS for either direction. Basically, it is the worst case LOS for the link in either direction during the respective peak periods.

Table 3 – CMP Roadway Segment Monitoring Results (Lowest LOS)

2017 CMP Roadway Segment Levels of Service													
			2017 LOS										
Route	Roadway Segment	LOS Standard	AM Without Exemption	PM Without Exemption	AM With Exemption	PM With Exemption	2015 LOS[2]	2013 LOS[2]	2011 LOS[2]	2009 LOS[2]	2007 LOS[2]	2005 LOS[2]
1	San Francisco County Line to Linda Mar Blvd.	E	A	A	A	A	A	F[3]/F[4]	F[3]/B[4]	F[3]/F[4]	F[3]/F[4]	F[3]/F[4]
1	Linda Mar Blvd. to Frenchmans Creek Road	E	D	D	D	D	D	D	D	D	D	D
1	Frenchmans Creek Road to Miramontes Road	E	E	E	E	E	E	E	E	E	E	E
1	Miramontes Road to Santa Cruz County Line	D	B	C	B	C	C	B	B	B	B	C
35	San Francisco county Line to Sneath Lane	E	D	C	D	C	D	B	A	C	C	C
35	Sneath Lane to I-280	F	F	F	F	F	F	F	F	E	F	F
35	I-280 to SR 92	B	C	C	C	B	C[3]/A[4]	C[3]/B[4]	C[3]/B[4]	B	B	C/C
35	SR 92 to SR 84	B	B	B	B	B	B	B	B	B	B	B
35	SR 84 to Santa Clara County Line	E	B	B	B	B	B	B	B	B	B	B
82	San Francisco County Line to John Daly Blvd	E	A	A	A	A	A	A	A	A	A	A
82	John Daly Boulevard to Hickey Boulevard	E	A	A	A	A	A	A	A	A	A	A
82	Hickey Boulevard to I-380	E	A	A	A	A	A	A	A	A	C	A
82	I-380 to Trousdale Drive	E	A	A	A	A	A	A	A	A	B	A
82	Trousdale Drive to 3rd Avenue	E	A	A	A	A	A	A	B	A	A	A
82	3rd Avenue to SR 92	E	A	A	A	A	A	A	A	A	A	A
82	SR 92 to Hillside Avenue	E	A	A	A	A	A	A	A	B	B	B
82	Hillside Avenue to 42nd Avenue	E	A	C	A	C	C	B	B	B	B	B
82	42nd Avenue to Holly Street	E	A	B	A	B	B	A	A	B	B	A
82	Holly Street to Whipple Avenue	E	A	A	A	A	B	B	C	C	D	D
82	Whipple Avenue to SR 84	E	A	A	A	A	A	A	B	C	C	C
82	SR 84 to Glenwood Avenue	E	A	B	A	A	B	A	B	B	B	B
82	Glenwood Avenue to Santa Cruz Avenue	E	B	C	B	C	C	C	B	B	C	D
82	Santa Cruz Avenue to Santa Clara County Line	E	B	B	B	B	B	B	A	B	B	C
84	SR 1 to Portola Road	C	C	D	C	B	D[3]/B[4]	C	C	C	C	C
84	Portola Road to I-280	E	C	C	C	C	C	B	B	B	B	B
84	I-280 to Alameda de las Pulgas	C	D	D	D	D	D[3]/D[4]	D[3]/D[4]	D[3]/C[4]	C	D/A	C
84	Alameda de las Pulgas to U.S. 101	E	D	D	D	D	D	D	E	E	E	E
84	U.S. 101 to Willow Road	D	D	C	D	C	C	C	B	E/E	C	B
84	Willow Road to University Avenue	E	F	F	A	B	F[3]/B[4]	F[3]/B[4]	F[3]/C[4]	F/E	F/F	F/F
84	University Avenue to Alameda County Line	F	F	F	F	F	F	F	F	F	F	F
92	SR 1 to I-280	E	E	E	E	E	E	E	E	E	E	E
92	I-280 to U.S. 101	D	F	F	E	E	F[3]/E[4]	F[3]/E[4]	F[3]/F[4]	E[3]/D[4]	F[3]/D[4]	F[3]/E[4]
92	U.S. 101 to Alameda County Line	E	F	F	B	C	F[3]/F[4]	E	F[3]/A[4]	A/B[3]	A/B[3]	A/B[3]

Notes:

[2] The first value represents LOS without exemptions, and the second value represents LOS with exemptions.

[3] Based on average speed from travel time surveys.

[4] Exemptions applied to volume-to-capacity ratios estimated from average speeds.

"-" = not applicable. LOS standard is not violated. Therefore, exemptions were not applied.

LOS Standard violations (after application of exemptions) are highlighted in red

LOS based on 1994 Highway Capacity Manual Methodology.

Table 3 ('cont) – CMP Roadway Segment Monitoring Results (Lowest LOS)

2017 CMP Roadway Segment Levels of Service													
			2017 LOS										
Route	Roadway Segment	LOS Standard	AM Without Exemption	PM Without Exemption	AM With Exemption	PM With Exemption	2015 LOS[2]	2013 LOS[2]	2011 LOS[2]	2009 LOS[2]	2007 LOS[2]	2005 LOS[2]
101	San Francisco County Line to I-380	E	F	F	D	E	F[3]/ E[4]	E	F[3]/ A[4]	D[3]	E[3]	D[3]
101	I-380 to Millbrae Avenue	E	E	F	E	D	F[3]/ D[4]	F[3]/ C[4]	F[3]/ C[4]	D[3]	F[3]/C[4]	F[3]/ D[4]
101	Millbrae Avenue to Broadway	E	E	F	E	C	F[3]/ E[4]	F[3]/ C[4]	F[3]/ C[4]	F[3]/C[4]	F[3]/C[4]	F[3]/ D[4]
101	Broadway to Peninsula Avenue	E	F	F	C	D	F[3]/ E[4]	F[3]/ C[4]	F[3]/ C[4]	F[3]/D[4]	F[3]/C[4]	F[3]/ D[4]
101	Peninsula Avenue to SR 92	F	F	F	F	F	F	F	F	F[3]	F[3]	F[3]
101	SR 92 to Whipple Avenue	E	F	F	E	E	F[3]/ E[4]	F[3]/ D[4]	F[3]/ D[4]	F[3]/E[4]	F[3]/D[4]	F[3]/ E[4]
101	Whipple Avenue to Santa Clara County Line	F	F	F	F	F	F	F	F	F[3]	F[3]	F[3]
109	Kavanaugh Drive to SR 84 (Bayfront Expwy.)	E	C	D	C	D	D	D	C	D	D	C
114	U.S. 101 to SR 84 (Bayfront Expressway)	E	B	C	B	C	C	A	B	C	C	B
280	San Francisco County Line to SR 1 (north)	E	E	E	E	E	E	E	E	F[3]/D[4]	F[3]/A	E[3]
280	SR 1 (north) to SR 1 (south)	E	E	D	E	D	E	E	A/B	E	E	E[3]
280	SR 1 (south) to San Bruno Avenue	D	F	F	A	D	F[3]/ C[4]	F[3]/ D[4]	F[3]/ D[4]	E[3]/D[4]	F[3]/C[4]	F[3]/ E[4]
280	San Bruno Avenue to SR 92	D	A	A	A	A	C	B	D	E[3]/C[4]	A/B[3]	A/B[3]
280	SR 92 to SR 84	D	E	E	C	A	E/C	C	A/B	D[3]	D[3]	D[3]
280	SR 84 to Santa Clara County Line	D	A	A	A	A	F[3]/ A[4]	F[3]/ A[4]	E[3]/ A[4]	D[3]	D[3]	E[3]/ C[4]
380	I-280 to U.S. 101	F	F	F	F	F	F	F	F	F[3]	F[3]	E[3]
380	U.S. 101 to Airport Access Road	C	A	A	A	A	A	A	A	B[3]	D[3]/C	A[3]
Mission St	San Francisco County Line to SR 82	E	A	A	A	A	A	A	A	A	A	A
Geneva Ave.	San Francisco County Line to Bayshore Blvd.	E	A	A	A	A	A	A	A	A	A	A
Bayshore Blvd.	San Francisco County Line to Geneva Avenue	E	A	A	A	A	A	A	A	A	A	A

Notes:

[2] The first value represents LOS without exemptions, and the second value represents LOS with exemptions.

[3] Based on average speed from travel time surveys.

[4] Exemptions applied to volume-to-capacity ratios estimated from average speeds.

"-" = not applicable. LOS standard is not violated. Therefore, exemptions were not applied.

LOS Standard violations (after application of exemptions) are highlighted in red

LOS based on 1994 Highway Capacity Manual Methodology.

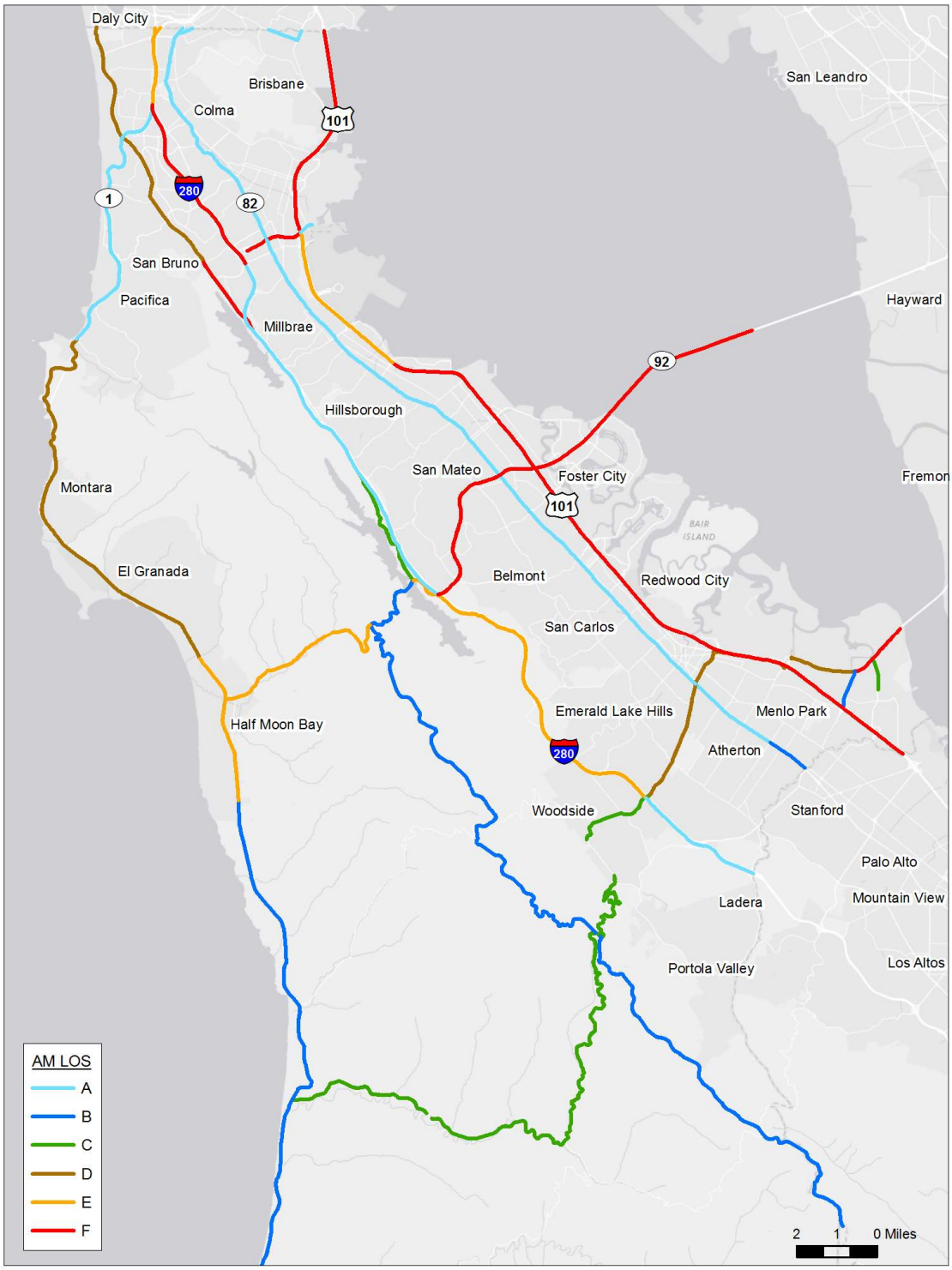

Figure 4 – AM LOS Results (before Exemptions)

