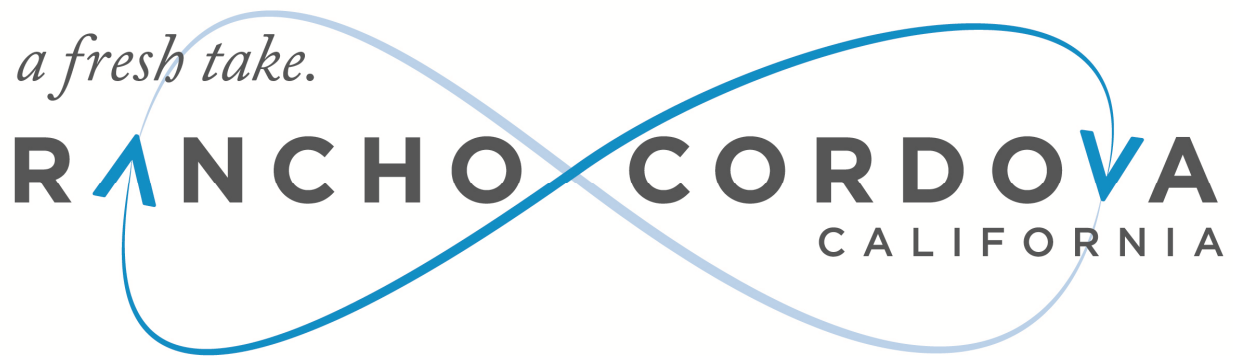


CITY OF RANCHO CORDOVA



CONCURRENT MEETING CITY COUNCIL/SUCCESSOR AGENCY TO THE CRA/RCFC

Tuesday, February 20, 2018

4:00 PM – Special Meeting/Closed Session

5:30 PM – Regular Meeting

AGENDA

Linda Budge, Mayor

Robert J. McGarvey, Vice Mayor

David Sander, Council Member

Garrett Gatewood, Council Member

Donald Terry, Council Member

CITY OF RANCHO CORDOVA



CONCURRENT MEETING CITY COUNCIL/SUCCESSOR AGENCY TO THE COMMUNITY REDEVELOPMENT AGENCY (CRA)/RANCHO CORDOVA FINANCING CORPORATION (RCFC)

City Hall
2729 Prospect Park Drive, Rancho Cordova

Tuesday, February 20, 2018

4:00 PM – Special Meeting/Closed Session
Community Board Room

5:30 PM – Regular Meeting
David B. Roberts Council Chambers

AGENDA

1. CLOSED SESSION - CALL TO ORDER/ROLL CALL

Council Members Gatewood, McGarvey, Sander, Terry and Mayor Budge.

2. PUBLIC COMMENT

At a special meeting, citizens wishing to address the Council for any matter on the agenda may do so at the time the matter is discussed. Under the provisions of the California Government Code, the City Council is prohibited from discussing or taking action on any item not on the agenda.

3. CLOSED SESSION

Council will meet in Closed Session to discuss the following item(s):

- 3.1 CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION: Significant exposure to litigation pursuant to Government Code section 54956.9(d)(2). Potential number of cases: One (1).

4. ADJOURNMENT

Mayor Budge will adjourn the Closed Session to the Regular Meeting in the David B. Roberts Council Chambers.

5. REGULAR MEETING - CALL TO ORDER / ROLL CALL

Council Members Gatewood, McGarvey, Sander, Terry and Mayor Budge.

6. METRO CABLE TV TELEVISION ANNOUNCEMENT

The Clerk will announce the meetings video recording and playback schedules.

7. PLEDGE OF ALLEGIANCE

The Mayor will call on someone in attendance to lead the Pledge.

8. INVOCATION

Chuck Kelly from St, John Vianney Catholic Church will give the invocation.

9. OPEN SESSION - REPORT FROM CLOSED SESSION

The City Attorney will report on action taken in Closed Session.

10. PRESENTATIONS

- 10.1 Girl Scouts of America Presentation by Troop 3109.
- 10.2 Folsom Lake College/Rancho Cordova Promise Program Presentation – A College Scholarship Program for Rancho Cordova Residents, Presented by Bernard Gibson, Dean of Student Services, from Folsom Lake College.
- 10.3 Community Enhancement Fund Grant Check Presentations to 1) Sacramento Area Bicycle Advocates: Promote Bicycling in Rancho Cordova and 2) Cordova Community Council Foundation: Improvements to Sports Fields and 3) Folsom Lake College: Folsom Lake College/Rancho Cordova Promise Program.
- 10.4 US 50 Integrated Corridor Management Presentation.
- 10.5 Introduction of New City Employee Daniel Leonardich, Community Enhancement Fund Management Technician, by Stacy Delaney, Community Enhancement Analyst II.

11. PUBLIC COMMENT

Citizens wishing to address the Council for any matter not on the agenda may do so at this time by completing and submitting a Speaker Card to the City Clerk. For items on the agenda, speakers will be called up to the podium by the Mayor at the point on the agenda when the item will be heard. Speakers are encouraged to keep comments to three minutes or less and to state name and community of residence.

Under the provisions of the California Government Code, the City Council is prohibited from discussing or taking immediate action on any item not on the agenda unless it can

be demonstrated to be of an emergency nature or the need to take immediate action arose after the posting of the agenda.

12. COUNCIL REPORTS

13. CITY MANAGER'S REPORT

14. CONSENT CALENDAR ITEMS - ROLL CALL VOTE

14.1 **Subject:** Meeting Minutes of the February 5, 2018 Regular Meeting.

Recommendation: Adopt Minutes.

14.2 **Subject:** Treasurer's Report – December 31, 2017.

Recommendation: This report is informational only. It is recommended that the City Council receive and file the December 31, 2017 Treasurer's Report.

Result of Recommended Action: The Treasurer's Report is required to be submitted to the City Council at least quarterly in accordance with California Government Code Section 53600 et. seq. The purpose of the Treasurer's Report is to update the City Council and the public on the status of the City's cash balances and investments, and highlight material changes from one period to another. The scope of this report covers the fourth quarter of this calendar year, ending December 31, 2017, and is in compliance with the State's reporting requirements.

Staff Report: Kim Juran-Karageorgiou, Administrative Services Director.

Advances Goals: 4.

14.3 **Subject:** Resolution Authorizing the City Manager to Execute an Agreement with Tyler Technologies BRAZOS to process electronic traffic citations.

Recommendation: Adopt Resolution 31-2018.

Result of Recommended Action: Adoption of Resolution 31-2018 will authorize the City Manager to execute an agreement with Tyler Technologies BRAZOS to process electronic traffic citations and interface with the Sacramento Superior Court Carol Miller Justice Center by the May 1, 2018 deadline.

Staff Report: Lieutenant Chad Lewis, Assistant Chief of Police.

Advances Goals: 2, 3, and 5.

14.4 **Subject:** LOCAL AGENCY INVESTMENT FUND (LAIF) INVESTMENT AUTHORIZATION – Resolution Authorizing City Staff to Deposit and Withdraw City Funds in the State's Local Agency Investment Fund (LAIF).

Recommendation: Adopt Resolution 11-2018, revising the authorization list on the City's LAIF accounts to reflect the current titles/staff positions in the City.

Result of Recommended Action: The City's authorizations with LAIF were last updated in August 2003, and there have been City position changes since that time. As a result, an updated resolution is required. The proposed resolution grants authority to the City Manager, Administrative Services Director/Finance Director and Senior Accountant, or their successors, to initiate investment-related transactions with LAIF.

Staff Report: Liisa Behrends, Sr. Accountant.

Advances Goals: 5.

14.5 **Subject:** Approve Parcel Map of Subdivision No. FM-2017-003-01, 3390 Sunrise Boulevard.

Recommendation: Approve Parcel Map of Subdivision No. FM-2017-003-01, 3390 Sunrise Boulevard; located on the west side of Sunrise Boulevard approximately 420

feet north of Recycle Road.

Result of Recommended Action: Approval of this recommendation will result in the recording of the parcel map creating two separate parcels.

Staff Report: Albert Stricker, Public Works Director.

Advances Goals: 1 and 2.

15. CONSENT PUBLIC HEARING ITEMS - ROLL CALL VOTE

- 15.1 **Subject:** Ordinance Amending Sections 10.50.010 and 10.50.020 of the Rancho Cordova Municipal Code to Establish Radar Enforceable Speed Limits on the Roads Listed in Ordinance 1-2018.

Recommendation: Introduce and waive the first reading of Ordinance No. 1-2018.

Result of Recommended Action: Adoption of Ordinance No. 1-2018 will allow the City of Rancho Cordova to establish radar enforceable speed limits on the roads listed in the Ordinance.

Staff Report: Albert Stricker, Public Works Director and Zach Bosch, Associate Civil Engineer.

Advances Goals: 1, 2, and 5.

- 15.2 **Subject:** 3287 Monier Circle Parcel Split – Project No. DD9743 – Tentative Parcel Map.

Recommendation: Adopt Resolution 30-2018.

Result of Recommended Action: Adoption of Resolution 30-2018 would approve the applicant's request to subdivide an existing developed 1.986+/- acre parcel into two separate parcels; Lot A at 0.969 acres and Lot B at 1.017 acres. This lot split would allow for the sale, lease, or finance of individual parcels. No physical improvements are proposed with this request. No physical improvements or changes in use are proposed with this request.

Staff Report: Nicholas Sosa, Assistant Planner.

Advances Goals: 1, 4, and 6.

- 15.3 **Subject:** Rancho Cordova Zoning Map Amendment.

Recommendation: Introduce and waive first reading of Ordinance No. 3-2018 to rezone APN 067-0030-078-0000 to General Commercial (GC).

Result of Recommended Action: The proposed zoning map amendment would change the existing zoning of M-1 (Light Industrial/Manufacturing) to GC (General Commercial) for consistency with the General Plan land use designation of Commercial Mixed Use (CMU).

Staff Report: Darcy Goulart, Principal Planner.

Advances Goals: 1 and 6.

16. PUBLIC HEARING ITEMS

- 16.1 **Subject:** Introduction and First Reading of Ordinance 4-2018, an Ordinance Amending Title 23 (Zoning Code) of the Rancho Cordova Municipal Code Regarding Specific Allowed Uses, Select Site Planning and Development Standards, Specific Use Provisions, Parking, Signs, and Updated Definitions.

Recommendation: Introduce and waive first reading of Ordinance 4-2018.

Result of Recommended Action: The Ordinance would come back for second reading and adoption at the next regular City Council meeting. Approval of Ordinance 4-2018 would amend Title 23 (Zoning Code) of the City of Rancho Cordova Municipal Code. Specifically, the proposed amendments will clarify approval authority, update

permit requirements, clarify minimum setback standards, address outdoor storage, create new development standards to ensure neighborhood compatibility, and clarify signage provisions.

Staff Report: Darcy Goulart, Principal Planner.

Advances Goals: 1, 2, and 6.

- 16.2 **Subject:** Cooperative Agreement with Douglas Road 105, LLC Related to Temporary Closure of Douglas Road, a Fee Credit Agreement, and Ordinance to Amend the Development Agreement.

Recommendation: 1) Adopt Resolution No. 26-2018; 2) Introduce and Waive the First Reading of Ordinance No. 2-2018.

Result of Recommended Action: Adoption of Resolution No. 26-2018 would authorize the City Manager to execute a Cooperative Agreement with Developers with stipulations that would allow the closure of Douglas Road between Americanos Boulevard and Grant Line Road for a period of up to six months during construction of utility and roadway infrastructure, and also authorize the City Manager to execute an impact fee credit agreement for the project. Adoption of Ordinance No. 2-2018 would approve amendments to the Development Agreement related to the fee credits and road improvements.

Staff Report: Elizabeth Sparkman, Interim Community Development Director and Albert Stricker, Public Works Director.

Advances Goals: 2, 5, and 6.

17. REGULAR CALENDAR ITEMS

- 17.1 **Subject:** Community Enhancement Fund Citizen Oversight Board Appointments.

Recommendation: The City Council interview, discuss, and select, by a majority vote of the full City council, five two-year term Board members and two one-year term at-large student appointees to fill the new Community Enhancement Fund Citizen Oversight Board.

Result of Recommended Action: The five Oversight Board members and two at-large appointees will be appointed to provide a review and audit of how tax revenues from Measure H are spent by the City.

Staff Report: Kim Juran-Karageorgiou, Administrative Services Director and Stacy Delaney, Community Enhancement Analyst.

Advances Goals: 3 and 5.

- 17.2 **Subject:** Resolution No. 3-2018 Authorizing The City Manager To Execute Contract No. 11-2018 With Neutron Holdings, Inc. DBA Limebike For The Rancho Cordova Pilot Bicycle Sharing Program.