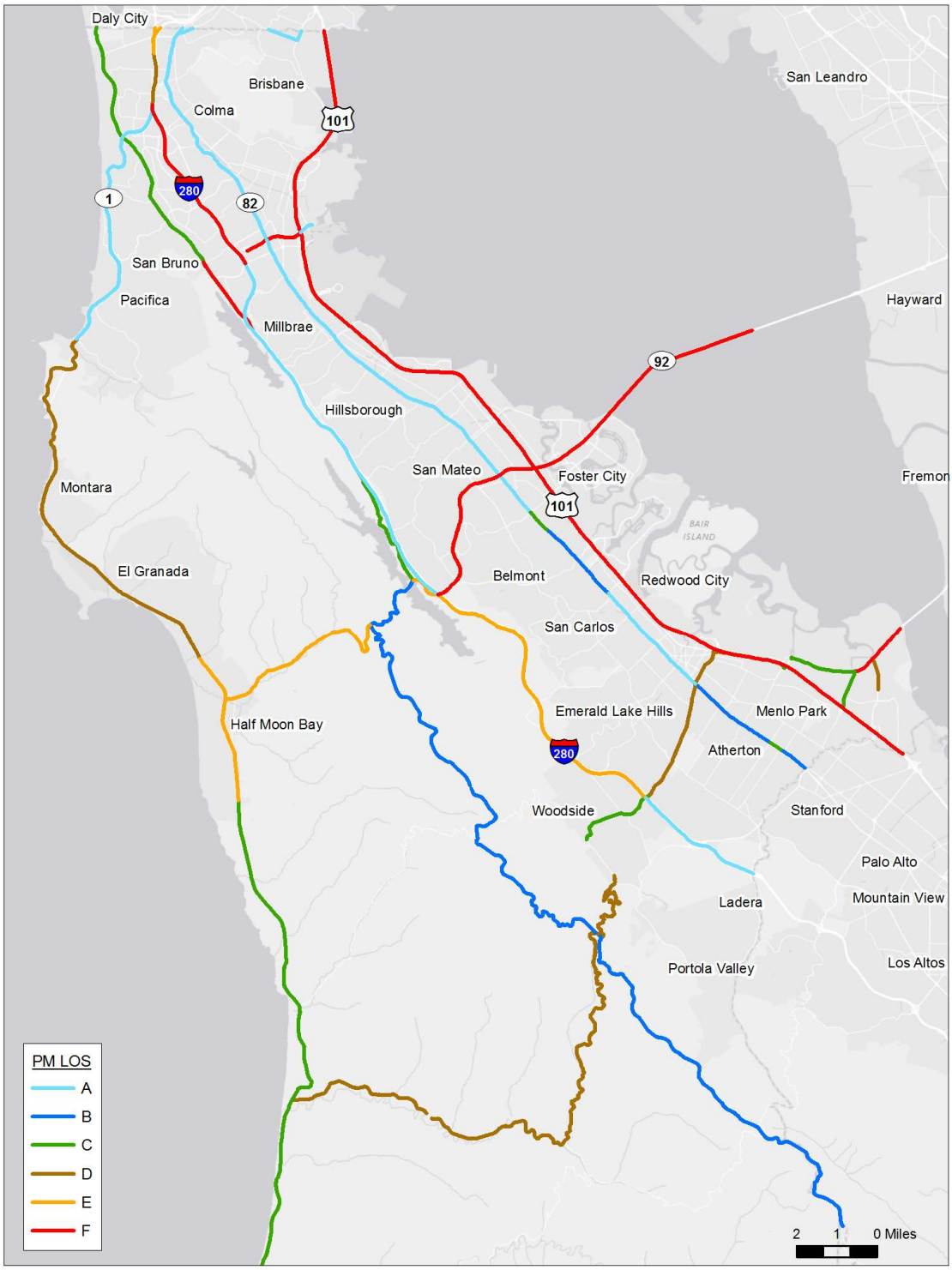

Figure 5 – PM LOS Results (before Exemptions)

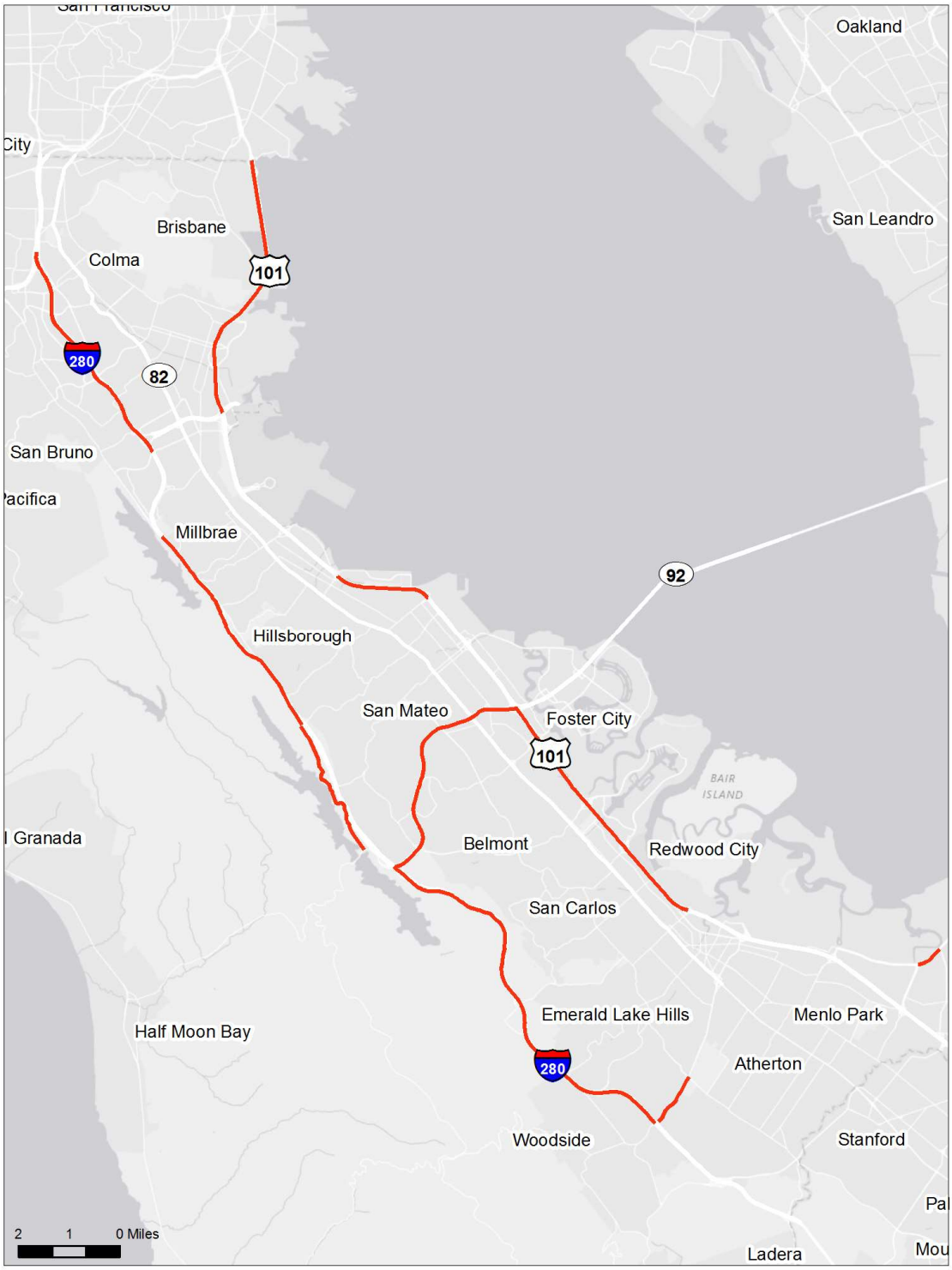

Figure 6 – AM CMP Segments with LOS Lower than Standard (before Exemptions)

Figure 7 – PM CMP Segments with LOS Lower than Standard (before Exemptions)

F. REDUCTION IN VOLUMES DUE TO INTERREGIONAL TRIPS

The CMP-enabling legislation allows for the reduction in volume for those trips that are interregional. In this case, "interregional" are those trips that originate from outside the county. That is those that either traverse the county or have a destination within the county. For those CMP segments found with a LOS below the standard, the county travel demand model is used to determine the proportion of the volume estimated to be from interregional travel. As shown in **Table 3**, there were 14 segments that had at least one direction in either the AM or PM peak period that had a lower LOS than the established standard. **Table 4** includes the resulting percentage of traffic from the travel demand model that is estimated to be interregional by segment.

Table 4 – Interregional Trips for Segments with LOS Lower than Standard

Link	Segment	Time Period	AM Peak		PM Peak	
		Direction	NB / WB	SB / EB	NB / WB	SB / EB
SR 35	I-280 to SR 92	AM NB/SB, PM NB/SB	27.1%	28.1%	41.6%	32.5%
SR 84	I-280 to Alameda de Las Pulgas	AM WB, PM WB	1.2%		2.7%	
SR 84	Willow to University Av	AM WB, PM EB	97.9%			40.6%
SR 92	I-280 to US 101	AM EB/WB & PM EB/WB	11.0%	35.2%	8.7%	41.3%
SR 92	US 101 to Alameda Co Line	AM WB, PM EB	68.8%			70.5%
US 101	SF Co Line to I-380	AM NB/SB & PM NB/SB	21.8%	65.7%	16.6%	65.0%
US 101	I-380 to Millbrae Av	PM NB/SB			23.6%	65.2%
US 101	Millbrae Av to Broadway	PM NB/SB			61.3%	45.7%
US 101	Broadway to Peninsula Av	AM NB/SB, PM NB/SB	48.0%	45.5%	34.3%	35.7%
US 101	SR 92 to Whipple Av	AM SB, PM NB		37.0%	35.4%	38.3%
I-280	SR 1 (south) to San Bruno Av	AM SB, PM SB		75.9%	35.2%	
I-280	SR 92 to SR 84	AM SB, PM SB		47.9%		72.1%

When applying reductions, they can be deducted directly for those where V/C is the performance measure used, but for those segments that use INRIX travel speed, a few extra steps are required to reflect the exemption. As mentioned earlier, freeway LOS is primarily determined based on density, but historically, the LOS Monitoring Study has made use of the LOS tables as included in the HCM 1994 that include reference speeds for given free-flow speeds and LOS. In order to reflect the reduction, the V/C must first be estimated from the same tables. This adds a level of error given that density is the preferred performance measure and the methodology is to use a secondary measure to estimate another secondary measure, take the reduction, and then reverse the calculation using the V/C and determine the adjusted LOS with the exemption.

G. DEFICIENT CMP SEGMENTS

After incorporating the reduction in volume for those segments found to have a LOS lower than the standard, while the AM peak period has 2 segments deficient, the PM peak period was found to have the same 3 segments deficient, as shown in **Figures 8 and 9**. As was the case in 2013 and 2015, these same segments were deficient in the last LOS Monitoring study. Those include the following:

- AM & PM – Westbound SR 84 between I-280 and Alameda de Las Pulgas
- AM & PM – Eastbound and Westbound SR 92 between I-280 and US 101

While the worst LOS of either peak period has historically been presented in the summary table, the individual peak periods have been separated for improved analysis in the body of the report this year and not just in the appendix as in the past. The segments deficient in the PM period are also highlighted in Table 3.

Figure 8 – AM Deficient Segments after Exemption

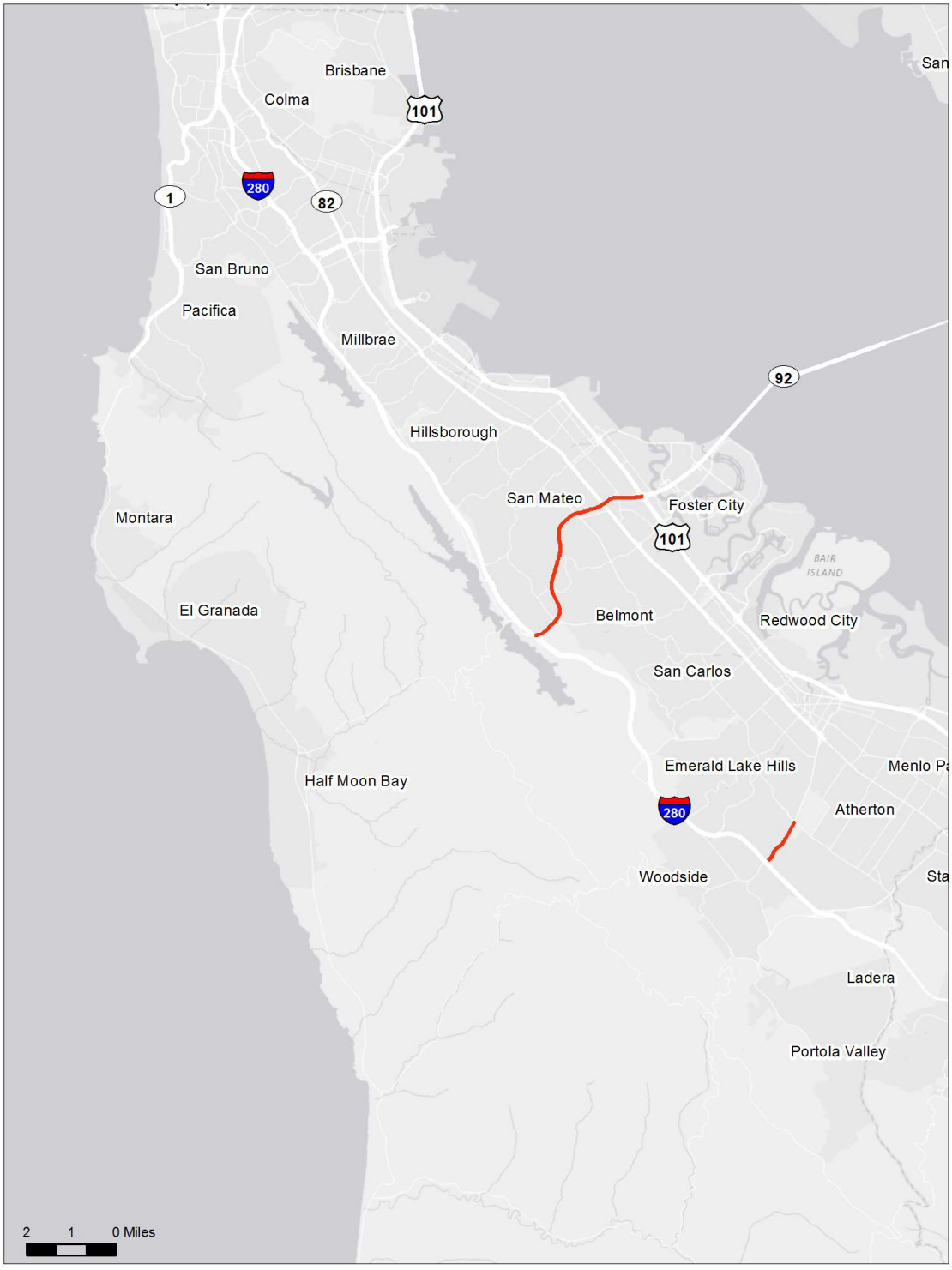

Figure 9 – PM Deficient Segment after Exemption

H. INTERSECTIONS

Sixteen intersections were analyzed as part of the 2017 LOS Monitoring. These intersections have been included in previous studies since 1999 and are included in **Table 5** for reference. The performance measure for intersections is LOS, but different from freeways and highways, the HCM 2000 was used to determine the LOS. Turning movement counts were collected for each intersection during the AM and PM peak periods and modeled in Synchro. The intersections were analyzed as if they were isolated (not coordinated or part of a signal system) and optimized given the current geometry. The modeled results provide an estimate of the optimized LOS and may not represent the actual conditions if the intersection is either using less than optimal phasing, splits or cycle length.

Table 5 includes the results for the 2017 study as well as those back to 2005 using the HCM 2000 methods. As highlighted in the table, all intersections are operating (under optimized signal timing) within established LOS standards. Intersection 14 is operating at standard and should be monitored to avoid exceeding the established LOS standard. Intersections 11, 12 and 13 are operating at LOS F which is the standard at those locations, but should be evaluated for possible improvements.

Table 5 – Intersection LOS

				2000 HCM Method							
Int #	Intersection	LOS Standard	Peak Hour	2017 LOS	2015 LOS	2013 LOS	2011 LOS	2009 LOS	2007 LOS	2005 LOS	2017 Standard Exceeded
1	Bayshore & Geneva	E	AM	B	B	B	B	C	B	C	No
			PM	A	B	B	B	C	C	C	No
2	SR 35 & John Daly Blvd	E	AM	C	D	C	C	B	B	B	No
			PM	B	E	C	C	C	B	C	No
3	SR 82 & Hillside/John Daly	E	AM	B	C	C	B	C	C	C	No
			PM	C	C	C	C	D	C	D	No
4	SR 82 & San Bruno Ave	E	AM	B	C	C	C	C	C	C	No
			PM	C	C	C	C	D	D	D	No
5	SR 82 & Milbrae Ave	E	AM	D	D	E	F/D	E	E	E	No
			PM	D	E	D	E	D	E	E	No
6	SR 82 & Broadway	E	AM	A	B	B	B	B	B	B	No
			PM	A	B	B	B	A	B	B	No
7	SR 82 & Park-Peninsula	E	AM	B	C	C	C	B	B	B	No
			PM	B	C	C	C	B	B	B	No
8	SR 82 & Ralston	E	AM	C	C	C	C	D	D	E	No
			PM	C	C	D	C	D	D	E	No
9	SR 82 & Holly	E	AM	C	C	C	C	C	C	C	No
			PM	C	C	C	C	D	C	C	No
10	SR 82 & Whipple Ave	E	AM	C	C	C	C	C	C	D	No
			PM	D	C	C	C	D	D	D	No
11	University & SR 84	F	AM	F	C	E	C	B	B	B	No
			PM	F	F	F	F	F	F	E	No
12	Willow & SR 84	F	AM	C	D	D	C	C	C	C	No
			PM	F	F	F	E	F	F	E	No
13	SR 84 & Marsh Rd	F	AM	F	F	D	D	C	C	C	No
			PM	F	F	D	E	F	D	C	No
14	Middlefield & SR 84	E	AM	E	C	D	C	D	D	D	No
			PM	E	D	D	D	D	D	D	No
15	SR 1 & SR 92	E	AM	B	C	C	D	C	D	D	No
			PM	C	C	C	C	D	D	D	No
16	Main St & SR 92	F	AM	B	C	B	C	C	C	C	No
			PM	B	B	B	B	C	C	C	No

Figures 10 and **11** illustrate the finding for the intersection LOS. Each intersection is represented with two shapes. The larger one is the base and is the LOS Standard. The smaller shape in the middle is the resulting peak period LOS for the respective time period.

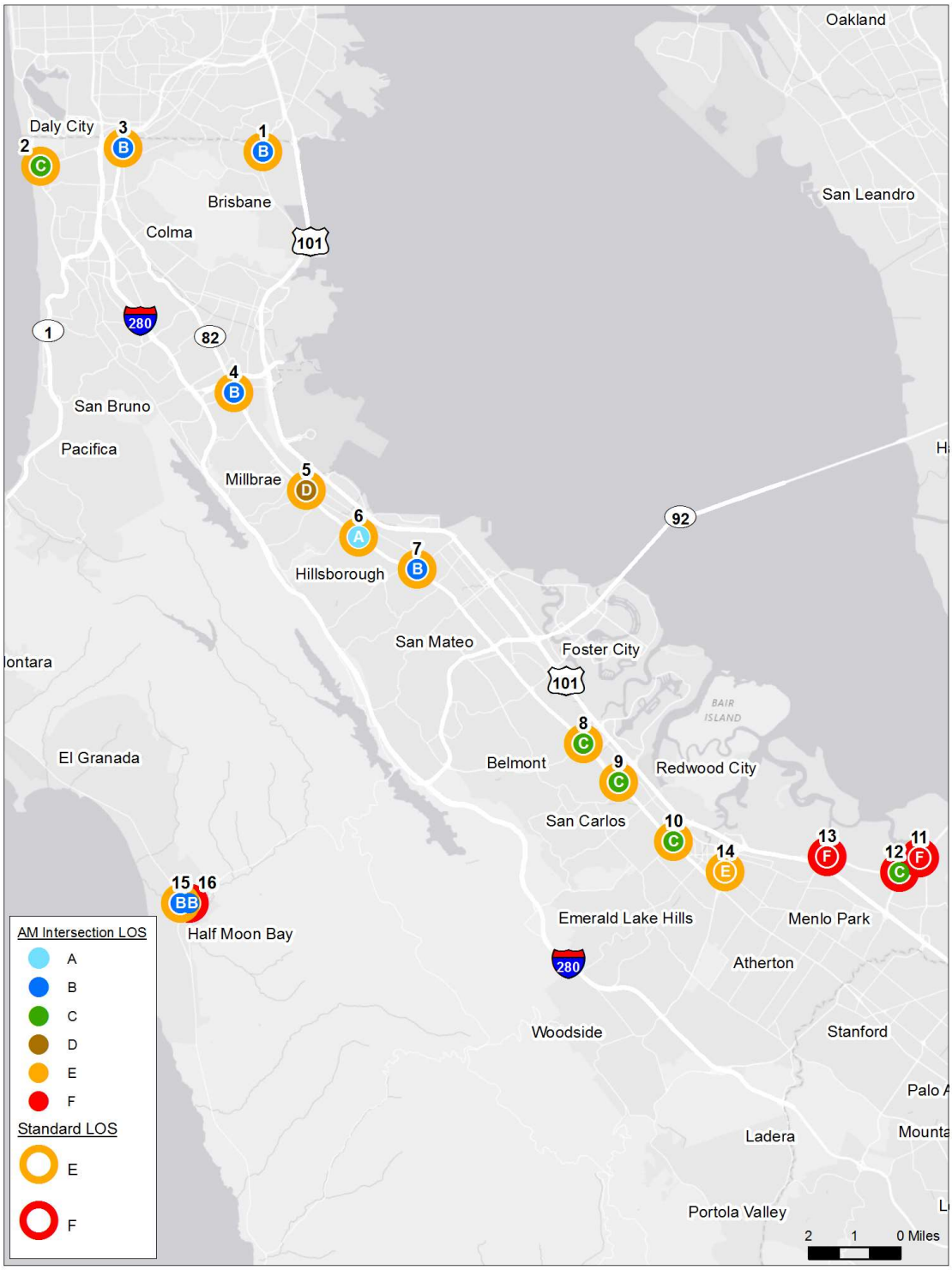

Figure 10 – AM Intersection LOS (Underlying Color is LOS Standard)