Recommendation: Staff recommends adoption of Resolution No. 3-2018 authorizing the City Manager to execute contract No. 11-2018 with Neutron Holdings, Inc. DBA "Limebike" for the Rancho Cordova Pilot Bicycle Sharing Program.

Result of Recommended Action: Adoption of Resolution No. 3-2018 would result in Limebike launching a pilot bicycle sharing program in Spring 2018 with approximately 200 bicycles.

Staff Report: Albert Stricker, Public Works Director and Zach Bosch, Associate Civil Engineer.

Advances Goals: 1, 2, and 5.

- 17.3 **Subject:** A Resolution of the City Council of the City of Rancho Cordova Authorizing the Issuance of Special Tax Bonds for and on Behalf of the City of Rancho Cordova

Sunridge North Douglas Community Facilities District No. 2005-1, Approving and Directing the Execution of a Supplemental Fiscal Agent Agreement, Approving the Form of Preliminary Official Statement, Approving Sale of Such Bonds, and Approving Other Related Documents and Actions.

Recommendation: Adopt Resolution 29-2018.

Result of Recommended Action: Adoption of this Resolution will authorize the sale of the final series of Special Tax Bonds (the "Bonds") for and on behalf of Sunridge North Douglas Community Facilities District No. 2005-1 for the purpose of providing money for the construction and acquisition of improvements, and the payment of certain fees, within the Community Facilities District.

Staff Report: Michelle Mingay, Sr. Finance Analyst.

Advances Goal: 5.

18. COUNCIL REQUESTS FOR FUTURE AGENDA ITEMS

19. ADJOURNMENT

ADDITIONAL INFORMATION

UNLESS THE COUNCIL ADOPTS A MOTION TO EXTEND THE MEETING, ANY ITEM THAT IS NOT INITIATED BEFORE 11:00 PM WILL BE CONTINUED TO THE NEXT DAY AT 5:30 PM OR SCHEDULED ON THE NEXT REGULAR MEETING AGENDA OF THE COUNCIL.

Public documents related to items on the open session portion of this agenda, which are distributed to the City Council less than 72 hours prior to the meeting, shall be available for public inspection at the time the documents are distributed to the Council. Documents are available for inspection at the City Clerk's office located in Rancho Cordova City Hall.

The agenda items are accessible on the City's website at www.cityofranchocordova.org on Thursdays or Fridays prior to the Regular City Council Meeting.

CITYWIDE GOALS - (Adopted March 27, 2012)	
1.	Promote the Positive Image of Rancho Cordova
2.	Ensure a Safe, Inviting and Livable Community
3.	Empower Responsible Citizenship
4.	Establish Logical City Boundaries that Provide Regional Leadership and Address Financial Challenges
5.	Ensure the Availability of the Best Public Services in the Region while Practicing Sound Fiscal Management
6.	Drive Diverse Economic Opportunities

UPCOMING MEETINGS	
Tuesday, February 27	5:30 PM Special Meeting/Work Session
Monday, March 5	4:00 PM Special Meeting/Study Session 5:30 PM Regular Meeting
Monday, March 19	5:30 PM Regular Meeting
Tuesday, March 27	5:30 PM Special Meeting/Work Session
Monday, April 2	4:00 PM Special Meeting/Study Session 5:30 PM Regular Meeting
Monday, April 16	CANCEL REGULAR MEETING
Tuesday, April 24	5:30 PM Special Meeting/Work Session
Monday, May 7	4:00 PM Special Meeting/Study Session 5:30 PM Regular Meeting
Tuesday, May 15	5:30 PM Special Meeting/Work Session
Monday, May 21	5:30 PM Regular Meeting
Tuesday, May 29	5:30 PM Special Meeting/Work Session - ONLY IF NEEDED
Monday, June 4	4:00 PM Special Meeting/Study Session 5:30 PM Regular Meeting
Monday, June 18	5:30 PM Regular Meeting
Tuesday, June 26	5:30 PM Special Meeting/Work Session
Monday, July 2	4:00 PM Special Meeting/Study Session 5:30 PM Regular Meeting
Monday, July 16	CANCEL REGULAR MEETING
Tuesday, July 31	CANCEL REGULAR MEETING

UPCOMING MEETINGS	
Monday, August 6	4:00 PM Special Meeting/Study Session 5:30 PM Regular Meeting
Monday, August 14	5:30 PM Special Meeting/Work Session
Tuesday, August 20	5:30 PM Regular Meeting
Tuesday, August 28	CANCEL WORK SESSION
Tuesday, September 4	4:00 PM Special Meeting/Study Session 5:30 PM Regular Meeting (Tuesday due to Holiday)
Tuesday, September 11	5:30 PM Special Meeting/Work Session
Monday, September 17	5:30 PM Regular Meeting
Tuesday, September 25	CANCEL WORK SESSION
Monday, October 1	4:00 PM Special Meeting/Study Session 5:30 PM Regular Meeting
Tuesday, October 9	5:30 PM Special Meeting/Closed Session for City Manager Evaluation
Monday, October 15	5:30 PM Regular Meeting
Tuesday, October 23	5:30 PM Special Meeting/Closed Session for City Manager Evaluation – ONLY IF NEEDED
Tuesday, October 30	CANCEL WORK SESSION
Monday, November 5	4:00 PM Special Meeting/Study Session 5:30 PM Regular Meeting
Monday, November 19	5:30 PM Regular Meeting
Tuesday, November 27	5:30 PM Special Meeting/Work Session
Monday, December 3	4:00 PM Special Meeting/Study Session 5:30 PM Regular Meeting
Tuesday, December 11	5:30 PM Special Meeting/Work Session
Monday, December 17	5:30 PM Regular Meeting

If you have any technical questions related to the agenda items, please contact the appropriate department as follows:

DEPARTMENTAL GENERAL TELEPHONE NUMBERS	
Building and Safety Division	(916) 851-8760
City Attorney's Office	(916) 556-1531
City Clerk's Department	(916) 851-8720
City Manager's Office	(916) 851-8800
Communications Department	(916) 851-8791
Economic Development Department	(916) 851-8780
Finance Department	(916) 851-8730
Housing Division	(916) 851-8784
Human Resources Department	(916) 851-8740
IT Department	(916) 851-8700
Neighborhood Services – Animal Services	(916) 851-8770
Parks & Recreation (Cordova Recreation & Park District)	(916) 362-1841
Planning Department	(916) 851-8750
Public Works Department	(916) 851-8710
Rancho Cordova Police Department	(916) 875-9600
Redevelopment Department	(916) 851-8780
Sac Metro Fire District	(916) 859-4300

The Rancho Cordova City Council/Successor Agency to the CRA/RCFC will be videotaped in its entirety and will be cablecast without interruption on Metro Cable 14, the Government Affairs Channel on the Comcast, Consolidated Communications and AT&T U-Verse Systems. Closed Captioning will be available on the playback cablecast. A VHS copy is available for check out from any library branch, a DVD copy is available from the City Clerk's Department, and a webcast of this meeting will be available for viewing via video streaming from the City's website within 48 hours of adjournment of this meeting.

In compliance with the Americans with Disabilities Act, if you need a disability-related modification or accommodation, including auxiliary aids or services, to participate in this meeting, please contact the City Clerk's Office at (916) 851-8720 at least 48 hours prior to the meeting.

CERTIFICATION OF POSTING OF AGENDA

I, Stacy Leitner, City Clerk for the City of Rancho Cordova, declare that the foregoing agenda for the Tuesday, February 20, 2018 Special and Regular Meeting of the Rancho Cordova City Council/Successor Agency to the CRA/RCFC was posted and available for review on February 15, 2018 at City Hall of the City of Rancho Cordova, 2729 Prospect Park Drive, Rancho Cordova, California, 95670. The agenda is also available on the city website at www.cityofranchocordova.org.

Signed at Rancho Cordova, California.



Stacy Leitner, City Clerk

PROMISE PROGRAM REPORT



City of Rancho Cordova / Folsom Lake College Promise Grant

Progress Report – Use of Funds

Report Period Two, February 20, 2018

The following report is submitted in accordance with *Exhibit B* “Report for Use of City Funds” for the *Rancho Cordova/Folsom Lake College Promise Grant (Contract No: 143-2016)*, funded by the City of Rancho Cordova for the 2017-18 Academic Year. The numbers were generated through reports run by *PeopleSoft*, the Los Rios Community College District’s human resources management software. Totals for students enrolled with and without a California Community Promise Grant (formerly known as the Board of Governor’s Fee Waiver) are listed below. Note that those students whose fees were paid by the California Community College Promise Grant could apply their *Rancho Cordova/Folsom Lake College Promise* funds to the purchase of required books and supplies in the Folsom Lake College bookstore.

FALL 2017

RANCHO CORDOVA / FOLSOM LAKE COLLEGE PROMISE FALL 2017 REPORT	TOTAL # OF STUDENTS
Enrolled with California Community College Promise Fee Waiver	91
Enrolled without California Community College Promise Fee Waiver	19
Total Students Served by program	110
PROMISE PROGRAM EXPENDITURES (as of 12/31/17)	TOTAL \$ SPENT
Enrollment Fees	\$8,464.00
Student Representation Fees	\$110.00
Universal Transit Pass Fees	\$2,646.00
Bookstore Purchases	\$26,435.47
Total Expenditures	\$37,655.47

SPRING 2018

S’ 2018 PROMISE PROGRAM ENROLLMENT PROJECTIONS	# OF STUDENTS	% OF STUDENTS
Students: Eligible and Enrolled	78	71%
Students: Eligible and not Enrolled	2	01%
Students: Not Eligible and Enrolled	15	14%
Students: Not Eligible and not Enrolled	15	14%

Note: 93 of the original 110 students starting in the program are persisting to S’18.

Let's start with a short story.....





PROMISE PROGRAM

FOLSOM LAKE COLLEGE
and RANCHO CORDOVA



Who are they and who are we, together?



City of Rancho Cordova / Folsom Lake College Promise Grant Progress Report Two – Use of Funds

February 20, 2018





110 Students started the
City of Rancho Cordova-Folsom Lake College Promise Program.....



PROMISE PROGRAM

FOLSOM LAKE COLLEGE
and RANCHO CORDOVA



93 Students are persisting
to Spring semester 2018!





PROMISE PROGRAM

FOLSOM LAKE COLLEGE
and RANCHO CORDOVA

\$37,655.47 of the initial \$100K investment
was expended in the first semester.





PROMISE PROGRAM

FOLSOM LAKE COLLEGE
and RANCHO CORDOVA



This is an excellent
Return On Investment....



...but what do our students think?

PROMISE PROGRAM

FOLSOM LAKE COLLEGE
and RANCHO CORDOVA



PROMISE PROGRAM

FOLSOM LAKE COLLEGE
and RANCHO CORDOVA



PROMISE PROGRAM

FOLSOM LAKE COLLEGE
and RANCHO CORDOVA



To be continued.....



MEMORANDUM



DATE: February 20, 2018

TO: Honorable Mayor and Council Members

FROM: Albert Stricker, Public Works Director and Rupa Somavarapu, Senior Engineer

SUBJECT: US 50 INTEGRATED CORRIDOR MANAGEMENT PRESENTATION

RECOMMENDATION:

Receive presentation from Caltrans staff and provide comments.

RESULT OF RECOMMENDED ACTION:

This is an informational item provided by Caltrans regarding Integrated Corridor Management.

BACKGROUND:

Caltrans District 3 has identified US 50 as a pilot corridor to implement Integrated Corridor Management (ICM) strategies due to the congestion the corridor faces daily. ICM strategies aim at shifting away from the isolated transportation networks to a more regional multi-jurisdictional transportation system that collaborates, coordinates, and communicates with each other utilizing intelligent transportation systems (ITS) technology and transportation management systems (TMS). This would improve travel time reliability, predictability, and overall system performance by navigating regional travelers through the corridor with better real-time information and travel choices.

Caltrans representatives will be in attendance to present additional details on the project scope and schedule to City Council.

FISCAL IMPACT:

Costs will be determined based on the final scope, phasing and schedule of the project. Caltrans proposes to partner with agencies to pursue grant funding.

ATTACHMENTS:

1. US 50 ICM Implementation Plan.
2. Implementation Plan - Appendix E.
3. Implementation Plan - Appendix F.
4. PowerPoint Presentation.