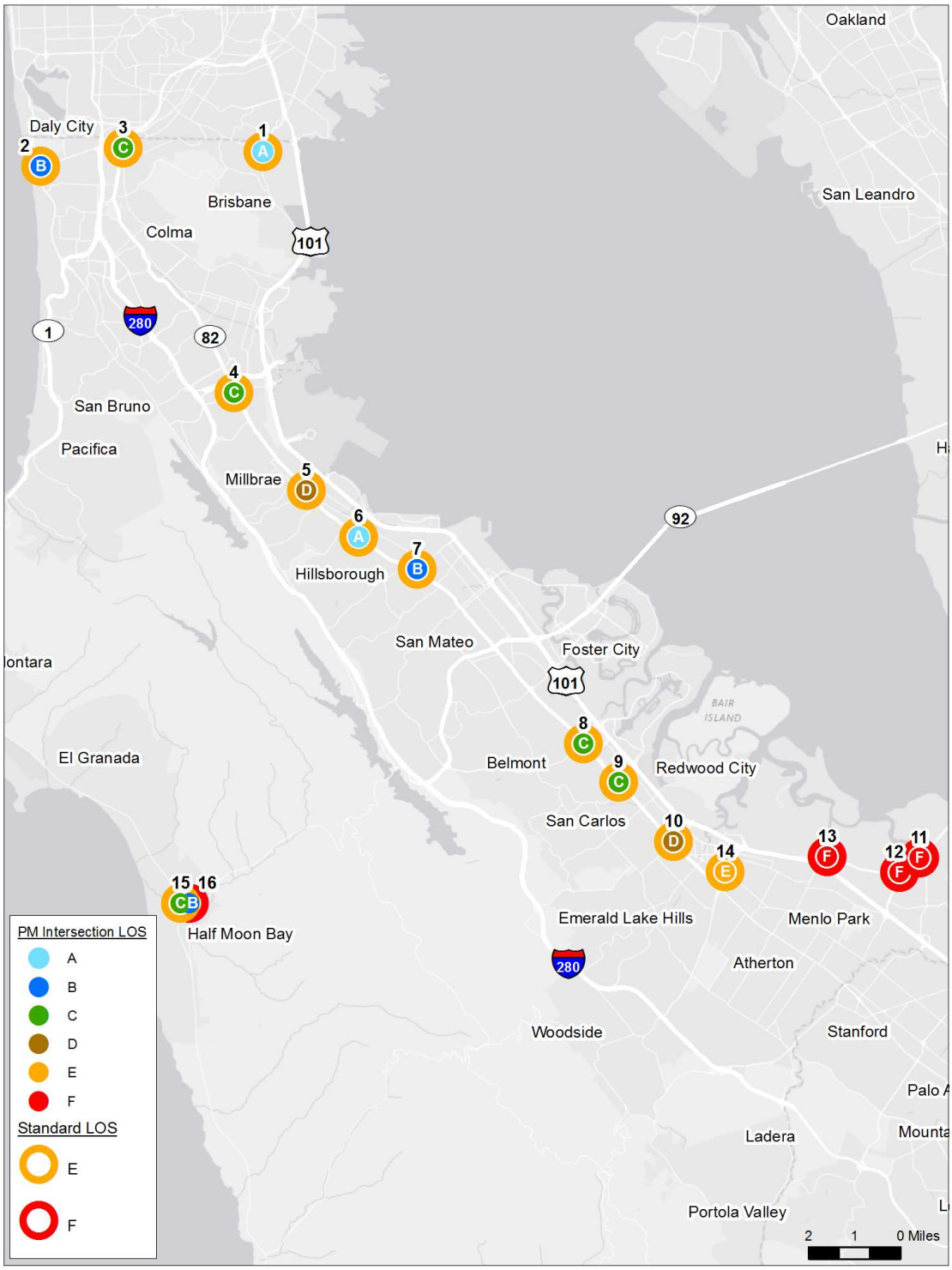

Figure 11 – PM Intersection LOS (Underlying Color is LOS Standard)

I. 2017 MULTI-MODAL PERFORMANCE MEASURE MONITORING PROGRAM

Beginning in 1995, the Transit LOS Standard element of the San Mateo County CMP was replaced with the Performance Measure element. Four Performance Measures were selected and incorporated in the 1997 CMP Update and used each update cycle through 2009. The four measures are used to measure the performance of the overall multi-modal transportation system, including non-automotive modes. They are:

- Level of service,
- Travel times from single-occupant automobiles, carpools, and transit,
- Pedestrian and bicycle improvements, and
- Ridership / person throughput for transit.

This section presents the 2017 measurements of these performance measures and includes the historic results for context.

Level of Service

The levels of service of the CMP corridors and segments are included in the previous sections of this monitoring report. The results show that two roadway segments exceeded the respective LOS standard following reflection of the interregional trips. For the 16 intersections included in the CMP network, all intersections were found to operated at or better than the established standard after incorporating exemptions.

Travel Times for Single-Occupant Automobiles, Carpools, and Transit

This multi-modal performance measure compares the travel time of the various modes available in the US 101 corridor from the Santa Clara County line to the San Francisco County line. Those include using the general purpose lanes, using the carpool lane for the limits available, or using transit via SamTrans or Caltrain.

The general purpose travel times previously presented early in this report were the result of a 2 month average between April and May. Those included in Table 6 for the single occupant vehicle represent the calculated INRIX travel time using the average speed over each TMC segment for each 5 minute interval during each respective AM and PM peak period. The HOV travel times are based on 5 runs in the field for the limits of the HOV between the county line and Whipple summed with the INRIX results for the balance of the route to the San Francisco county line on the north. Therefore, the HOV portion represents a far smaller sample size than an average for the peak period over 2 months.

The current limits of the carpool lane in San Mateo County are from the Santa Clara County line to Whipple Avenue. For those that are able to use this lane during the peak hours, the remainder of the run will take place in the general purpose lane.

Travel times for those using transit include the option to access SamTrans route KX along the US 101 corridor or Caltrain. The travel times for the transit options are represented based on the published

schedules. Actual data collection for these routes was not performed but is shown consistent with methods used in previous LOS monitoring studies.

The travel times for the various mode options are included in **Table 6** below. The table includes the respective travel times, listed by direction and peak periods, for the current reporting period as well as previous years back to 2009.

Table 6 – Average Travel Time in US 101 Corridor (in minutes)
Between San Francisco and Santa Clara County Lines

Average Travel Time in US 101 Corridor (in minutes) *(Between San Francisco and Santa Clara County Lines)*																				
Mode	AM - Morning Commute Peak Period										PM - Evening Commute Peak Period									
	Northbound					Southbound					Northbound					Southbound				
	2017	2015	2013	2011	2009	2017	2015	2013	2011	2009	2017	2015	2013	2011	2009	2017	2015	2013	2011	2009
Auto - Single Occ. [3]	32	32	28	29	30	35	36	41	34	28	36	39	30	32	33	32	32	33	40	29
Carpool - HOV Lane [4]	32	32	32	28	30	34	35	37	30	26	36	42	37	30	32	32	32	32	35	27
Caltrain (Baby Bullet b/n Palo Alto and Menlo and Approximate north county line near Bayshore Station - but not stop on Baby Bullet) [1]	40	39	23	35	35	44	43	27	31	31	40	38	24	34	34	36	38	23	35	35
SamTrans Route KX (b/n Palo Alto Station and SFO then transfer to BART at SFO to County Line) [2]	80	80	68	76	79	-	-	73	81	85	-	-	72	81	83	91	91	74	78	89
1 Baby Bullet b/n Palo Alto and Menlo and Approximate north county line near Bayshore Station - but not stop on Baby Bullet.																				
2 Route KX b/n RWC and SF(AM NB Only, PM SB Only) & 398 (b/n Palo Alto and Redwood City).																				
3 2015 & 2017 Results based on Inrix avg speeds over each TMC for the full 3 and 2 month periods, respectively																				
4 2015 & 2017 HOV results are based on HOV field runs south of Whipple + Inrix avg speed for TMC north to SF county line																				

The AM and PM auto travel times in the general-purpose lanes have fluctuated slightly since 2009, while showing a slight improvement for 2017 as compared to 2015.

The carpool travel times have improved slightly in most cases saving on average 1 minute over the section from Whipple to the county line.

Caltrain has made minor changes to its schedules since 2009 on the Baby Bullet express that was introduced in 2005, thus the travel times have not changed too much since 2013 between the express stops of Palo Alto just south of the county line to the SF stop north of the county line since the last stop in San Mateo County is Millbrae.

The published schedule for SamTrans Route KX remains the same as compared to 2015. The KX route only goes as far north as SFO and requires a transfer onto Route 398 to continue north to San Francisco. The times shown reflect the duration of the trip between Palo Alto and San Francisco.

Pedestrian and Bicycle Improvements

The purpose of this performance measure is to maintain a focus on non-vehicular alternatives. This should be reflected in connectivity to transit and other modes to not only make connections convenient, but safe and attractive. During the CMP update process, seven-year Capital Improvement Program (CIP) projects are identified and evaluated. The top-ranked projects are forwarded to MTC to be evaluated in the regional process for State and Federal funding.

C/CAG developed the San Mateo County Comprehensive Bicycle and Pedestrian Plan to address the planning, design, funding, and implementation of bicycle and pedestrian projects of countywide significance. The Plan includes a policy framework to guide and evaluate implementation of projects identified by the local implementing cities and the County. To maximize funding available for bikeway projects, the Plan emphasizes projects that improves safety, promote access to jobs, and located within high population as well as employment densities. The Plan also establishes geographical focus areas for countywide investment in pedestrian infrastructure.

Ridership / Person Throughput for Transit

The purpose of this performance measure is to document the number of patrons using the available transit options. Within San Mateo County, there are three options including SamTrans, Caltrain, and BART. BART has three stops that serve the county including the SFO Airport extension that opened in 2005, Colma, and Daly City.

The 2017 transit ridership data for SamTrans, Caltrain, and BART (Bay Area Rapid Transit) is included in **Table 7**. As shown in Table 7 below, the 2017 transit ridership data indicates annual total ridership for SamTrans has decreased by 10% whereas Caltrain ridership increased by 3% when compared to the CMP update 2015. Annual total ridership for BART decreased by 4% at the Colma and Daly City stations and decreased by 4% for the SFO Extension stations. Overall annual total transit ridership decreased about 3% when compared with the previous 2015 CMP Update.

Table 7 – Transit Ridership

	Annual Total					Average Weekday				
	2017	2015	2013	2011	2009	2017	2015	2013	2011	2009
SamTrans	11,816,760	13,158,703	12,445,748	13,474,466	14,951,949	38,700	42,981	40,966	44,910	49,950
Caltrain	18,743,189	18,156,173	15,595,559	12,673,420	12,691,612	59,132	58,429	49,031	39,909	40,066
BART (Colma & Daly City)	7,818,023	8,155,340	7,778,180	7,014,816	7,026,186	25,269	28,050	27,102	23,598	23,711
BART (SFO Ext. Stations)	12,102,872	12,614,731	11,685,236	10,097,310	9,900,626	39,989	40,741	38,696	32,294	31,485
Combined Transit	50,480,844	52,084,947	47,504,723	43,260,012	44,570,373	163,090	170,201	155,795	140,711	145,212

J. TRENDS AND NEXT STEPS

Overall between 2015 and 2017 there were a few areas that showed improvements while there were a larger number of segments in other areas that worsened especially in the AM Peak Period. A few specifics to highlight during the AM period that either improved a letter grade in LOS or over 10 mph faster travel time include the following:

- SR 84 between US 101 and Willow Road - eastbound
- SR 92 between I-280 and US 101 – westbound
- SR 114 between US 191 and SR 84 - westbound

Similarly, for those that worsened a letter grade in LOS or slower by more than 10 mph during the AM period include:

- SR 92 between US 101 and the Alameda County Line - westbound
- I-380 between US 101 and Airport Access Road - eastbound

A few specific segments to highlight during the PM period that either improved a letter grade in LOS or over 10 mph faster travel time include the following:

- SR 82 between 42nd St and Holly St – northbound
- SR 82 between SR 84 and Glenwood Ave - northbound
- SR 84 between SR 1 and Portola Rd
- SR 84 between US 101 to Willow - eastbound
- SR 109 between Kavanaugh and SR 84 – northbound
- I-280 between San Bruno Avenue and SR 92 – northbound
- I-280 between SR 84 and Santa Clara County Line - southbound

Similarly, for those that worsened a letter grade in LOS or slower by more than 10 mph during the PM period include:

- SR 82 between Santa Cruz Avenue to Santa Clara County Line – northbound
- I-380 between I-280 and US 101 – westbound
- I-380 between US 101 and Airport Access Road - eastbound

The LOS and Performance Measure Monitoring Report for many years has continued to use the 1994 Highway Capacity Manual as the basis for determining LOS for freeways, arterials and intersections. There have been a couple substantial updates to this manual over the years that not only changed the thresholds for determining LOS but also the methodology to be used over the last 15 years. With these changes have come new data sources that allow additional performance measures to be evaluated included travel time reliability and duration of congestion. Nationally, these performance measures are many times of more interest not only to planners and engineers but to drivers. A driver, many times is more concerned with the consistency or reliability with their travel time than they are with the actual conditions. That allows the driver to better plan their trip, departure time, and arrival time with some level of reliability.

It is recommended for the next update cycle, C/CAG transition to the current 2010 HCM.

APPENDIX A

AM and PM Roadway LOS Tabular Results

APPENDIX B

TECHNICAL APPENDIX

- The technical details, database and support documents are included in a separate geographic information system (GIS) deliverable

Executive Summary

The City/County Association of Governments of San Mateo County (C/CAG), as the Congestion Management Agency for San Mateo County, is required to prepare and adopt a Congestion Management Program (CMP) on a biennial basis. The purpose of the CMP is to identify strategies to respond to future transportation needs, develop procedures to alleviate and control congestion, and promote countywide solutions. The CMP is required to be consistent with the Metropolitan Transportation Commission (MTC) planning process that includes regional goals, policies, and projects for the Regional Transportation Improvement Program (RTIP). The 2017 CMP, which is developed to be consistent with MTC's Plan Bay Area, provides updated program information and performance monitoring results for the CMP roadway system.

The CMP roadway system comprises of 53 roadway segments and 16 intersections. The roadway network includes all the State highways within the County in addition to Mission Street, Geneva Avenue, and Bayshore Boulevard. The intersections are located mostly along El Camino Real (Chapter 2). Baseline Level of Service (LOS) Standards were adopted for each of the roadway segments and intersections on the system wherein five roadway segments and four intersections were designated LOS F (F designated as the worse possible congestion) (Chapter 3).

In addition to the roadway system LOS, the CMP also includes other elements to evaluate the performance of the roadway and transit network such as travel time to traverse the length of the County by single-occupant vehicle, carpool, and transit in addition to transit ridership during the peak periods (Chapter 4). Monitoring is completed every two years to determine compliance with the adopted LOS standards and changes to the performance elements are measured.

The results of the 2017 Monitoring indicate the following roadway segments exceeded its LOS Standard before the reduction of interregional trips:

- SR-84 between SR 1 and Portola Road – PM Peak Hour
- SR-84 between I-280 and Alameda de las Pulgas – AM and Peak Hour
- SR-84 between Willow Road and University Avenue – AM and PM Peak Hour
- SR-92 between I-280 and US-101 – AM and PM Peak Hour
- SR-92 between US-101 and Alameda County Line – AM and PM Peak Hour
- US-101 between San Francisco County Line and I-380 – AM and PM Peak Hour
- US-101 between I-380 and Millbrae Avenue – PM Peak Hour
- US-101 between Millbrae Avenue and Broadway – PM Peak Hour
- US-101 between Broadway and Peninsula Avenue – AM and PM Peak Hour
- US-101 between SR-92 and Whipple Avenue – AM and PM Peak Hour
- I-280 between SR-1 (South) and San Bruno Avenue – AM and PM Peak Hour
- I-280 between SR-92 and SR-84 – AM and PM Peak Hour

It is noted that nine (9) of the twelve (12) CMP segments had deficient level of service (without interregional travel exemptions) in both the AM and PM peak periods. Three (3) segments had deficient level of service in the PM peak period only.

The CMP-enabling legislation allows for the reduction in volume for those trips that are interregional. In this case, "interregional" are those trips that originate from outside the county. Based on the monitoring report and after the exclusions for interregional traffic was applied, two out of the 53 roadway segments exceeded the LOS standard. The segments in violation of the LOS Standard in 2017 are as follows:

- Westbound SR-84 between I-280 and Alameda de Las Pulgas – AM and PM Peak Hour
- Eastbound SR 92 between I-280 and US 101 – AM and PM Peak Hour
- Eastbound SR 92 between I-280 and US 101 – AM and PM Peak Hour

Regarding intersections, all intersection locations are in compliance with their LOS Standards.

Travel time for single occupancy vehicles and high occupancy vehicles along US-101 identified as part of the 2017 monitoring indicates a minor improvement in the northbound direction during the PM peak hour.

Travel times for bus and passenger rail modes are estimated based on SamTrans and Caltrain published schedules for travel between County lines during peak commute periods (7 a.m. – 9 a.m. and 4 p.m. to 7 p.m.). Caltrain travel times show a 2% increase in the NB AM Peak Period, 3% increase the SB AM Peak Period, 5% increase in the NB PM Peak Period, and a 5% improvement in the SB PM Peak Period.

SamTrans travel times showed no change in the NB AM Peak Period and SB PM Peak Period. (The complete 2017 Monitoring results are included in Appendix F)

The CMP includes C/CAG's programs and policies regarding transportation systems management (TSM) and transportation demand management (TDM), which address efforts to increase efficiency of the existing system and encourage utilization of alternative modes of transportation. The TSM/TDM programs under Measure A, Commute.org, Transportation Fund for Clean Air (TFCA), local cities, and C/CAG are updated in the 2017 CMP to reflect the current status (Chapter 5). Also included in the CMP is the C/CAG Land Use Impact Analysis Program Policy which address long-range planning, individual large developments generating 100 or more net peak period trips on the CMP network, and cumulative developments.

The Policy provides procedures for local jurisdictions to analyze and mitigate potential impacts to the CMP network resulting from land use decisions (Chapter 6 and Appendix I). The Countywide Congestion Relief Plan (CRP), (reauthorized through June 2019) was developed to address the roadway system deficiencies (or violations of LOS Standards) on a countywide basis. The CRP relieves individual jurisdictions from the need to develop individual deficiency plans to mitigate (or reduce) existing congestion on specific locations. Elements contained in the CRP includes revised provision for Countywide programs such as Employer-based shuttle program and local transportation services, Travel Demand Management, Countywide Intelligent Transportation System (ITS) program and traffic operational improvement strategies, Ramp Metering, and other programs Linking Transportation and Land Use (Chapter 7). The seven-year Capital Improvement Program (CIP) consists of projects programmed in the updated 2018 State

Transportation Improvement Program (STIP), OBAG 2, and TDA Article 3 in Chapter 8, Table X.

Other elements included in the 2017 CMP are updates to Measure M, an additional VRF approved by the voters in November 2010, imposes an annual fee of ten dollars ($10) on motor vehicles registered in San Mateo County to help fund transportation-related congestion mitigation and water pollution mitigation programs (Chapter 11). The most current Measure M 5-Year Implementation Plan for Fiscal Year 2017-2021 is included in Appendix M.

The Traffic Impact Analysis (TIA) Policy, which provides uniform procedures to analyze traffic impacts on the CMP network, was added to the 2009 CMP and remains the same. The TIA Policy applies to all General Plan updates, Specific Area Plans, and modifications to the CMP roadway network. (Chapter 12 and Appendix L)

Senate Bill 743 was signed into law in 2013 and aimed to replace the metric used to measure the transportation impact assessment in the California Environmental Quality Act (CEQA) process from a delay based metric such as traffic level of service (LOS) to another metric such as vehicle miles traveled (VMT).

The Governor's Office of Planning and Research (OPR) is responsible for identifying the alternative metric and updating the CEQA Guidelines on transportation impact analysist. OPR has identified VMT as the new metric but is currently still finalizing the technical guidance for impact analysis.

Until SB 743 implementation guidelines are adopted by OPR's effort, or if any other legislative efforts to amend the CMP legislation will occur, C/CAG did not do any major updates to the CMP and only made focused changes during this update to report on the work performed and progress made in implementing the CMP elements (Roadway System, Traffic LOS Standards, Performance Element, Trip Reduction and Travel Demand Element, Land Use Impact Analysis Program, and Seven-Year Capital Improvement Program) since the last update in 2015.

Since current CMP legislation requires the use of LOS metric, the Draft 2017 CMP has been prepared following current CMP guidelines. However, it is anticipated when SB 743 implementation guidelines are fully adopted by OPR, C/CAG, in coordination with the Metropolitan Transportation Commission and other Congestion Management Agencies in the Bay Area, will evaluate and recommend performance metrics for future CMP updates.

C/CAG AGENDA REPORT

Date: November 27, 2017

To: Congestion Management and Environmental Quality (CMEQ) Committee

From: Susy Kalkin

Subject: Review and recommend approval of the Call for Projects for the C/CAG and San Mateo County Transportation Authority Shuttle Program for Fiscal Year 18/19 & Fiscal Year 19/20

(For further information or questions contact Susy Kalkin at 599-1467)

RECOMMENDATION

That the CMP TAC review and recommend approval of the Call for Projects for the C/CAG and San Mateo County Transportation Authority Shuttle Program for Fiscal Year 18/19 & Fiscal Year 19/20.

FISCAL IMPACT

For the FY 18/19 & FY 19/20 funding cycle there will be approximately $10,000,000 available.

SOURCE OF FUNDS

Funding to support the shuttle programs will be derived from the Congestion Relief Plan adopted by C/CAG, and is anticipated to include $1,000,000 in funding ($500,000 for FY 18/19 and $500,000 for FY 19/20). Additionally, the San Mateo County Transportation Authority (TA) Measure A Program is expected to provide approximately $9,000,000 for the two-year funding cycle. The C/CAG funding will be predicated on the C/CAG Board of Directors approving shuttle funding in the amount of $500,000 for each fiscal year through the budget adoption process.

BACKGROUND/DISCUSSION

For the upcoming San Mateo County Shuttle Program, C/CAG will again partner with the San Mateo County Transportation Authority to issue a joint call for projects (CFP) for FY 18/19 and FY 19/20. The combined program is designed to utilize one call for projects, one application, and one scoring committee. Once proposed projects have been scored they will be brought to each respective Board of Directors for the funding allocation from the respective agency. Staff will work to try to issue only one source of funds (C/CAG or TA) for each shuttle program sponsor.

The result of this process will be a single prioritized list of projects to be funded by each agency. After the funding allocations are made by each Board of Directors, staff from each agency will be responsible for administering their agency's funding agreements with the shuttle program

project sponsors.

Program Guidelines

The program guidelines, attached, are similar to the prior CFP that helped subsidize the operation of shuttles during the last cycle (FY 16/17 & 17/18) with the following two exceptions:

1. The established operating cost per passenger benchmark for commuter, community and door to door shuttles has been revised to account for an incremental increase in the consumer price index (CPI), as shown here:

Shuttle Type	**Op. Cost/Passenger FY16/17 & 17/18 (Prior CFP)**	**Op. Cost/Passenger FY18/19 & 19/20 (Current CFP)**
Commuter	$7/passenger	**$8/passenger**
Community	$9/passenger	**$10/passenger**
Door to Door	$18/passenger	**$20/passenger**

2. Although C/CAG use to require sponsors to provide a minimum 50% funding match when it conducted its own separate shuttle program funding calls, that changed when C/CAG and the TA combined their shuttle programs together to conduct joint funding calls beginning in FY 12/13 and 13/14. To qualify for funding, project sponsors of the joint C/CAG - TA shuttle funding calls have historically been required to provide a minimum of 25% of the total cost of the program, and that remains the proposal in this cycle for both new shuttles and for existing shuttles that: 1) are meeting their benchmarks for operating cost per passenger; or, 2) are missing the benchmark by less than 50%; or 3) have been in operation for less than two full years. However, for existing shuttles that have failed to meet the applicable "operating cost per passenger" benchmark by 50% or more after two full years of operation, staff is proposing a required 50% match to encourage sponsors to take a more proactive approach with the productivity and cost effectiveness of their shuttles.