US 50

**Caltrans District 3
US 50 Corridor
Integrated Corridor Management (ICM)**

Implementation Plan



June 2017



Version History

Version #	Implemented By	Revision Date	Approved By	Approval Date	Reason/Action
0.95	MEH	1/4/2017	TC	1/13/2017	Draft document for internal review.
1.0	TC	2/9/2017			Revised internal document.
2.0	BM	2/27/2017			Internal QA/QC
3.1	TH	2/27/2017	TC	2/27/2017	Final internal review
2/28/2017	TC	2/28/2017			Submitted deliverable
Final 0.8	MEH	4/10/2017			Incorporation of Comments
Final 0.81	MEH	5/03/2017	TC	5/11/2017	Incorporation of final comments
Final 1.0	TC	5/12/2017			Revised Submitted
Final 1.1	MEH	5/24/2017			Incorporation of Comments
Final 1.2	MEH	6/12/2017			Incorporation of Comments
June 2017	TC	6/16/2017			Final Submitted



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1 Introduction

The California Department of Transportation (Caltrans) District 3 US 50 Integrated Corridor Management (ICM) Implementation Plan (Plan) provides the District and its regional partners with guidance to better coordinate the development and integration of transportation system management projects throughout the US 50 corridor. This Plan supports the *District 3 Regional Concept of Transportation Operations (RCTO)* by detailing the critical steps needed to proactively develop and move needed projects forward on the US 50 corridor.

This Plan will also foster improved interagency planning and operational coordination, Intelligent Transportation Systems (ITS) interoperability, and inter-modal connectivity and management of the freeway facility, parallel arterials, transit services, and bicycle/ pedestrian networks.

The primary focus of this document is the Implementation Strategy detailed in Section 4 of the Plan. This introductory section provides an overview of the background and purpose of the Implementation Plan. Section 2 describes the underlying concept of the ICM system and provides the rationale for deployment of the system. Section 3 presents the goals and performance measures to be used to evaluate the effectiveness of the implementation and identifies the user needs.

1.1 Purpose of the Implementation Plan

The purpose of the Plan is to develop a partnership-based plan for a portion of US 50 within the “2014” US 50 Corridor System Management Plan” (CSMP).

The existing US 50 corridor in eastern Yolo, Sacramento, and western El Dorado Counties contains an array of freeway, arterial, multimodal transit, and bicycle and pedestrian networks that are independently maintained and operated by Caltrans and its regional partners.

The responsible transportation management agencies along the corridor already have strong working relationships and have collaborated on solving regional transportation issues over many years. What is presently lacking is the necessary system infrastructure and capabilities to take the partnership to the next level in transportation system management and integrated management and operations. The various transportation networks can be siloed and often do not interact in a way that takes advantage of available capacities during major accidents, incidents, or special events that impact traffic conditions along the corridor. The lack of integration hinders effective coordination of appropriate responses that could optimize system performance and reduce emissions.

This Plan provides detailed guidance to Caltrans and regional partner agencies along the corridor to better manage the transportation corridor as one system, rather than as individual entities, to improve travel time reliability and predictability, help optimize system performance, and empower travelers through better information and more travel choices through all facilities and modes. The coordination efforts as part of the upcoming Regional ITS Master Plan by the Sacramento Area Council of Governments (SACOG) should improve the opportunity to develop a seamless transportation network. According to the U.S. Department of Transportation (USDOT):

“The vision of Integrated Corridor Management (ICM) is that transportation networks will realize significant improvements in the efficient movement of people and goods through institutional collaboration and aggressive, proactive integration of existing



infrastructure along major corridors. Through an ICM approach, transportation professionals manage the corridor as a multimodal system and make operational decisions for the benefit of the corridor as a whole.”

1.2 Project Background

With the successful application of ICM on I-15 in San Diego, and current efforts to deploy ICM strategies on other California freeway corridors (e.g., I-80 in the Bay Area, and I-210 and I-110 in Los Angeles), it is clear that ICM is a valuable tool used statewide in managing and optimizing California’s congested corridors.

Caltrans District 3 has several congested corridors, which are forecast to get worse in the future as traffic demand increases. When considering political, environmental, and fiscal constraints to transportation infrastructure planning and development, ICM is one of the most viable options to optimize system performance in the District.

District 3 has identified US 50 as a pilot corridor to implement ICM strategies due to the congestion the corridor faces daily. Additionally, the US 50 corridor already contains many of the parallel facilities and ITS infrastructure required for ICM integration. It is the District’s long-term intention to implement ICM strategies within other corridors throughout the District based on the success and lessons learned from ICM application within the US 50 corridor.

Upon completion of the District 3 RCTO in 2015, a strategic plan to improve the District’s and the region’s Transportation System Management and Operations (TSM&O), Caltrans District 3 and its US 50 corridor partner agencies launched a coalition to consider ICM application on the corridor. The coalition formed a project development group (herein referred to as the “group”) with engineering and planning members from each of the partner agencies. The group defined the vision and scope for the US 50 ICM and meets on a regular basis to provide guidance and direction in the future development and deployment of the ICM concept.

The group selected a 37-mile option that extends west to east from Enterprise Boulevard in the City of West Sacramento (southeastern Yolo County), through Sacramento County, to Cameron Park Drive in western El Dorado County as shown in Figure 1.

The ICM corridor passes through the following cities in Yolo and Sacramento Counties:

- West Sacramento
- Sacramento
- Rancho Cordova
- Folsom

The corridor also passes through the unincorporated areas of Rosemont, El Dorado Hills, and Cameron Park.

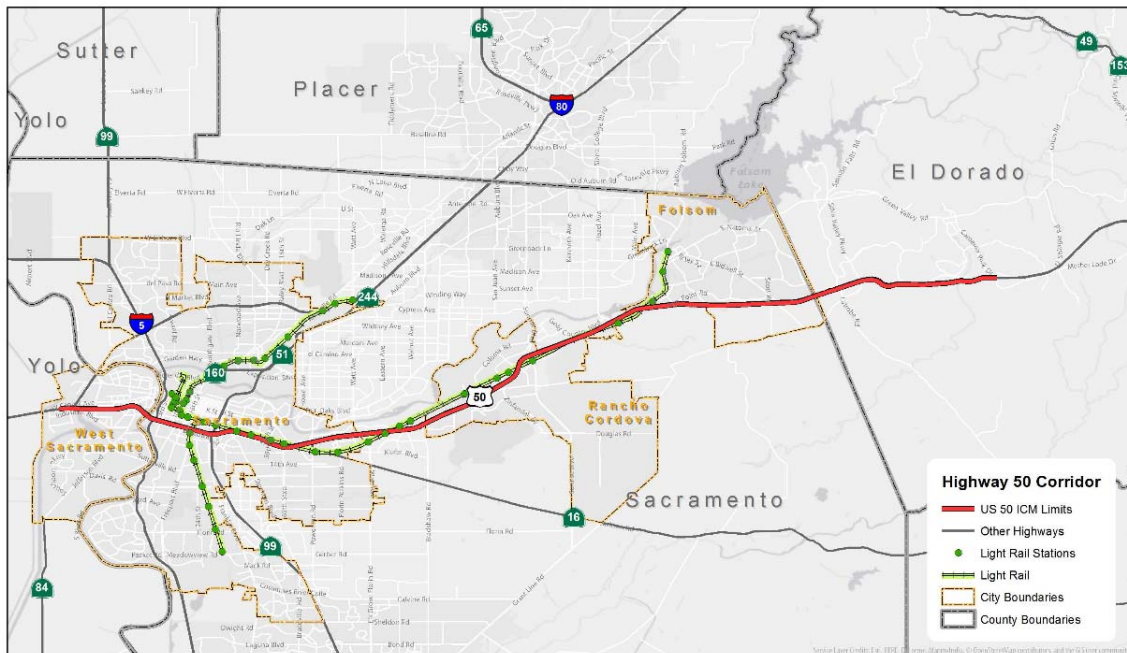


Figure 1: US 50 ICM Corridor

The group decided that the ICM approach should seek a solution and ultimate implementation that addresses the following, in order of priority:

- non-recurrent congestion (incident and event management)
- corridor-specific traveler information system
- multimodal operations
- goods movement and truck traffic
- recurrent congestion (daily commuter traffic congestion)

It was generally accepted that the objectives mentioned were meaningful for the US 50 corridor and would be considered for eventual implementation. A phased implementation of targeted operations improvements to address non-recurrent congestion would be the first priority. These improvements include signal coordination, advanced ramp metering, and specific traveler information.

The group also expressed a great desire to coordinate activities with and take advantage of the light rail and transit options, including bicycle and pedestrian access, along the corridor as rapidly as possible, possibly as part of the initial implementation phase if funding and systems allowed.

The outcomes of the US 50 ICM implementation are to aid the district and its regional partners in achieving the following objectives defined in the District 3 RCTO:

- ▶ Goal 1 - Safety and Health
 - Reduce user fatalities and injuries
- ▶ Goal 2 - Stewardship and Efficiency
 - Effectively manage transportation assets
- ▶ Goal 3 - Sustainability, Livability, and Economy



- o Provide mobility choice, increase accessibility to all transportation modes and create transportation corridors
 - o Support statewide reduction of Green House Gas (GHG) emissions
- ▶ Goal 4 - System Performance
 - o Improve travel time reliability for all modes
 - o Reduce peak period travel times and delays for all modes
 - o Improve systems integration and operations
 - o Develop ICM strategies
- ▶ Goal 5 - Organizational Excellence
 - o Improve collaborative partnerships

Additionally, the team recognized and incorporated the Regional goals as defined in the Metropolitan Transportation Plan and Sustainable Communities Strategies (MTP/SCS) as described by the Sacramento Area Council of Governments (SACOG). The goals described in the MTP/SCS are similar in nature to the Caltrans RCTO goals described above.

In light of these goals, objectives, and initial pilot corridor scope, the group developed a vision statement for the ICM project that encompasses the desires of the participants:

“US 50 Integrated Corridor Management (ICM) is the proactive multiagency integration and management of the US 50 multimodal transportation corridor to move people and goods more effectively and ensure the greatest gains in operational performance across the entire corridor network.”

This vision statement may require modifications over time to be relevant; however, participants agreed this statement provides an overall summary of the objectives for the corridor.

1.3 Participating Agencies and Stakeholders

The stakeholders involved in the development of this Plan represent all agencies responsible for funding, implementing, and operating all the transportation modes that operate on the US 50 corridor. Individuals representing management, senior leadership, and staff (day-to-day operations) from various departments (i.e. planning, operations, maintenance) from transit-providers, State, County, City, and Regional agencies have attended many of the meetings. This demonstrates the regional commitment to the concept, and allows for the transfer of knowledge and information from a wide range of perspectives. More importantly, this extensive participation from regional partners allows for a deeper understanding of all stakeholders regarding the constraints and challenges that the ICM is likely to encounter during implementation. The participating agencies in the project development group included:

- Caltrans District 3
- Caltrans Headquarters (HQ)
- Federal Highway Administration (FHWA)
- Sacramento Area Council of Governments (SACOG)
- Sacramento County Department of Transportation
- El Dorado County
- City of West Sacramento
- City of Sacramento

- City of Rancho Cordova
- City of Folsom
- Sacramento Regional Transit
- Yolo Bus
- El Dorado County Transportation Commission (ED CTC)

A complete list of individual participants with contact information is provided in Appendix C.

1.4 Scope of the initial ICM Project

To help establish the scope of the ICM corridor, the group reviewed the existing and planned infrastructure to determine if a segment could be identified for which ICM strategy could be implemented with minimal further investment.

The group elected to focus on a system that considers the aspects of an ICM corridor of freeway system, local agency arterial routes, transit, parking management, and bicycle and pedestrian routes, as depicted in the example Figure 2. The ultimate US 50 ICM system architecture may not be as depicted at this time, as it will be determined during the design stage.