   The following table shows how the 50% match would be applied:

Shuttle Type	**Op. Cost/Passenger FY18/19 & 19/20 (Current CFP)**	**Benchmark missed by 50% or more**
Commuter	$8/passenger	**≥$12/passenger**
Community	$10/passenger	**≥$15/passenger**
Door to Door	$20/passenger	**≥$30/passenger**

   Please note that as part of the discussions prior to the last (2015) CFP, staff had informed both the C/CAG and TA boards, as well as our existing shuttle sponsors, of the potential for such an increase in the minimum matching funds requirement to address shuttle effectiveness.

Eligible project applicants include local jurisdictions and/or public agencies. A governing board resolution that confirms that the jurisdiction/agency approves of the application submittal and commits to providing the matching funds must be submitted along with the application. In

addition, a letter of concurrence from SamTrans is required to confirm that the shuttle route will not duplicate SamTrans fixed-route service or other public shuttle service.

Tentative Timeline for Project Review and Approval:

- November 16, 2017 – Technical Advisory Committee Call for Projects Review
- November 27, 2017 – Congestion Management and Environmental Quality Committee Call for Projects Review
- December 14, 2017 – C/CAG Board of Directors Call for Projects Review and Approval
- December 18, 2017 – Issue Call for Projects for FY 18/19 & FY 19/20 San Mateo County Shuttle Program
- December 18, 2017 – Application Workshop at SamTrans offices
- February 9, 2018 – Shuttle Program Applications Due
- Early March – Convene Shuttle Program Evaluation Committee
- April 19, 2018 – CMP Technical Advisory Committee Recommended Project List Review
- April 30, 2018 – Congestion Management and Environmental Quality Committee Recommended Project List Review
- May 3, 2018 – Transportation Authority Board of Directors Project List Final Review and Approval
- May 10, 2018 – C/CAG Board of Directors Project List Review and Approval

ATTACHMENTS

1. San Mateo County Shuttle Program Call for Projects FY 2018/2019 & 2019/2020

C/CAG

CITY/COUNTY ASSOCIATION OF GOVERNMENTS OF SAN MATEO COUNTY

TO: City/County Managers
Public Works Directors

FROM: Susy Kalkin, C/CAG
Joel Slavit, SMCTA

DATE: December 15, 2017

RE: **Call for Projects: San Mateo County Shuttle Program FY 18/19 & FY 19/20**

This memo transmits the guidelines and criteria for the San Mateo County Shuttle Program for FY 18/19 & FY 19/20, a combination of the C/CAG Local Transportation Services Program under the Countywide Congestion Relief Plan and the San Mateo County Transportation Authority (TA) Measure A Sales Tax Program. This combined funding program offers an estimated $10,000,000 available on a competitive basis for a two-year funding cycle. The funding for this Call for Projects is intended to start new local transportation services, augment existing services, or continue projects previously funded under the Congestion Relief Plan and/or the Measure A Sales Tax Local Shuttle Program. Shuttles funded through this program must be open to the general public, and must conform to all applicable federal, state and local laws and regulations.

Eligible applicants, including local jurisdictions and/or public agencies within San Mateo County, can apply for funding to establish local shuttle services designed to assist residents and employees to travel within the County and/or to connect with regional transportation service (ex. major SamTrans routes, Caltrain, BART, ferries). Although a public agency must be the applicant for the funds, they may use another entity such as SamTrans, the Peninsula Traffic Congestion Relief Alliance (Commute.org) or others to manage and/or operate the service. Similarly, employers and private entities are not eligible to apply directly, but may partner with a local jurisdiction or public agency to sponsor a project. Projects that are coordinated among multiple jurisdictions are encouraged.

To qualify for funding, the project sponsor must provide a minimum of 25% of the total cost of the program. However, a 50% match is required for sponsors of existing shuttles that have failed to meet the applicable "operating cost per passenger" benchmark by 50% or more after two full years of operation. The source of matching funds is at the discretion of the project sponsor, although matching funds must not be C/CAG funds or San Mateo County Transportation Authority Measure A Local Shuttle Program funds. Direct costs for operations, marketing and administration of shuttles are eligible.

Sponsors of new shuttles, as well as sponsors of existing shuttles that do not meet the established operating cost per passenger or passenger per service hour benchmarks, are <u>required</u> to consult

with either SamTrans operations planning staff (for community shuttles) or Commute.Org (for commuter shuttles) for shuttle technical assistance prior to the submittal of an application, and are encouraged to continue to seek assistance as needed during the shuttle funding cycle. Additionally, a letter of concurrence/sponsorship from SamTrans is required to confirm that the shuttle route(s) shall not duplicate SamTrans fixed-route service. Please note that SamTrans planning staff will be available, by appointment only, on Tuesdays and Thursdays in December and January. It is strongly recommended that project sponsors schedule appointments as soon as possible, but no later than four weeks prior to the close of the call, to ensure sufficient time for SamTrans to provide both technical assistance and the required concurrence letter, as well as to allow Commute.Org adequate time to provide its technical assistance. See contacts below:

SamTrans – Community Shuttles	Commute.Org – Commuter Shuttles
Patrick Blankenship, Mgr. Scheduling and Planning blankenshipp@samtrans.com (650) 508-6249	John Ford, Executive Dir. shuttles@commute.org (650) 508-8170

The application deadline is 4:00 p.m. Friday February 9, 2018. **An application workshop will be held from 1:30-3:30 p.m. on Monday December 18, 2017 in the 4nd Floor Dining Room of the SamTrans office in San Carlos.** The applications must include the information listed below and must be completed with the attached Microsoft Word application forms. Projects (both new and existing) may be considered for reduced funding in the event that there are insufficient funds to fully fund the requested amount. C/CAG and the TA intend to program funds such that each shuttle program funded through this funding cycle will only receive one funding source.

To apply, submit one unbound original, seven hard copies and one electronic copy of the application. Applications may be emailed* to callforprojects@samtrans.com and mailed to:

Jennifer Williams
SMCTA
1250 San Carlos Ave.
San Carlos, CA 94070

(*Note: TA email capacity is 10 MB. For larger files please send an electronic copy via disc, flashdrive, dropbox, or similar means.)

EVALUATION PROCESS (dates are subject to change)

An evaluation panel will review the applications and develop recommendations for publication by mid-March 2018. These recommendations will be presented to the TA Citizen Advisory Committee (CAC) on April 3, 2018 and to the TA Board on April 5, 2018 for information. The recommendations will be presented to the C/CAG Congestion Management Program Technical Advisory Committee (TAC) on April 19, 2018. The TAC recommendation will go to the C/CAG Congestion Management and Environmental Quality Committee (CMEQ) on April 30, 2018. The recommendations will also go to the TA CAC for a final recommendation on May 1,

2018. The TA Board of Directors and the C/CAG Board of Directors will each approve a final program of projects after consideration of the recommendations provided by the TAC, CMEQ, and the TA CAC on May 3, 2018 and May 10, 2018, respectively.

Attachments:

a. San Mateo County Shuttle Program Application FY 18/19 & 19/20 for Existing Shuttles
b. San Mateo County Shuttle Program Application FY 18/19 & 19/20 for New Shuttles
c. San Mateo County Shuttle Program Criteria
d. Non-supplantation of funds certification

San Mateo County Shuttle Program FY 18/19 & FY 19/20
Application Form for Existing Shuttles
(Filing Deadline: February 9, 2018)

Sponsoring agency:

Contact person:

Phone:

Email:

Shuttle Name	Amount of Funding Requested
	$

Minimum Requirements:

Yes	No	
☐	☐	Project is located within San Mateo County
☐	☐	Project is a shuttle service that meets local mobility needs and/or provides access to regional transit
☐	☐	Funding is for shuttle operations open to the general public
☐	☐	Shuttles must be compliant with the Americans with Disabilities Act (ADA)
☐	☐	A funding match of at least 25% will be provided*
☐	☐	A Non-Supplantation Certificate is attached
☐	☐	A letter of concurrence/sponsorship from SamTrans is attached*
☐	☐	A governing board resolution in support of the proposed shuttle is attached
☐	☐	Project met shuttle program benchmark standards for FY 16/17[2]
☐	☐	If project did not meet shuttle program benchmark standards for FY 16/17, project sponsor has met with SamTrans operations planning staff (community serving shuttles) or Commute.org (commuter shuttles) for technical assistance.

* Minimum 50% match required for existing shuttles in operation for 2 years or more that fail to meet the applicable operating cost per passenger benchmark by 50% or more based on FY16/17 performance data. (More recent performance data covering a full 12 months may be applied if available at the time the application is submitted.).[1]

* Sponsors shouldcontact Patrick Blankenship, Operations Planning (blankenshipp@samtrans.com), byJanuary 12, 2018, and preferably before, to allow sufficient time for SamTrans operations planning staff to review, follow up with sponsors as needed and ultimately make a determination as to whether a letter of concurrence/sponsorship can be issued .

- Sponsors should make appointments to receive technical assistance by January 12, 2018, and preferably before, to allow sufficient time if any follow-up appointments are needed and to incorporate technical assistance recommendations into their proposals.

1 FY18/19 & 19/20 Benchmarks and 50% match requirement calculation

Shuttle Type	Op. Cost/Passenger FY18/19 & 19/20 (Current CFP)	Benchmark missed by 50% or more
Commuter	$8/passenger	**≥$12/passenger**
Community	$10/passenger	**≥$15/passenger**
Door to Door	$20/passenger	**≥$30/passenger**

2 FY 2016/17 Shuttle Operation Benchmarks

Shuttle Type	Op. Cost/Passenger FY 16/17	Passengers Per Service Hour FY16/17
Commuter	**$7/passenger**	**15**
Community	**$9/passenger**	**10**
Door to Door	**$18/passenger**	**2**

If you have answered "no" to any of the above minimum requirements, please review the project guidelines and contact Susy Kalkin [(650) 599-1467, kkalkin@smcgov.org] or Joel Slavit [(650) 508-6476, slavitj@samtrans.com] with any questions.

Attachments

List all attachments here:

- ☐ A letter of concurrence/sponsorship from SamTrans
- ☐ A Non-Supplantation Certificate
- ☐ Service Maps
- ☐ Governing Board Endorsement
- ☐ Support letters ☐ Other specify here _____

APPLICATION FOR EXISTING PROJECTS

A. Need (up to 20 points)
Describe how the shuttle will:

1. Provide service in/to an area underserved by other public transit

2. Provide congestion relief in San Mateo County (Does it provide peak period commute service? Does it make connections to employment centers, activity centers or transit stations? Does is make first or last mile connections? Provide as much detail as you can to support your response.)

3. Provide transportation to special populations (e.g. low-income/transit dependent, seniors, disabled, other) and connects to the services used by these demographic groups.

Letters of support from co-sponsors, partners, stakeholders, etc. *(List agencies/organizations and attach letters)*

B. Readiness (Up to 20 points)

1. Service Plan - Describe how the service was delivered for the prior 12 months and any proposed changes for the new two year funding period, including:

   a. Service area (route description, destinations served)
   (Attach maps)

   b. List specific rail stations, major SamTrans route or ferries served by the shuttle

   c. Schedule (Days, times, frequency) Show coordination with scheduled transit service. Also describe whether the shuttle is a community shuttle, commuter shuttle or door-to-door shuttle as well as the size and number of vehicles to be used.

   d. Marketing (outreach, advertising, signage, schedules, etc.)

   e. Service provider

   f. Administration and oversight plan/roles

   g. Co-sponsor/stakeholders (roles/responsibilities)

h. Monitoring plan (service quality performance data, complaints/complements, surveys)

i. Ridership characteristics (commuters, employees, seniors, students, etc.)

j. Any differences/changes to existing service for the funding period, compared to the prior 12 months

k. If the shuttle under-performed the benchmarks listed in Table 1 below, did the sponsor utilize the required Technical Assistance Program (TAP) offered by SamTrans and/or the Alliance (Commute.Org)?