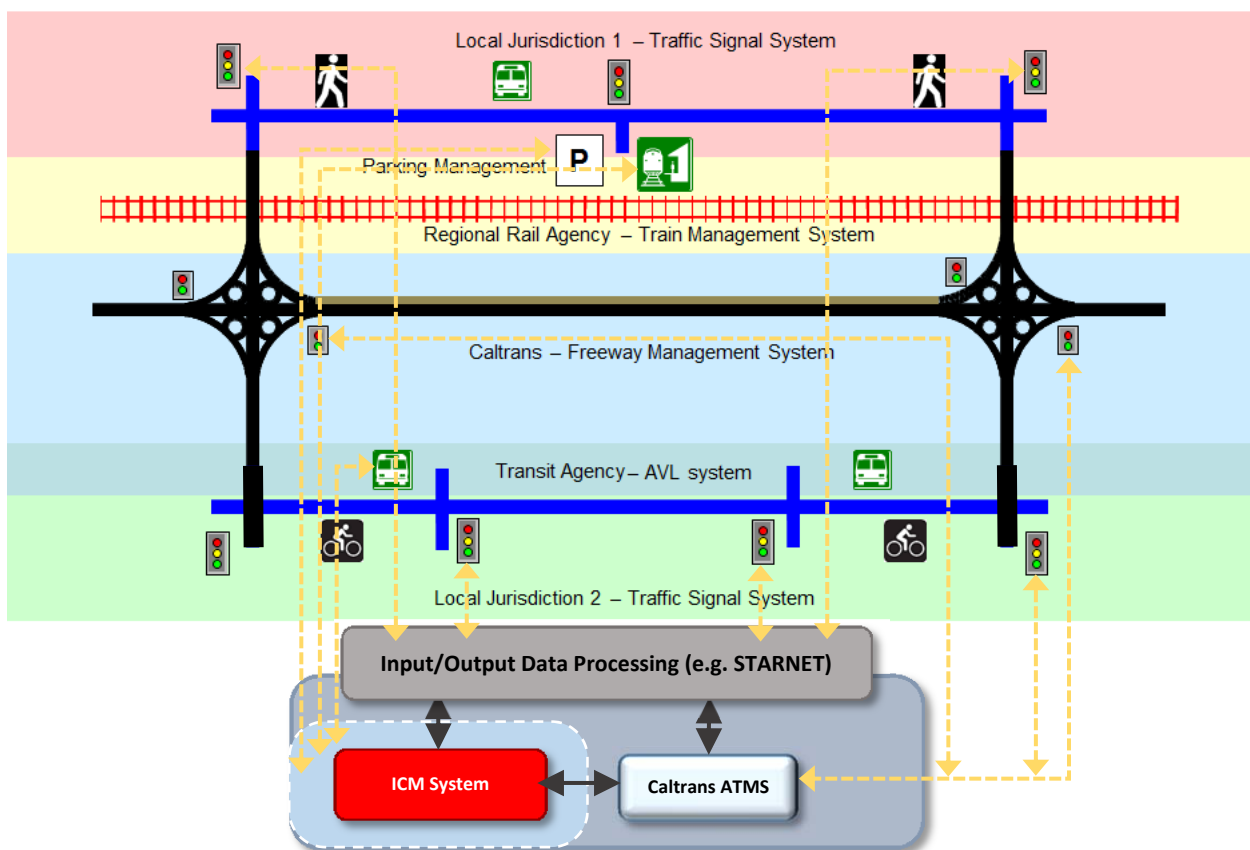


Figure 2: Example ICM Corridor Systems



Various ICM deployment models were considered by the group in defining the US 50 ICM scope. The models included the I-80 ICM recently deployed in the San Francisco Bay Area, the I-15 ICM in San Diego, the I-110 Dynamic Corridor Congestion Management (DCCM) under development in Los Angeles, and the I-210 Connected Corridors under development through the San Gabriel Valley. Other models implemented in other parts of the country were reviewed and considered as well to gain a comprehensive perspective. Based on the alternative assessments, the group felt that the I-210 Connected Corridors or a hybrid version could be the best solution for the US 50 corridor pilot deployment.



2 US 50 ICM System Concept

2.1 Corridor Defined

The US 50 multimodal transportation corridor under consideration for ICM deployment is a section of the US 50 through Yolo, Sacramento, and El Dorado counties as described in Section 1 (page 3). The multimodal transportation corridor includes the freeway facility, arterials running parallel and connecting to the freeway facility, public transit systems, park and ride lots, transit parking structures and surface lots, and bicycle and pedestrian facilities.

Reaching a consensus among as many as 12 agencies for the ICM deployment project over 37 miles could be a daunting task, not to mention the high cost and resource needs. A phased implementation, starting with a portion of the corridor limits, provides a more reasonable solution that can be deployed more quickly and efficiently than a single comprehensive corridor implementation. Once the pilot deployment of the initial corridor segment is demonstrated to be effective, implementation can then be expanded to include the other segments of the corridor.

The US 50 ICM corridor was divided into three sub-segments for initial data collection and implementation considerations as follows:

- Segment 1 (10 miles) – Enterprise Blvd. in West Sacramento through the City of Sacramento to Howe Ave./ Hornet Drive in Sacramento County
- Segment 2 (14 miles) – Howe Ave./Hornet Drive through the cities of Sacramento, Rancho Cordova, and Folsom to Folsom Blvd/Iron Point LRT Station.
- Segment 3 (13 miles) – Folsom Blvd/Iron Point LRT Station to Cameron Park Dr. in El Dorado County.

These segments are not fixed and should be considered for modification if a partner on an adjoining segment has the capability to provide additional resources earlier in the implementation. Likewise, if a partner agency is not able to participate initially, it could easily be moved to a later phase of that segment or to a different segment in the larger 37-mile project, as long as there is some continuity in the phased implementation. Any of these adjustments could be made, preferably earlier in the planning phase, by modifying the limits associated with the various affected segments.

Although there is stakeholder interest to undertake the entire 37 miles, funding limitations may affect the breadth of initial deployment. The group and stakeholders have reached consensus on moving forward with a single segment for implementation of proof of concept. After all segments were considered for initial deployment, Segment 2 was noted to be favored by the group for several reasons. Many of the arterials which run parallel to US 50 have received considerable funding commitments for traffic signal improvements or have recently completed modernization improvements. Additional improvements will be required for implementation along these arterials; however, the total cost for a proof of concept could be significantly less along Segment 2. Further, initial project deployment of a shorter segment is more cost- and time-effective in demonstrating the benefits of the ICM approach. If the investments are spread over a larger geographic area, benefits may not prove as apparent as they would if funding was focused on Segment 2.

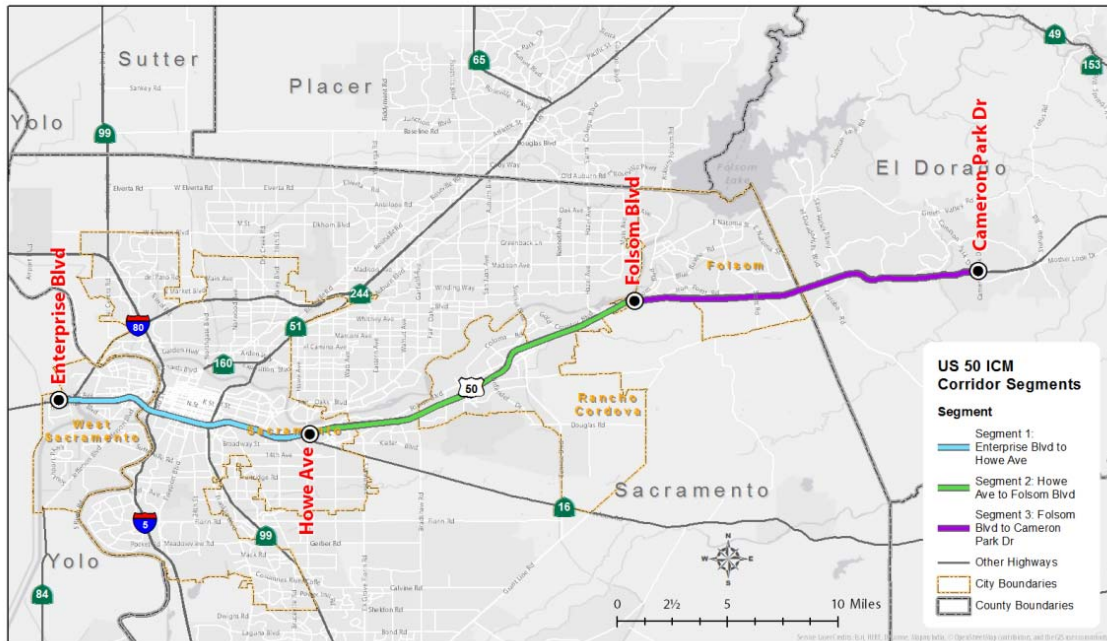


Figure 3: US 50 ICM Corridor Segments

2.2 Regional and State ITS Architecture (technology requirements)

The Regional ITS Architecture from 2006 as well as the California State ITS Architecture were reviewed to determine whether the Architecture flows required for implementation of the current vision of the ICM corridor were satisfied. The Regional ITS Architecture will soon be updated by SACOG and a review of technologies planned or envisioned for implementation within the ICM corridor should be completed and considered for inclusion as part of the upcoming update. The primary infrastructure components are presently supported by the regional architecture and should not present any limitations during the initial implementation phase.

A review of the market packages, as presented in Table 1, which were included in the 2006 ITS Regional Architecture showed that all potential infrastructure interfaces were included in the current version. The titles of each market package are self-explanatory and have been documented for review purposes. As the Architecture gets updated, inclusion of these market packages may be necessary.

Area	Market Package	Name
Traffic Management	ATMS 01	Network Surveillance
	ATMS 02	Probe Surveillance
	ATMS 03	Surface Street Control
	ATMS 04	Freeway Control
	ATMS 06	Traffic Information Dissemination
	ATMS 07	Regional Traffic Control
	ATMS 08	Traffic Incident Management System
	ATMS 15	Railroad Operations Coordination
	ATMS 16	Parking Facility Management

Maintenance and Construction	MC 03	Roadway Weather Data Collection
	MC 04	Weather Information Processing and Distribution
	MC 07	Roadway Maintenance and Construction
	MC 08	Work Zone Management
	MC 10	Maintenance and Construction Activity Coordination
Public	APTS 01	Transit Vehicle Tracking
	APTS 02	Transit Fixed-Route Operations
	APTS 07	Multimodal Coordination
	APTS 08	Transit traveler Information
Traveler Information	ATIS 01	Broadcast Traveler Information
	ATIS 02	Interactive Traveler Information

Table 1: Market Package Analysis (Regional ITS Architecture 2006 version)

The infrastructure necessary for the initial ICM implementation has been included in past versions of the Regional ITS Architecture. In most cases, an example of the ITS technology exists in some form within the regional transportation system. While the ITS elements exist, they are not necessarily widespread in their implementation and, consequently, additional ITS element construction will be needed.

Computer infrastructure will be required for the implementation of the ICM system, as well as to improve cross agency network connectivity. The Information Technology departments will need to be consulted as methodologies are developed to assure all network security is maintained. Obtaining support of concepts and preliminary approvals for those concepts will require working with the system developers, agency operations personnel and the IT policy makers to find solutions to these complex coordination concerns.

2.3 ICM Concept Approach

Key to the ICM approach is the ability of the operational and planning personnel from each agency to consider issues and take actions with the public's and each other's interests in mind. This is a trait that has been well demonstrated over the years in the Sacramento Region and will become a primary factor for the successful implementation of ICM along the US 50 corridor. The ICM concept as described here is a high-level approach that includes the potential concept of operations, operational scenarios, and scenario response plans, for consideration. The concept approach will need to be clarified and detailed during the Concept of Operations development as part of the System Engineering process.

The development group ranked five different concepts of operations, selecting non-recurrent congestion as the initial concept the implementation should address. All other concepts can be added on as the system and its management capability matures.

Ranked Concepts for ICM Implementation:

1. Address non-recurrent congestion
2. Provide corridor-specific traveler information system
3. Optimize multimodal operations
4. Manage goods movement and truck traffic
5. Address recurrent congestion



When incidents occur, whether on freeway or arterial, motorists often choose to sit in congestion, frustrated, or attempt various, un-organized detour routes in many different directions. These un-organized detours have been increasing as smartphone applications (e.g., WAZE, Google Maps, etc.) provide route guidance suggestions to motorists to avoid areas of congestion, often resulting in movements through areas not designed for this increase in traffic, such as residential streets. Figure 4 below illustrates this pattern.

The concept of ICM will allow managers across agency boundaries to coordinate their actions, assess available capacity, and address a surge in demand at any one facility (e.g., as a result of an incident). When implemented in conjunction with Traveler Information (TI), the public can plan their points of exit from and entrance to the highway and ease impact on the local arterials and residential streets. By monitoring the performance of the corridor, additional capacity can be allocated in the direction of demand and reduce travel delay in a coordinated fashion, as illustrated in Figure 5.

This coordinated approach to the demand will reduce the amount of “cut through traffic” in neighborhoods and on local streets, by enhancing capacity and operations along the arterial network where applicable. As capacity of the arterial network is reached, Traveler Information can then be updated to inform public of the current conditions on the arterial. The ICM system can be designed to continuously optimize response plan selection. Traveler Information should also be used to inform motorists of other modes and/or route options available before beginning their trips or if already en-route, before completing those trips. Providing real-time and accurate information on the status of the transit system and other available modes as part of the response plan allows the public to make informed decisions when choosing their mode, time of travel, and route to avoid traffic congestion.