Table 1 – FY 16/17 Benchmarks

Shuttle service	Operating Cost/ passenger	Passengers/ Service Hour
Commuter	$7	15
Community or Combination	$9	10
Door to Door	$18	2

2. Funding Plan with Budgeted Line Items *(use Table 2 below):*

Table 2

Budget Line Item	For Prior 12 Months	FY 18/19 Budget	FY 19/20 Budget	Total Budget FY 18/19 & 19/20
a. Contractor cost (e.g. operator/vendor) – incl. fuel surcharge if applicable)				
b. Insurance				
c. Administrative costs (e.g. staff oversight)				
d. Other direct costs (e.g. marketing)				
e. Total Operating Cost				

f. Notes/exceptions (e.g. if there are projected differences between the first and second years' costs)

C. Effectiveness (up to 25 points)

1. Service Performance

Annual operating cost per passenger and passengers per service hour for FY 16/17 *(Use Table 3 below)*

Table 3

Operating Data	For FY 16/17
Vehicle Hours of Service	
Service Vehicle Miles	
Total Passengers	
Performance Indicators	**For FY 16/17**
Operating Cost/Passenger[1]	
Passengers/Service Hour[2]	

Footnotes
1. Total Operating Cost/Total Passengers
2. Total Passengers/Vehicle Hours of Service

2. What other transit services does this shuttle connect with *(if bus, identify the route)?*

3. Does the shuttle provide connections between transit oriented development and major activity centers?

4. Describe the extent that this shuttle reduces Single Occupancy Vehicle (SOV) trips and Vehicle Miles Traveled (VMT). *Provide justification/methodology for the reduction in the number of SOV trips and VMT.*

D. Funding Leverage (up to 20 points)

1. List amounts and sources of matching funds

Source of Funding	Amount$	Percentage%
Matching Funds (*list source*)		
Subtotal Matching Funds		
TA or C/CAG Funding request for FY 18/19 & 19/20		
Total Funding		

2. How much private sector funding will be contributed towards this shuttle? $_____

E. Policy Consistency & Sustainability – (up to 15 points)

1. Proposed shuttle is included in adopted local, special area, county or regional plan *(list plans)*

2. Describe how the shuttle service supports job and housing growth/economic development.

3. Will clean-fuel vehicles be deployed for shuttle service? *(describe)*

4. Does the shuttle accommodate bicycles?

San Mateo County Shuttle Program FY 18/19 & FY 19/20
Application Form for New Shuttles
(Filing Deadline February 9, 2018)

Sponsoring agency:

Contact person:

Phone:

Email:

Shuttle Name	Amount of Funding Requested
	$

Minimum Requirements:

Yes	No	
☐	☐	Project is located within San Mateo County
☐	☐	Project is a shuttle service that meets local mobility needs and/or provides access to regional transit
☐	☐	Funding is for shuttle operations open to the general public
☐	☐	Shuttles must be compliant with the Americans with Disabilities Act (ADA)
☐	☐	A funding match of at least 25% will be provided
☐	☐	A Non-Supplantation Certificate is attached
☐	☐	A letter of concurrence/sponsorship from SamTrans is attached*
		* Sponsors should contact Patrick Blankenship, Operations Planning (blankenshipP@samtrans.com), by January 12, 2018, and preferably before, to allow sufficient time for SamTrans operations planning staff to review, follow up with sponsors as needed and ultimately make a determination as to whether a letter of concurrence/sponsorship can be issued.
☐	☐	A governing board resolution in support of the proposed shuttle is attached
☐	☐	Project sponsor has met with SamTrans operations planning staff (community shuttles) or Commute.Org staff (commuter shuttles) for technical assistance prior to application deadline.

If you have answered "no" to any of the above minimum requirements, please review the project guidelines and contact Susy Kalkin [(650) 599-1467, kkalkin@smcgov.org] or Joel Slavit [(650) 508-6476, slavitj@samtrans.com] with any questions.

Attachments
List all attachments here:

- ☐ A letter of concurrence/sponsorship from SamTrans
- ☐ A Non-Supplantation Certificate
- ☐ Service Maps
- ☐ Governing Board Endorsement
- ☐ Support letters *(E2)*
- ☐ Other (*specify here*)

APPLICATIONS FOR NEW PROJECTS

A. Need (up to 25 points)
Describe how the shuttle will:

1. Provide service in/to an area underserved by other public transit.

2. Provide congestion relief in San Mateo County (Does it provide peak period commute service? Does it make connections to employment centers, activity centers or transit stations? Does is make first or last mile connections? Provide as much detail as you can to support your response.)

3. Provide transportation to low-income, transit dependent, seniors, disabled or other special-needs populations and connects to the services used by these demographic groups.

Letters of support from co-sponsors, partners, stakeholders, etc. *(List agencies/organizations and attach letters)*

B. Readiness (Up to 25 points)

1. Service Plan - Describe how the service will be delivered including:

   a. Service area (route description, destinations served)
   (Attach maps)

   b. Describe your service plan development (planning process, public outreach, use of SamTrans/Alliance technical assistance program, etc.)

   c. List specific rail stations, major SamTrans route or ferries served by the shuttle

   d. Schedule (Days, times, frequency) Show coordination with scheduled transit service. Also describe whether the shuttle is a community shuttle, commuter shuttle or door-to-door shuttle as well as the size and number of vehicles to be used.

   e. Marketing (outreach, advertising, signage, schedules, etc.)

   f. Service provider

   g. Administration and oversight plan/roles

h. Co-sponsor/stakeholders (roles/responsibilities)

i. Monitoring plan (service quality performance data, complaints/complements, surveys)

j. Ridership characteristics (commuters, employees, seniors, students, etc.)

2. Funding Plan with budgeted line items – Use Table 1

Table 1

Projected Operating Costs	FY18/19 Projection	FY19/20 Projection
- Contractor (operator/vendor) cost (incl. fuel surcharge, if applicable)		
- Insurance		
- Administrative Costs (e.g. Personnel expenses)		
- Other Direct Costs (e.g. marketing materials, promotions, etc.)		
- Total Operating Costs		

C. Effectiveness (up to 15 points)

1. Projected ridership and performance for each fiscal year.[1] (*State assumptions and document justifications where possible.*)

Projected Operating Data	FY18/19 Projection	FY19/20 Projection
- Vehicle Hours of Service		
- Service Miles		
- Total Passengers		
- Operating Cost/Passenger		
- Passengers/Service Hour		

[1] FY 2018/19 & 2019/20 Shuttle Operation Benchmarks

Shuttle Type	Op. Cost/Passenger FY18/19 & 19/20	Passengers Per Service Hour FY18/19 & 19/20 (Current CFP)
Commuter	**$8/passenger**	**15**
Community	**$10/passenger**	**10**
Door to Door	**$20/passenger**	**2**

2. What other transit services does this shuttle connect with *(if bus, identify the route)?*

3. Does the shuttle provide connections between transit oriented development and major activity centers (*if so, describe*)?

4. Describe the extent that this shuttle reduces Single Occupancy Vehicle (SOV) trips and Vehicle Miles Traveled (VMT). *Provide justification/methodology for the reduction in the number of SOV trips and VMT.*

D. Funding Leverage (up to 20 points)

1. List amounts and sources of matching funds

Source of Funding	Amount$	Percentage%
Matching Funds (*list source*)		
Subtotal Matching Funds		
TA or C/CAG Funding request for FY 18/19 & 19/20		
Total Funding		

2. How much private sector funding will be contributed towards this shuttle? $_____

E. Policy Consistency & Sustainability – (up to 15 points)

1. Proposed shuttle is included in adopted local, special area, county or regional plan *(list plans)*

2. Describe how the shuttle service supports job and housing growth/economic development.

3. Will clean-fuel vehicles be deployed for shuttle service? *(describe)*

4. Does the shuttle accommodate bicycles?

San Mateo County Shuttle Program Criteria

Eligibility Criteria	San Mateo County Shuttle Program Call for Projects FY 18/19 & FY 19/20
Minimum Local Match	- 25% funding match for: 1) existing shuttles that do not exceed the applicable operating cost/passenger benchmark by more than 50% and 2) all new shuttles and existing shuttles that have been in operation for less than two years [1] - 50% funding match for existing shuttles in operation for 2 years or more that fail to meet the applicable operating cost per passenger benchmark by 50% or more based on FY16/17 performance data. (More recent performance data covering a full 12 months may be applied if available at the time the application is submitted.)
Local Match	- Measure A Local Streets and Transportation funds may be used. - C/CAG or Measure A funds from programs other than Local Streets and Transportation cannot be used as the local match for either funding agency.
Program Purpose	- Provide local shuttle services for residents and employees to travel within or to connect with regional transportation/transit service within San Mateo County.
Eligible Applicants	- Local jurisdictions and/or public agencies are eligible applicants for the funds; however, they must obtain a letter of concurrence/sponsorship from SamTrans. They may partner with other public, non-profit or private entities to co-sponsor shuttles. - Grant applicants may also contract with other public, non-profit or private entities to manage and/or operate the shuttle service.
Eligible Costs	- Costs directly tied to the shuttle service, such as operations, marketing and outreach, and staff time directly associated with shuttle administration are eligible. - Leasing of vehicles is an eligible expense; vehicle purchase is not. - Overhead, indirect or other staff costs are not eligible.
Minimum Requirements	- Project is located in San Mateo County - Project is a shuttle service that meets local mobility needs and/or provides access to regional transit. - Funding is for operations open to the general public - Shuttles must be compliant with the Americans with Disabilities Act(ADA).
Other Requirements	- Any change to the proposed service prior to implementation or during the funding period must be approved by the funding agency (TA or C/CAG) with the concurrence of SamTrans.

Screening Criteria	Existing Shuttles	New Shuttles
Non-Supplantation Certification	Funding request does not substitute for existing funds.	Funding request does not substitute for existing funds.
Letter of Concurrence/ Sponsorship	Evidence of coordination with SamTrans, through a letter of concurrence from SamTrans, that shuttle routes do not duplicate SamTrans fixed-route or other public shuttle service, is required. If there are proposed route and/or schedule changes to existing shuttle service, applicant shall provide a letter of concurrence from SamTrans regarding the proposed changes.	Evidence of coordination with SamTrans, through a letter of concurrence from SamTrans, that proposed shuttle routes does not duplicate SamTrans fixed route or other public shuttle service, is required.
Governing Board Resolution	A governing board resolution in support of the project is required.	
Technical Assistance	Sponsors of new as well as existing shuttles that have not met the established cost/passenger and passengers/service hour benchmarks, from FY 16/17, are required to consult with SamTrans operations planning staff for community serving shuttles and Commute.org for commuter shuttles prior to the submission of a funding application for guidance on how to best provide cost effective service to meet the identified need. If SamTrans and/or Commute.org apply as sponsors to receive funding from the San Mateo County Shuttle program, they must document the actions that will be taken to improve performance for any of their existing shuttles that do not meet the applicable cost/passenger and passengers/service hour benchmarks.	