Many strategies and concepts were discussed for potential incorporation into the scenario response plans, including:

1. Minor-level incident on freeway
2. Moderate-level incident on freeway (partial lane closure)
3. Major incident on freeway (all lanes closed)
4. Moderate incident on arterial (partial lane closure)
5. Major incident on arterial (all lanes closed)
6. Incident on freeway on-ramp
7. Incident on freeway off-ramp
8. Recurrent congestion conditions

The plans under consideration for development include re-routing for incidents along the highway, and for incidents along the arterials within the corridor. The impact of the incident and scenario would be evaluated and the response would vary depending on the likely impact to the traveling public. A response for a minor incident on a freeway might be limited to the highway facility, and as the severity increases, additional responses could be initiated; including upstream notification, rerouting, and information on multimodal alternative routes. The options would be evaluated by the ICM system and a recommendation made to the system managers for approval or implementation. Some ICM concepts were eliminated from consideration due to costly infrastructure requirements and potentially controversial operational policy requirements. The concepts explored included:

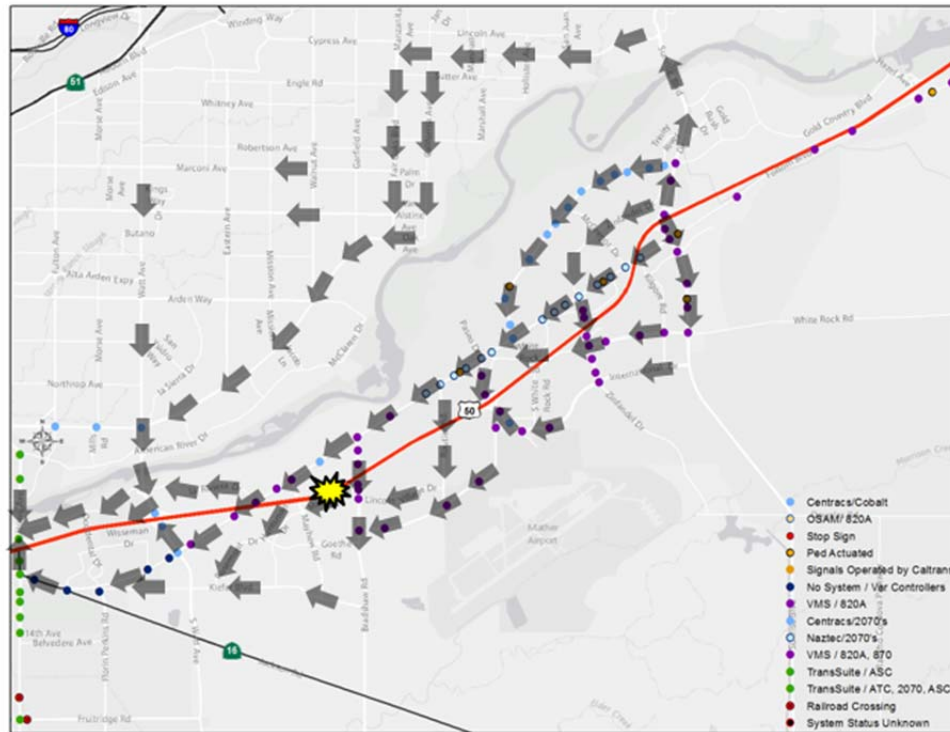


Figure 4: Typical public response to an incident

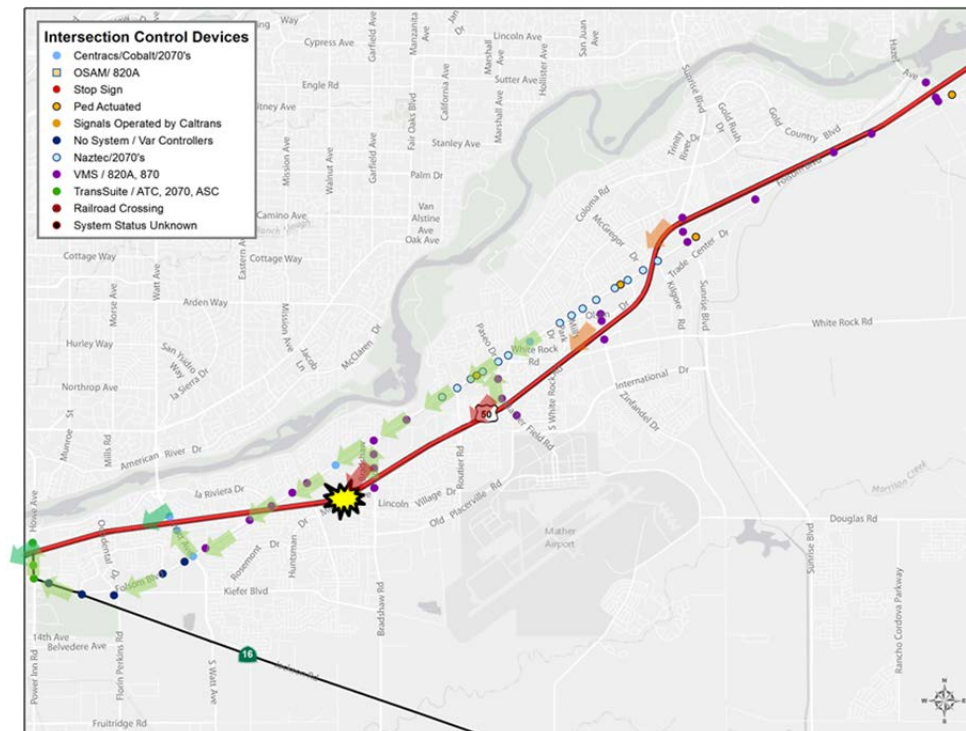


Figure 5: ICM approach to redistributed demand.



- Variable Speed Limits/Speed Harmonization
- **Adaptive Ramp Metering**
- Junction Controls/Metering
- Queue End Warning
- Dynamic Lane Management
- Reversible Lane Control
- Hard Shoulder Running
- Congestion Pricing
- **Traffic Signal Control**
- **Alternate Routing**

The concepts shown above in **bold type** were selected for further exploration as the participants felt they could be implemented relatively quickly without large capital investment. As part of the initial deployment, the group also decided upon the following actions for the ICM System to consider:

- **Automatically detect congestion events**
- **Real-time (multimodal) decision support**
- **Network traffic prediction**
- **Real-time response strategy assessment**
- **Dynamic rerouting**
- **Freeway adaptive ramp metering**
- **Signal coordination with freeway ramp metering**
- **Regional arterial management**
- **En-route traveler information**
- **Pre-trip traveler information**

The group then identified the following essential strategies and systems for the US 50 integration:

- Freeway system improvements
 - Corridor adaptive ramp metering
 - Advanced central signal control
 - Freeway vehicle detection and performance monitoring (VDS, Bluetooth/Wi-Fi, other sensors)
 - Traveler Information and Routing
- Arterial system improvements
 - Intersection control upgrades
 - Arterial vehicle detection and performance monitoring (VDS, Bluetooth/Wi-Fi, other sensors)
 - Trailblazer signing
- Other systems (transit, parking, active transportation, trucks)
- Integration System (decision support system, data hub, interfaces, etc.)
- Traveler information system
- Pre-planned and pre-approved response plans to various corridor conditions scenarios

Some of these strategies and improvements have already been implemented or funded to be implemented along the corridor; however, the infrastructure will need additional investments before a complete proof of concept can be validated. Local environmental processes will need to be completed during the preliminary engineering stage for all field infrastructure improvements as part of the various agencies project development processes.

Measurement of the performance of the transportation systems under before and after conditions will be required to determine the actual return on investment and gains in system performance. Data collection as required for the analysis should become a priority and investments should keep this data collection need in mind as choices are made on system investments.

Additional discussion and information on the various operational alternatives and ICM system components can be found in Appendix E: *US 50 ICM Implementation Plan - Deployment Alternatives and Potential Strategies*.

2.4 ICM Benefits

Benefits from ICM deployment have been demonstrated and well documented in many projects across the nation. The benefits are not just to the motorists' user experience, but also to the freeway, arterial, and multimodal facilities transportation operations. Most of the ICM benefits are to the local and regional agencies and transit agencies. The key ICM benefit to the freeway operations is reduced secondary collisions and improved travel time reliability. The collective benefits include:

- Improved mobility (improved travel times)
- Reduced secondary collisions
- Reductions in neighborhood intrusion (as depicted in Figures 4 and 5)
- Streamlined response to incidents
- Optimized use of transportation infrastructure capacity
- Reduced motorist delays
- Reduced greenhouse gas emissions

Benefit statistics from various studies are provided in Appendix B.

2.4.1 IMC Benefits to Local and Regional Agency

There a number of benefits to local and regional agencies along the ICM corridor, particularly to the ICM partner agencies. These benefits can include:

- When incidents occur on the freeway, much of the traffic diverts onto local streets. Without signal coordination, traffic is bogged down and often create gridlocks are various intersections. Cell phone navigation apps also often guide traffic through residential streets and school areas. With ICM, the diverted traffic is better managed, guiding them through preferred routes with dynamic signal coordination and synchronization, and keeping them away from residential streets and school areas.
- When incidents occur on the freeway, diverted traffic on arterials, past the incident, has difficulty getting on the freeway downstream because the ramp metering is limiting the rate of vehicles entering the freeway. With ICM, the ramp metering is integrated into the coordination

and synchronization such that ramp metering downstream of incidents are in flush mode or increased rate to allow for higher volume of traffic to enter freeway.

- When incidents occur on the arterials, local agencies do not yet have dynamic signal control system to adjust to the changing demand conditions dynamically. Also, traffic wanting to bypass the incident using the freeway has difficulty because the freeway ramp metering is limiting the rate of vehicles entering the freeway. With ICM, the freeway is a managed alternate route for the arterials. Ramp metering rate is increased around local incident to allow local traffic to use the freeway to bypass the incident. This is particularly advantageous along the US 50 because of the American River. There are only few bridges across the river, such that it limits the traffic between the river and the freeway on the north side of the freeway, trapping much of the traffic and creating gridlocks.
- With ICM, local community traffic will experience less congestion, improved mobility, better circulation, reduced vehicle emissions, and improved access through their neighborhood arterial streets during major incidents.

2.4.2 IMC Benefits to Transit Agencies

There a number of benefits to transit agencies along the ICM corridor, particularly to the ICM partner agencies. These benefits can include:

- With ICM, by integrating transit and alternative modes (walking or bicycling), the partners can expect additional transit ridership and increased alternative modal choices for the public. The traveler information will be able to reach potential motorist before they select personnel vehicles for optimal selection of alternate modes. Traffic stuck in traffic during major incidents can be informed of transit parking availability, modal choices available at the transit hubs, and arrival time of transit to key destinations. This will encourage motorist to park their vehicle at the nearest hub and take other modes to their final destination. With improved first and last mile accessibility considering Uber and Lyft, bike share, and others, it is expected that travelers will take multitude of transportation modes, rather than selecting just one mode, for their entire trip.
- With ICM, transit vehicles utilizing the roadway facilities along the US 50 ICM corridor can experience improved travel times, better access, improved travel time reliability, and improved on-time arrivals. With ICM, transit agencies will have better real-time information on roadway incidents and travel times on various freeway and arterial routes, and traffic management operations. This will help transit agencies to better coordinate and manage their transit en-route and respond to major incidents with transit scheduling.
- With ICM, transit agencies can better inform their riders and improve their relationships with customers.

2.5 Deployment Rationale (collisions, incidents, and congestion)

Many factors were considered when selecting a corridor in the Sacramento Region for implementation of ICM. The analysis included number of collisions per mile, total vehicle miles traveled and vehicle hours of delay. The group then looked at additional factors, such as multimodal opportunities (transit, light rail, bicycle facilities, park and ride/transit stops, maturity of transit facilities), adjoining and parallel arterial networks, as well as the participating agencies and their capabilities to implement ICM without major systems reconstruction.

The incident or collision analysis was completed for 2014 using TASAS (Traffic Accident, Surveillance and Analysis System) data and for 2016 using the California Highway Patrol Computer Aided Dispatch (CHP-CAD) incident data. Per analysis, the US 50 corridor was ranked as having the second or third highest incident rate in the Region depending on the year analyzed. State Route 51 and Interstate 80 had a greater number of incidents per mile, but with other factors considered as mentioned above, the study participants elected to move forward with US Route 50 which had a significant number of incidents per mile (see Table 2 and Figure 6), along with numerous positive additional factors mentioned above.

Freeway Corridor	Freeway Miles	2014 TASAS Collisions	Collisions per mile	2016 CHP CAD Incidents	Incidents per mile
I-5	127	1,116	9	6,136	48
US 50	109	1,838	17	8,922	82
SR 51	9	639	71	3,351	372
SR 65	30	218	7	62	2
SR 70	81	224	3	768	9
I-80	132	2,123	16	12,866	97
SR 99	117	1,539	13	5,756	49
SR 113	38	87	2	205	5
SR 160	48	89	2	267	6

Table 2: TASAS and CHP CAD Incident Data

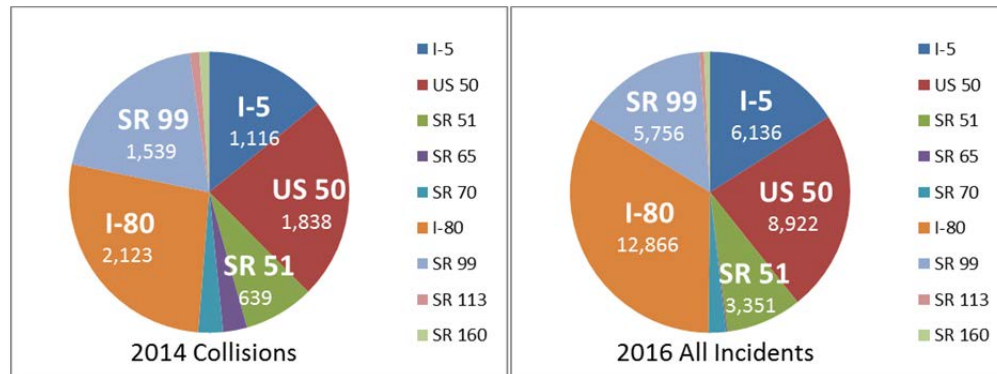


Figure 6: 2014 and 2016 Incidents by Route

Regional Congestion and vehicle miles traveled were considered as part of the selection criterion. A review was completed and once again the region's three most congested routes very easily identifiable in the data.

Freeway Corridor	Detection Coverage Miles	2016 Vehicle Miles Traveled (VMT)	VMT per mile	2016 Vehicle Hours Delay (VHD)	VHD per mile
I-5	46	1,693,751,000	29,946,000	1,814,000	39,400
US 50	47	2,321,711,000	43,503,000	2,399,000	51,000
SR 51	9	478,643,000	52,212,000	2,051,000	227,900
SR 65	13	303,522,000	22,829,000	270,000	20,800
SR 70	10	187,067,000	15,404,000	245,000	24,500
I-80	105	3,475,781,000	30,316,000	2,911,000	27,700
SR 99	48	1,778,030,000	37,122,000	2,170,000	45,700
SR 113	15	329,753,000	13,531,000	191,000	12,700
SR 160	4	64,844,000	14,295,000	209,000	59,700

Table 3: Caltrans Performance Management System - VMT and VHD

The US 50 Corridor typically does not experience the greatest amount of delay, but again was consistently experiencing significant delay due to incidents. Per review of motorist delay performance indicators, I-80, US 50 and SR 99 were found to experience the greatest delays.

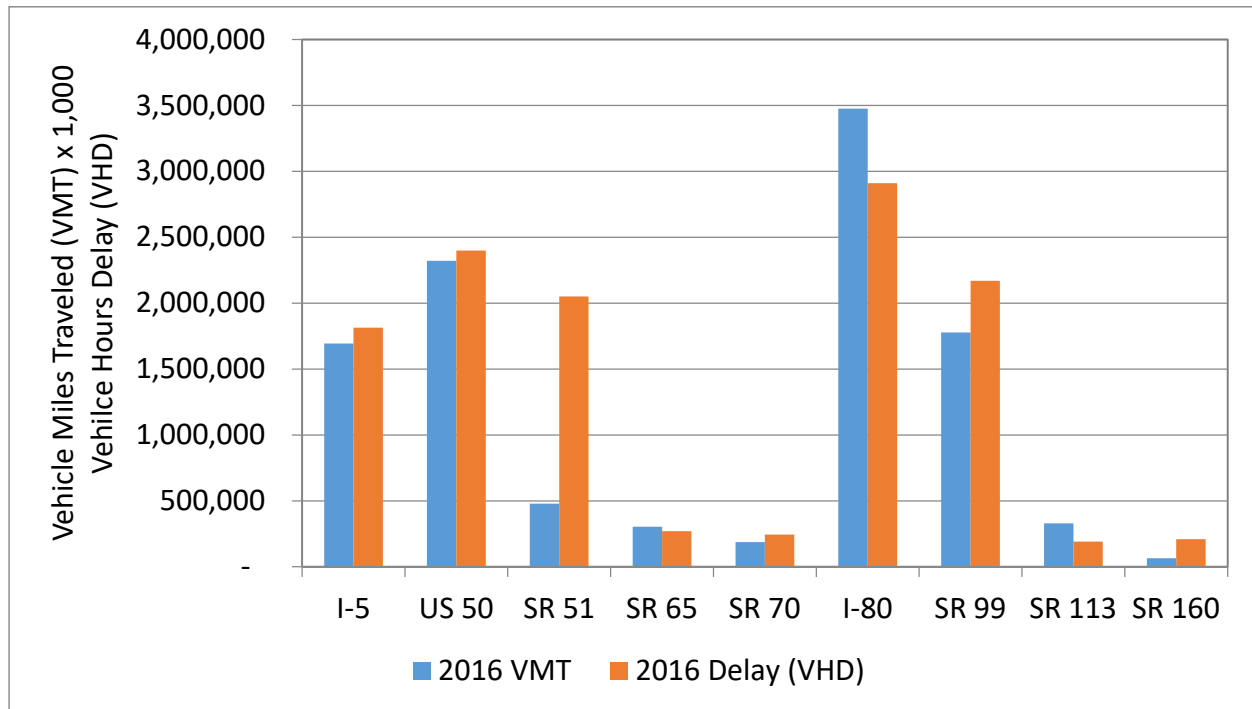


Figure 7: 2016 VMT and VHD by Route

Based on congestion data, incident location data, previous infrastructure investments, active participants, existing funding allocations, transit system capabilities, and alternate modal characteristics (walk and bicycle), selection for initial deployment was made for the US 50 Corridor.

The three US 50 proposed segments were then examined by the same factors for comparison purposes and to assure the participants that no one segment dominated the statistics (see Table 4). It can be observed that the higher hours of delay in the downtown urban core segment (Segment 1) align with



the highest incident rate segment. While the incident rate was considered during the selection process, the partnership elected to consider other factors leading to the selection of a different segment.

The US 50 ICM segment 2 was selected for implementation as it passed through three different jurisdictions and bordered on two additional agencies at the boundaries. The incident rates, VMT and VHD, are significant for ICM testing purposes and the ability to incorporate multiple transit agencies make this segment a good initial test bed choice. It should be noted that either end could be extended to allow for a short segment of the adjoining agencies to participate in the initial effort. The “alternate routing” under consideration for Segment 2 continues into these neighboring jurisdictions and would allow for ease of inclusion into the initial concept test bed segment.

<i>Attributes</i>	<i>Segment 1</i>	<i>Segment 2</i>	<i>Segment 3</i>
<i>Description</i>	Sacramento Downtown Urban Core	Suburban Sacramento County	Suburban El Dorado County
<i>Limits</i>	Enterprise Blvd (West Sac.) to Howe Ave (Sac County)	Howe Ave (Sac. County) to Folsom Blvd (Folsom)	Folsom Blvd (Folsom) to Cameron Park Dr (El Dorado County)
<i>Length</i>	10 Miles	14 Miles	13 Miles
<i>Local Arterial Jurisdictions</i>	West Sacramento, Sacramento	Sacramento, Rancho Cordova, Folsom, Sacramento County	El Dorado County, Folsom
<i>Transit Agencies</i>	Yolo Bus, SacRT (bus and light rail)	SacRT, CordoVan, El Dorado Transit, Folsom Stage Lines	El Dorado Transit, Folsom Stage Lines
<i>Multimodal hubs</i>	Howe/Power Inn	Watt, Bradshaw, Mather Field, Sunrise, Hazel, Iron Point	Latrobe Road (Post Street)
<i>Existing (2016) Vehicle Miles Traveled (VMT)</i>	559,703,000	806,968,000	641,253,000
<i>Existing (2016) Delay (vehicle-hours)</i>	1,370,000	619,000	288,000
<i>Existing (2014) TASAS Collisions</i>	742	594	216
<i>Existing (2016) CHP CAD Incidents</i>	3,869	2,981	1,212

Table 4: US 50 ICM Corridor Attributes

3 Impacts of the ICM Deployment

3.1 Goals and Performance Measures

The Caltrans District 3 and the US 50 ICM corridor local agency partners identified key goals and objectives for the ICM project to consider as part of the development. These key objectives were to:

- **Improve system performance** (mobility, safety, reliability, productivity)
 - Decrease delay and collisions (fatalities)
 - Improve travel time reliability
 - Stabilize vehicle flow rates and average speeds
- **Provide transportation choices** (alternate modes, alternate routes)
 - Increase non-auto modes usage
 - Increase multimodal options provided
 - Improve coordination with operations on parallel routes
- **Increase accessibility** (connectivity, traveler information)
 - Improve distribution of traveler information, multimodal connections made
- **Enhance sustainability** (non-auto modes)
 - Increase non-auto modes usage
 - Reduce need for system expansion
 - Position corridor to take advantage of emerging/future technologies
- **Improve environment** (GHG emissions, green infrastructure)
 - Reduce GHG emissions
 - Add green infrastructure
- **Improve collaborative partnerships**

The US 50 ICM project as proposed would support the goals and objectives as identified as part of the District 3 RCTO. The RCTO goals and objectives align with the Sacramento Area Council of Governments (SACOG's) 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) guiding principles, which include the following:

- o **Smart Land Use** – Design a transportation system to support good growth patterns, including increased housing and transportation options, focusing more growth inward, and improving the economic viability of rural areas.
- o **Environmental Quality and Sustainability** – Minimize direct and indirect transportation impacts on the environment for cleaner air and natural resource protection.
- o **Financial Stewardship** – Manage resources for a transportation system that delivers cost-effective results and is feasible to construct and maintain.
- o **Economic Vitality** – Efficiently connect people to jobs and get goods to market.
- o **Access and Mobility** – Improve opportunities for businesses and citizens to easily access goods, jobs, services, and housing.
- o **Equity and Choice** – Provide real, viable travel choices for all people throughout our region.

The ICM implementations across the nation have demonstrated these goals and objectives are reasonable and obtainable.

District 3 RCTO Goals & Objectives	District 3 Performance Targets
Goal 1 (Caltrans SMP Goal #1) - Safety and Health	
1. Reduce user fatalities and injuries	♦ Result in 0.5 or less fatalities per 100 million VMT on SHS every year ♦ 10% reduction in number of fatalities in calendar year in each mode type
Goal 2 (Caltrans SMP Goal #2) - Stewardship and Efficiency	
1. Effectively manage transportation assets with asset management plan (fix-it-first)	♦ By 2020, maintain 90% or better ITS elements health
Goal 3 (Caltrans SMP Goal #3) - Sustainability, Livability, and Economy	
1. Provide mobility choice, increase accessibility to all transportation modes and create transportation corridors	♦ By 2020, increase non-auto modes (triple bicycles, double pedestrians, and double transit ridership)
2. Support statewide reduction of GHG emissions	♦ By 2020, 15% reduction of GHG (from 2010 levels) ♦ By 2020, 20% increase incorporating green infrastructure into projects
Goal 4 (Caltrans SMP Goal #4) - System Performance	
1. Improve travel time reliability for all modes	♦ By 2020, improve buffer time index reliability ranking by one level or 15%
2. Reduce peak period travel times and delays for all modes	♦ By 2020, reduce to 8% rate of growth in daily vehicle hours' delay (DVHD) under 35 mph on urban SHS
3. Improve integration and operations	♦ By 2020, provide real-time multimodal system information to public along integrated corridors
4. Increase number of Complete Streets features on SHS	♦ By 2020, increase annual number of Complete Streets features by 5%
5. Develop integrated corridor management (ICM) strategies	♦ By 2020, complete one ICM implementation plan in District 3 ♦ By 2025, implement one ICM corridor in District 3, reduce to 6% rate of DVHD growth on corridor
Goal 5 (Caltrans Goal #5) - Organizational Excellence	
1. Improve internal and external communication to demonstrate professionalism and service levels to the public and stakeholders	♦ By 2020, increase approval rating by stakeholders by at least 5% annually
2. Improve collaborative partnerships	♦ By 2020, have at least 75% approval rating by collaborative partners

Table 5: District 3 RCTO Goals and Objectives

3.2 User Needs

The primary user needs for the US 50 ICM deployment are common to most other ICM projects. Examples of user needs and requirements can be found in the I-210 Connected Corridors pilot project, as well as the I-80 ICM and I-110 DCCM projects. The group should begin to review documentation of previous ICM implementations to reduce the amount of effort required to develop their User Needs. Examples of the common user needs include the following:



- Database for historical data and manage access and control
- System selection of conditions category or type
- Simulation modeling results and shared viewing
- Detailed decision support system recommendations
- Response strategy options and selection
- Download selected option plans to devices instantly (central control)
- Manual override control by location and by corridor segment
- View roadway and control devices conditions for monitoring
- Indicated control devices not working (repair needed)
- Produce traveler information to dedicated site(s)
- Assess impact of strategy deployment
- Assess key performance measures
- Publish information
- Produce management reports including before/after comparison
- Document lessons learned

A review of the current capabilities of STARNET should also be conducted to determine the additional work that will be required for this region. Communication and adherence to data standards will be critical in successfully adapting software and application from other ICM projects. The recommended standard for consideration is published by the Institute of Transportation Engineer (ITE) in the Traffic Management Data Dictionary (TMDD) Standard version 3.0x for the Center to Center Communications (C2C). This standard has been principally developed to support:

1. Providing event information to other centers
2. Providing traffic and travel data to other centers
3. Assisting coordinate operations within the defined C2C network
4. Providing remote control of traffic control devices

The TMDD standards are provided for traffic signal controllers, ramp meters, highway advisory radios, environmental sensors, dynamic message signs, video switches, close circuit television, traffic detectors, as well as event or incident data. The standards have been written to be independent of the communication protocol and allow for XML or REST API interface use.