Scoring Criteria	Existing Shuttles	New Shuttles
Need & Readiness	**Need – 20 points** - Provides service to an area underserved by other public transit - Provides congestion relief in San Mateo County - Provides transportation services to special populations (e.g. low income/transit dependent, seniors, disabled, other) and connects to the services used by these populations - Letters of support from stakeholders **Readiness – 20 points** Solid service plan in place describing how the shuttle service will be delivered for the 2-year funding period including: a. Service area (routes/maps, destinations served) b. Specific rail stations, ferry or major SamTrans transit centers served c. Schedule (days, times, frequency) - show coordination with scheduled transit service d. Marketing plan/activities (advertising, outreach, signage, etc.) e. Service Provider f. Administration and oversight (whom?) g. Monitoring/evaluation plan/activities (performance data, complaints/ compliments, surveys) h. Co-sponsors/stakeholders (roles?) i. Ridership characteristics: e.g. commuter/ employees, seniors, students, etc j. Any significant changes to existing service k. Incorporation of any changes to the service plan as a result of the required technical assistance consultation with SamTrans operations planning or Commute.org staff for existing underperforming shuttles **Solid funding plan with budgeted line items for:** a. Contractor (operator/vendor) cost. (inc. fuel surcharge if applicable) b. Administrative (Staff oversight) c. Other direct costs (e.g. marketing) d. Total operating cost e. Notes/exceptions (e.g. if there are projected differences between the 1st and 2nd year costs)	**Need – 25 points** - Provides service to an area underserved by other public transit - Provides congestion relief in San Mateo County - Provides transportation services to special populations (e.g. low income/transit dependent, seniors, disabled, other) and connects to the services used by these populations - Letters of support from stakeholders **Readiness – 25 points** Solid service plan in place describing how the shuttle service will be delivered for the 2-year funding period including: a. Service area (routes/maps, destinations served) b. Service plan development c. Specific rail stations, ferry or major SamTrans transit centers served d. Schedule (days, times, frequency) - show coordination with scheduled transit service e. Marketing plan/activities (advertising, outreach, signage, etc.) f. Service Provider g. Administration and oversight (whom?) h. Monitoring/evaluation plan/activities (performance data, complaints/ compliments, surveys) i. Co-sponsors/stakeholders (roles?) j. Ridership characteristics: e.g. commuter/ employees, seniors, students, etc k. Planning process for shuttles, including actions taken as a result of the required technical assistance consultation with SamTrans operations planning or Commute.org staff for new shuttles **Solid funding plan with budgeted line items for:** a. Contractor (operator/vendor) cost (inc. fuel surcharge if applicable) b. Administrative (Staff oversight) c. Other direct costs (e.g. marketing) d. Total operating cost e. Notes/exceptions (e.g. if there are projected differences between the 1st and 2nd year costs)
Effectiveness	**Effectiveness – 25 points** - Annual average operating cost per passenger for the prior 12 months - Annual average passengers per revenue vehicle hour of service for the prior 12 months - Service links with other fixed route transit (more points for higher ridership routes) - Improves access from transit oriented development to major activity nodes - Reduces single occupant vehicle (SOV) trips and vehicle miles traveled (VMT), state assumptions and methodology used for any calculations	**Effectiveness - 15 points** - Projected ridership, operating costs, and revenue vehicle hours of shuttle service to be provided in the first and second years of shuttle service. - State assumptions and document justification where possible - Proposed service links with other fixed route transit (more points for higher ridership routes) - Proposed service improves access from transit oriented development to major activity nodes - Proposed service reduces single occupant vehicle (SOV) trips and vehicle miles traveled (VMT), state assumptions and methodology used for any calculations
Funding Leverage – 20 points	**Percentage of matching funds contribution:** Shuttles w/ min. 25% match reqmt. 25 to < 50% - 5 to 10 points 50 to < 75% - 10 to 15 points 75 to < 99% - 15 to 18 points Shuttles w/ min. 50% match reqmt. 50 to < 75% - 5 to 15 points 75 to < 99% - 15 to 18 points Private sector funding proposed (supports less public subsidy) – 2 points	**Percentage of matching funds contribution:** 25 to < 50% - up to 10 points 50 to < 75% - up to 15 points 75 to < 99% - up to 18 points Private sector funding proposed (supports less public subsidy) – 2 points
Policy Consistency & Sustainability – 15 points	- Proposed shuttle is included in an adopted local, special area, county or regional plan (e.g. community-based transportation plan, general plan, Grand Blvd. Initiative, MTC Priority Development Area, etc.) - Supports jobs and housing growth/economic development - Use of clean fuel vehicle(s) for service - Shuttle accommodates bicycles	- Proposed shuttle is included in an adopted local, special area, county or regional plan (e.g. community-based transportation plan, general plan, Grand Blvd. Initiative, MTC Priority Development Area, etc.) - Supports jobs and housing growth/economic development - Use of clean fuel vehicle(s) for service - Shuttle accommodates bicycles
	Maximum Point Total - 100	**Maximum Point Total - 100**

[1] See Tables 1 & 2, next page, for details on Shuttle Operation Benchmarks and parameters for 50% match

Table 1 – FY 2018/19 & 2019/20 Shuttle Operation Benchmarks

Shuttle Type	Op. Cost/Passenger FY18/19 & 19/20	Passengers Per Service Hour FY18/19 & 19/20 (Current CFP)
Commuter	**$8/passenger**	**15**
Community	**$10/passenger**	**10**
Door to Door	**$20/passenger**	**2**

Table 2 - The following table shows how the 50% match would be applied for shuttles that fail to meet the applicable operating cost per passenger benchmark by 50% or more after 2 full years of operation:

Shuttle Type	Op. Cost/Passenger FY18/19 & 19/20 (Current CFP)	Benchmark missed by 50% or more
Commuter	$8/passenger	**≥$12/passenger**
Community	$10/passenger	**≥$15/passenger**
Door to Door	$20/passenger	**≥$30/passenger**

San Mateo County Shuttle Program
Fiscal Years 2018/2019 and/or 2019/2020

Non-Supplantation of Funds Certification

This certification, which is a required component of the project initiator's grant application, affirms that San Mateo County Transportation Authority (TA) Measure A Local Shuttle Program and/or City/County Association of Governments of San Mateo County (C/CAG) Local Transportation Services Program funds will be used to **supplement** (add to) existing funds, and will not **supplant** (replace) existing funds that have been appropriated for the same purpose. Potential supplantation will be examined in the application review as well as in the pre-award review and post award monitoring.

Funding may be suspended or terminated for filing a false certification in this application or other reports or documents as part of this program.

Certification Statement:

I certify that any funds awarded under the FY 2018/2019 and/or 2019/2020 TA Measure A Local Shuttle Program and/or C/CAG Local Transportation Services Program will be used to supplement existing funds for program activities, and will not replace (supplant) existing funds or resources.

Project Name: _____

Project Applicant: _____

_____ _____
PRINT NAME **TITLE***

_____ _____
SIGNATURE **DATE**

* This certification shall be signed by the Executive Director, Chief Executive Officer, President or other such top-ranking official of the Project Applicant's organization.

C/CAG AGENDA REPORT

Date: November 27, 2017

To: Congestion Management and Environmental Quality Committee

From: Reid Bogert, Stormwater Program Specialist

Subject: Review and recommend approval of the proposed project funding list under the Safe Routes to School and Green Streets Infrastructure Pilot Program.

(For further information or questions contact Reid Bogert at 650 599-1433)

RECOMMENDATION

Review and recommend approval of the proposed project funding list under the Safe Routes to School and Green Streets Infrastructure Pilot Program.

FISCAL IMPACT

$2,000,000.

SOURCE OF FUNDS

Funded in equal parts from local $4 vehicle license fees (AB 1546) designated for regional stormwater pollution prevention programs and $10 vehicle license fees (Measure M) designated for Safe Routes to School Programs.

BACKGROUND

At the July 13, 2017 C/CAG Board of Directors meeting, the Board approved Resolution 17-31 authorizing the Safe Routes to School and Green Streets Infrastructure Pilot Program (Pilot Program), including a Call for Projects and associated funding guidelines. The purpose of the Pilot Program is to demonstrate an integrated approach to building infrastructure that makes it safer for walking and biking to school while simultaneously addressing the capture and cleaning of stormwater runoff. Specifically, the Pilot Program is intended to fund integrated improvements at intersections and mid-block crossings near schools. Funding for the Pilot Program includes $1 million from Measure M slated for the Safe Routes to Schools (SRTS) program and $1 million from AB 1546 slated for countywide stormwater pollution prevention programs.

Staff released a Call for Projects on July 18, 2017. A pre-application coordination meeting was held on May 18, 2017 for interested local agency and school representatives. In addition, C/CAG hosted an application workshop on August 3, 2017 for potential project sponsors. Proposals were due on October 20, 2017.

Sixteen (16) applications were submitted from 12 jurisdictions. Applications were screened for responsiveness and 15 of the 16 proposals were deemed eligible. A selection panel, including staff from C/CAG, County Office of Sustainability, County Health System, and County Office of Education scored the eligible projects based on the scoring criteria, and scores were ranked and summarized (see Attachment 1).

Of the 15 eligible projects submitted, nine are recommended for full funding and one for partial funding, totaling $2,000,000. In accordance with the Pilot Program guidelines, the recommended funding list prioritizes distribution of funds to as many jurisdictions as possible before funding multiple projects in a single jurisdiction (i.e., second project proposals from three jurisdictions are not recommended for funding). Also, due to being oversubscribed with qualified projects ($2,489,267 in eligible funding requests), staff recommends providing partial funding ($137,137) for the Menlo Park submittal, which requested $250,000. This recommendation is based on there being insufficient funds to award the entire requested amount and based on the project's ranking.

Projects receiving funding are required to be completed by October 1, 2019, with the final reimbursement request submitted to C/CAG no later than December 31, 2019. The C/CAG Congestion Management Program Technical Advisory and Stormwater Committees both approved the proposed funding list at their meetings on November 16. After consideration by the CMEQ Committee, the C/CAG Board of Directors will consider approving the final recommended funding list and executing associated funding agreements at its December 14 meeting.

ATTACHMENTS

1. Safe Routes to School and Green Streets Infrastructure Pilot Program Funding Recommendation

Recommended Funding List					
Rank	**Score**	**Jurisdiction**	**Project Title**	**Funding Request**	**Funding Recommendation**
1	**91**	**Redwood City**	**Safe Routes to School (SRTS) and Green Streets Infrastructure Pilot Program at Taft Community School**	**$250,000**	**$250,000**
2	**91**	**Colma**	**Mission Road Improvements Safe Routes to School and Green Streets Infrastructure Project**	**$200,000**	**$200,000**
3	**85**	**Pacifica – Cabrillo**	**Cabrillo School Pedestrian Crossing Improvement Project**	**$157,600**	**$157,600**
4*	78	Pacifica – Terra Nova	Terra Nova High School Pedestrian Crossing Improvement Project	$123,200	$0
5	**78**	**East Palo Alto**	**Addison Avenue SRTS and Green Streets Infrastructure Project**	**$250,000**	**$250,000**
6	**78**	**Millbrae**	**Taylor Middle School SRTS and GSIPP**	**$212,500**	**$212,500**
7	**77**	**Brisbane**	**Brisbane SRTS and Green Infrastructure Project**	**$245,263**	**$245,263**
8	**76**	**Daly City - Westlake**	**Westlake Elementary School Pilot Green Streets Improvements Project**	**$144,500**	**$144,500**
9	**76**	**San Mateo County**	**Fair Oaks Community School Green Infrastructure and SRTS Improvements**	**$250,000**	**$250,000**
10*	75	Daly City - Panorama	Panorama Elementary School Pilot Green Streets Improvement Project	$170,000	$0
11	**72**	**Half Moon Bay – Cunha**	**Half Moon Bay Safe Routes to Cunha School Project**	**$153,000**	**$153,000**
12	**71**	**Menlo Park**	**Oak Grove SRTS and Green Infrastructure Improvements Project**	**$250,000**	****$137,137**
13*	69	Half Moon Bay - Hatch	Half Moon Bay Safe Routes to Hatch School Project	$221,000	$0
14	66	South San Francisco	Hillsdale Blvd Safe Routes to Martin School Project	$212,204	$0
15	54	Belmont	School Crossing at Cipriani Blvd and Carmelita Ave	$100,000	$0
			TOTAL:	**$2,489,267**	**$2,000,000**

Note:
* Second application for jurisdiction
** Partial funding