The STARNET system was built using this same data standard and can be utilized as a translator engine for many of the Regions data streams. The STARNET development utilized the same data formatting and protocols for the traveler information dissemination interfaces, allowing third parties easy access to the data and reutilization of products developed for other regions.

Much of the TMDD User Needs for event-related tasks were completed during the development and implementation of STARNET. In addition, the status of many of the partner agencies field elements was shared. The portion of the User Needs required to define traffic signal controllers and ramp meters remains to be addressed in the STARNET system. Within STARNET, no work was completed with respect to signal controller modification from a remote agency or system. Preliminary proof-of-concept work was completed on CCTV control, but those deliverables will likely require updating before control can be implemented across agency network boundaries. The TMDD standard does provide a great deal of information on typical user needs for the areas requiring additional or new effort. The first Volume of the TMDD v3.03d provides detailed user needs that the partners should consider while developing their

own user needs matrix. An excerpt of TMDD v3.03d Volume 1 is provided in Appendix D, Section 5.4 of this document for this purpose. The original document can be downloaded from: <http://www.ite.org/standards/tmdd/3.03.asp>.

Transit agencies across the country have focused on the GTFS-Realtime (General Transit File Specification – Realtime) as the standard utilized for transferring data and building applications. Transit agencies interested in participating in the ICM effort should consider moving towards this standard for their dispatch and AVL systems or require their existing vendors to build a translator interface to allow their systems to output data using the GTFS standard. Detailed information is available at: <https://developers.google.com/transit/gtfs-realtime/>. Presently, the GTFS-Realtime standard supports the following information types:

- **Trip updates:** Delays, cancellations, changed routes
- **Service alerts:** Stop moved; unforeseen events affecting a station, route, or the entire network
- **Vehicle positions:** Information about transit vehicles including location and congestion level

This transit information could be valuable along the ICM route for providing real-time alternative mode information to travelers when an ICM is activated. Details of the transit integration will need to be addressed in the development of the Concept of Operations and in the System Engineering process. This includes traffic signal transit priority and/or preemption.

3.3 Primary Impacts (system and data requirements)

The impacts will depend much on the ICM system architecture. Generally, the major components of the architecture include the inputs (from existing systems and performance monitoring); data hub to store and access data; a Decision Support System (DSS) software to provide response decision recommendations to operators; a data bus, and some type of interface mechanism to provide instructions to the existing systems to change local signal timing, ramp metering rates, and electronic signs; and to provide data and information to traveler information systems. The figure below is an example of the latest I-210 Connected Corridors system architecture:

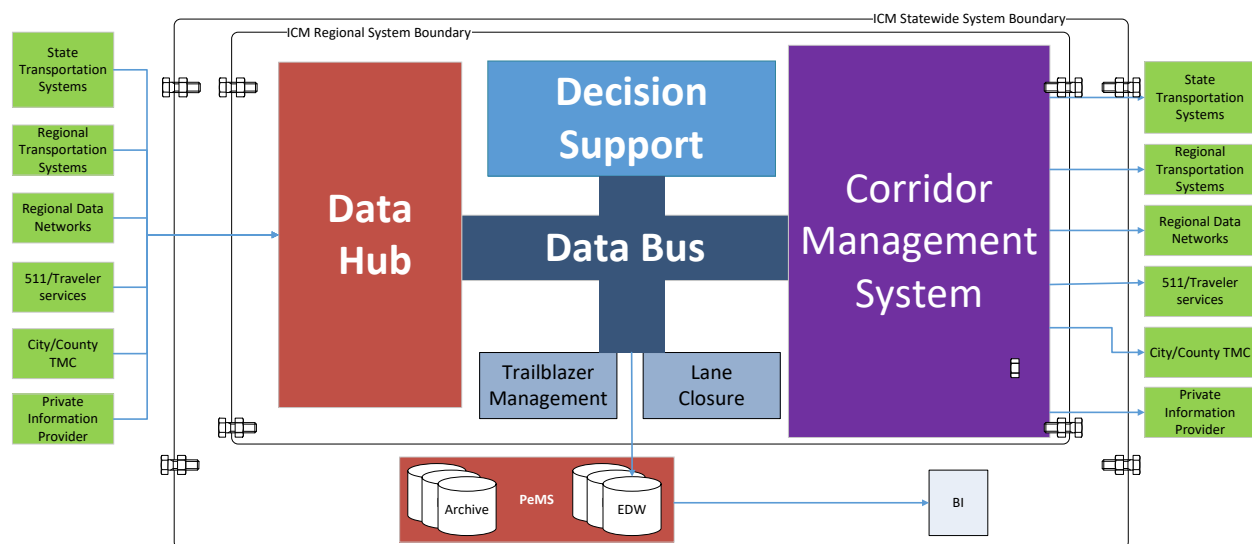


Figure 8: Example ICM System Architecture (I-210 Connected Corridors)



The data required for the support of the DSS will require direct field measurement of transportation system information. Data will be required from US 50 travelers and will take advantage of investments previously made in the existing speed monitoring network and/or ramp meter sensing locations. In the future, this data may be fused with data provided through an API (Application Programming Interface) from HERE Traffic or WAZE. The combined traffic volume and speed data will provide an excellent source of real-time traffic information for system optimization and performance measurement. Additional technologies that are currently being tested across the region and include probe vehicle data gathered from vehicles running smartphone applications, toll tag transceivers, and the use of “Bluetooth identification signal” matching systems. All data collected should not contain personal identification information. Once all data source information is aggregated, the real-time status of the system should be documented for performance measurement by the DSS.

Similar traffic flow data can be gathered from signal systems and further enhanced by integrating with the API driven data sources. Incorporating mid-block arterial data, which provides more consistent vehicle count and occupancy measurement than stop bar data, would be new for the region and would be able to provide available arterial network capacity in real-time. In addition, new detection has been considered for intersection departing flows. The data from the arterial network will allow operators to determine if recommendations and changes in signal timing are influencing motorist behavior and will be valuable in measuring the effectiveness of the ICM concepts.

Data collected when the ICM/DSS system is not recommending actions be taken due to incidents, will be collected for performance measurement calculations. This data will provide flow information for the “standard” or “normal” system performance reference. When an incident does occur, the data collected will be used to determine the effectiveness of the response plans and potentially could provide additional insight for operations personnel on improvements for response plans alternatives.

The data collected from all systems can also be used to verify air quality and travel time reliability benefits provided by the ICM system. This data can then be used as support for future funding applications to demonstrate achievement the Caltrans District 3 Goals and Objectives and the SACOG Regional Objective.

The performance data will provide additional benefit to regional and transportation planners by allowing for the collection of detailed data that can be combined and used to validate the Regional Transportation model for the base condition as well as incident impact and response events.

As depicted in Figure 8, all the collected data samples would go into the data hub, either at a physical location or a web-based cloud. Caltrans HQ is exploring and seeking opportunities and alternatives using a web-based cloud service to host the Caltrans ICM data hub.

Caltrans District 3 has been exploring methodologies with the Information Technology Division which will allow the ICM project to leverage the Regional investments in the STARNET or CARS system (Condition Acquisition Reporting System). An early consensus has begun to form around a proposed architecture allowing the various systems to communicate, while preserving the network integrity desired by the Caltrans IT division (Figure 9).

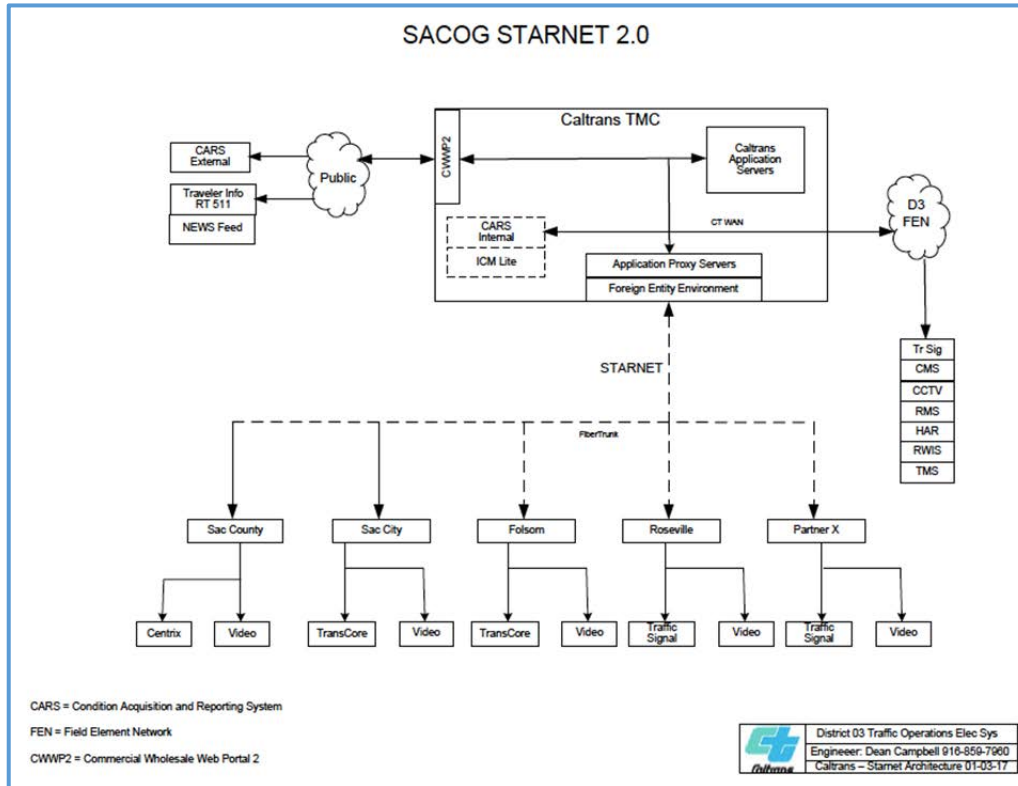


Figure 9: Example ICM / STARNET System Architecture

The primary functions of the proposed ICM system include the following:

- Data Input

Comprehensive and reliable real-time data input will be needed from traffic sensors, ramp metering system, traffic signal management system, other control devices, transit management systems, parking management systems, etc. Information about active incidents, weather, construction and maintenance schedules, and other planned events may also be included. All collected data must further be validated prior to being used to ensure that erroneous information is not included in system evaluations. Data processing may also involve the application of data fusion algorithms designed to address potential discrepancies among data collected from various sources and gaps in collected data. A data hub would be needed to hold the large amount of real-time and historical data.

- Determination of Asset Availability

Prior to conducting any system management strategy evaluation, an inventory of available assets must be conducted to determine which assets may be used. While this step may appear trivial, specific assets may not always be available.

- Evaluation and Selection of Management Strategies

As a situation arises and a response is required, the ICM system would become activated and operated in real-time environment. Once activated, the conditions are assessed and available management strategies would be evaluated to determine their effectiveness in addressing the identified operational condition. Only the strategies that can physically be implemented based on available assets would then be evaluated. Evaluations would be conducted by a Decision Support System (DSS) drawing strategies from rules or playbooks describing potential supply-side and demand management solutions. It would use various processes to evaluate current system operations, determine the near-term impacts of individual strategies or groups of strategies, and provide recommendations on which strategies to implement. Depending on system setup and capabilities, these evaluations could be conducted every 5, 10, or 15 minutes. The various functionalities of the DSS would include:

- o State Estimation – Estimation of the current operational conditions based on an analysis of real-time data provided by various monitoring systems, archived historical data, and results from the application of analytics.
 - o Demand and State Prediction – Determination of predicted near-future conditions based on projected changes in traffic demand and the implementation of various combinations of demand management and/or supply management strategies.
 - o Operator Interface – Communication of change instructions to the various control devices to implement selected strategy.
 - o Knowledge Development – Aggregation of strategy selection and evaluation results for future analysis and refinement.
- Strategy Execution

Once the appropriate strategy is determined and initiated, the selected management strategy would be translated into specific commands that can be understood by the various control elements and assets involved in the implementation of the strategy. A Corridor Management System or an alternate control interface would be needed to communicate between the ICM and the various ICM components both internal and in the field.

4 Implementation Strategy

4.1 Process, Procedures, and Milestones

The successful implementation of the US 50 ICM will require that Caltrans District 3 and its partners work together to achieve the common objectives defined by the Vision Statement. Together, the partners can effectively manage the transportation system to benefit all travelers on the ICM corridor using all available modes. To implement the ICM concepts in the shortest time possible, the partners will need to reach consensus on many processes, procedures, and milestone objectives. The implementation depends on all partners sharing information and working together toward achieving regional benefits.

The process for securing the necessary approvals for decisions on the command and control aspects of the system and sharing the authority to implement pre-authorized decisions will be front and center. It is recommended that the implementation group be formalized for the US 50 ICM corridor Segment 2 (from west of Howe Avenue to east of Folsom Boulevard). One option would be to formalize the current partnership group and create a charter for that group. The charter documents the agreement among the stakeholders over the key elements of a project, and helps to guide the implementation team efficiently and effectively through the project development process. Developing the charter will also serve as an educational mechanism to inform decision-makers regarding the project and to secure their approval of the ICM concept for the US 50 corridor.

It is also recommended that both key operational authority and final decision authority personnel be recognized. Identifying and assigning final decision-makers within each agency will be critical in securing approvals in a timely manner.

The process and procedures required to secure the necessary approvals will likely vary by the type of decision being made. Each partner agency should share the process and the time frames typically required for securing those approvals (normal operational activities or policy decisions). This could be beneficial to the partnership, as the lead times may affect the milestone dates and expectations.

Major milestone dates should be targeted for key objectives. Establishing quarterly objectives may prove useful to management to show progress or to quickly flag potential delays. Other milestones can be added later for work to be accomplished and for policy commitments. Setting expectations for partner agencies and knowing the status of other agencies can assist in moving the project forward.

It is recommended to set a monthly meeting schedule for the formal “implementation group”. It may be desirable to combine this effort with an existing periodic meeting. When critical deliverables are due or key decisions are required, a special meeting may be needed.

A broader second group composed of all the US 50 ICM segment partners should also be established to allow for the flow of information on progress and decisions made. When policy decisions are being made, information should be shared with “future implementers” to avoid conflicts within the system that will generate delays or added expenditures for other segments. These meetings should occur less frequently than those of the active implementation group (e.g., quarterly, bi-annually, or annually).



4.2 Inter-Agency Agreements (letters of support, charter)

Securing letters of support will be critical initially as the partners begin to seek funding for implementation of the ICM components. Then following up with a more detailed partnership Memorandum of Understanding (MOU) will be necessary for the development and implementation of the ICM deployment. In addition, ensuring that the ICM components and communication needs are incorporated into the upcoming ITS Master Plan will be necessary to secure regional funding.

Several partners have already prepared and presented Caltrans with letters of support for the ICM concept development. None of the partners have yet offered or been requested to provide funding for system expansion.

Obtaining the support or acknowledgement from elected officials or executive management of partner agencies can be beneficial. As the project progresses and difficult policy-level decisions are needed, having approval ahead of time from decision makers will expedite solutions to challenging issues that arise from any major project implementation. Early knowledge of the concept, when combined with the potential for public questions, can assist managers and elected officials in answering those questions before they develop into major objections. By beginning the educational process early, as part of the Charter discussion described above, the group may develop allies who will become advocates later in the process. If objections are discovered as part of the educational process, the possibility for mitigations to be designed into the systems become much more cost effective and obtainable.

4.3 Organizational Structure (roles and responsibilities)

Either Caltrans District 3 and/or SACOG should consider leading the ICM effort. The US 50 ICM concept began with Caltrans and could leverage other Caltrans ICM investments made in other areas of the State. The other option is for the effort to be considered a “regional activity” with SACOG leading the effort to reduce GHG emissions and provide improved travel times by promoting alternative modes of travel while minimizing the need for new roadway construction.

After determining the project champion, the next step will be to develop a Systems Engineering plan for the ICM software system. The System Engineering plan would include the formal documentation of a Concept of Operations and System Requirements. An analysis of compatibility with the other systems being developed or deployed by Caltrans should be completed as part of this effort to leverage other investments made elsewhere in the State, including Adaptive Ramp Metering System, ICM system, and advanced traveler information system. A review of the STARNET investments made by SACOG also should be completed to avoid duplicative efforts for systems that already exist. An analysis of specific existing data communication capabilities could be considered and would aid in future investments to avoid repeating lower return investments based on current systems limitations.

As indicated in the milestones section of this Plan, the District should consider working with Caltrans HQ and other Districts as they advance ICM. The District could provide input on “future needs” for these other systems, with the other regions reciprocating by sharing information regarding their investments with District 3.

It is also recommended to continue to support and invest in performance monitoring and data collection to understand performance of past investments. On-going performance assessments will ensure that

successes are reported to policy makers and the public. Moreover, potential shortcomings can be flagged early and addressed to prevent future issues.

The role of the Local Agencies or “Arterial Operators” should be to advance their capabilities to monitor and control flow through their signal systems, and develop “approvable” alternative signal operational timing patterns (while continuing to leverage and look for opportunities to advance the concept of ICM and infrastructure improvements). Local agency management should maintain a commitment for working with Caltrans and develop improved interagency communications or use of STARNET. All software and potential data source investments should consider including standardized data formatting and the requirements of an interface control document (ICD) to serve as a key to the data flows. Investment in mid-block detection or investments in increased detection at regular intervals and flow measurement will be helpful in collecting data to support the “existing condition” as well as performance improvements as ICM begins implementation.

The Agency Operators and Caltrans D-3 Operations personnel have begun the response planning task by developing a highway incident-based response escalation matrix presented in Figure 10.

US-50 CONNECTED CORRIDOR RESPONSE PLAN					
Response	Condition	Messaging			Signal Timing
Mild	1 lane blocked and/or estimated duration < 30 minutes	CRASH AT _____ EXPECT DELAYS			ADJUST WITHIN CYCLE (TRAFFIC RESPONSIVE)
Assertive	2 lanes blocked and/or estimated duration 30 minutes < X < 90 minutes	CRASH AT _____ REDUCED LANES	TRUCKS / BUSES STAY ON US-50		CHANGE CYCLE LENGTH
Aggressive	Single lane only and/or estimated duration 90 minutes < X < 150 minutes	CRASH AT _____ ONE LANE ONLY	TRUCKS / BUSES STAY ON US-50	PASSENGER VEHICLES EXIT	CHANGE PHASE SEQUENCE
Most Aggressive	All lanes blocked and/or estimated duration > 150 minutes	CRASH AT _____ LANES BLOCKED	PASSENGER VEHICLES EXIT		SKIP / OMIT PHASE

Figure 10: Response Escalation Matrix

Similar efforts to those illustrated in Figure 10; however, the initial selection of performance criterion based on CT D-3 incident reporting parameters, has led to a positive discussion amongst the partner agencies. The Partners are beginning work on developing similar response plans for crashes along the arterial roadway network.

Transit operators should continue to invest in data collection (Automatic vehicle location [AVL] and real-time arrival estimation) and remain committed to sharing the data in a standardized format. All new software and system investments should consider including standardized data sharing requirements and the provision of an ICD. Upgrades made to key facilities should include providing Park and Ride “space availability” information to users and other systems. Performance and on-time data collection should be gathered to help demonstrate current delay and future system reliability as ICM is implemented.



SACOG should consider including ICM technologies and methodologies as part of a Metropolitan Transportation Plan/Sustainable Communities Strategies (MTP/SCS) update. This would facilitate and help position ICM for future funding rounds. Including ICM components during the development of the Regional ITS Master Plan and its ultimate endorsement by the SACOG Board of Directors would provide vital support from the regional Metropolitan Planning Organization (MPO). Support for documentation and air quality offsets provide by ICM might be accomplished using the Regional Air Quality model run by SACOG.

4.4 Deployment Strategy and Phased Implementation

Developing a phased strategy to implement the ICM corridor will help guide the partners as the project moves forward. By implementing the ICM project in phases and by segment, the partnership will be able to demonstrate the benefits of ICM without overtaxing the funding programs across the region.

The estimated costs have been prepared in two separate phases. This allows for Phase 2 work to be augmented or adjusted as necessary as actual data of progress, additional options, and funding from Phase 1 is available. The decision to phase the work was not intended to preclude any agency that was ready and able to participate from doing so as soon as possible. If funding can be obtained or an agency can contribute earlier in the process, then that effort is encouraged. If an agency finds itself in a situation where they cannot participate in the first phase of the project along their respective segment, then those activities can be moved to the second phase. The purpose of the phasing is to provide flexibility and allow for the concept to move to production as rapidly as possible.

Many aspects of work remain before field element implementation or software development can commence. Finalizing the segment boundaries for the first phase of deployment is the first task for the working group to address. The group will also need to obtain or redirect funding sources for necessary new developmental work.

Institutional barriers will require attention, with IT policies typically being some of the most difficult issues to tackle. Documenting the IT relationships desired and the types of information to be exchanged across network interfaces should be some of the first work undertaken. Continued work on the Systems Engineering aspects of planning will remain in the forefront and should be completed without a large time or resource investment by the partners. This task should be part of the initial design, engineering, and support task.

4.5 Implementation Schedule (construction and implementation dates)

Establishing an implementation schedule can be very constructive to keep the ICM project moving forward. The schedule should include meetings, delivery dates, major milestone events, procurement deadlines, and funding round information. The dates for these tasks can be flexible. The more detail added improves the likelihood of a positive outcome and on-time delivery. As not all dates are known at time of scheduling, the project lead should monitor all sources for new release deadlines associated with funding rounds.

A draft two-year list of objectives is presented below, broken down by anticipated quarter, to serve as a baseline guide for a more detailed development schedule.

US 50 ICM Implementation Plan - Recommended Segment 2 Deployment Schedule							
2016		2017		2018		2019	
1st half	2nd half	1st half	2nd half	1st half	2nd half	1st half	2nd half
Implementation Plan							
	Communications (letters of support, charter)						
		ConOps & System Requirements, Validation Plan, SEMP					
				Detailed Design			
			Corridor Preparation (infrastructure & system upgrades)				
				Arterial Management System (AMS)			
				ICM Component Development & System Integration			
					System Validation & Acceptance		
						System Training and Begin Operations	
				System Evaluation			

Figure 11: Implementation Schedule (Construction and Implementation Dates)

2017

- During the first half of 2017, the partnership should begin working on a Charter, continue to secure letters of support, and aggressively pursue funding. The formal implementation group should be established, and they should meet to present their lists of potential partner representatives. The lead agency (Caltrans District 3 or SACOG) should be selected and announced. Caltrans and SACOG should work together to monitor and pursue local, State, and Federal aid funding opportunities.
- The Regional Funding Round activities should be announced during the fall and the representative from SACOG should be able to provide insight on deadline dates and background on the types of information likely to be incorporated into the application. An estimate of anticipated funds often accompanies the early information.
- The Charter should be prepared for approval and endorsement by the various active implementation participants or all agencies' leadership if possible. The Charter should begin circulation early since it could prove useful in the fall funding round application.
- Caltrans District 3 should continue to work with the Caltrans HQ Division of Traffic Operations for guidance and HQ Information Technology to gain a better understanding of the controlling policies. The District should begin to formulate mitigation strategies if conflicts are found between the implementation vision and policies. All written policies should be shared with the larger secondary group (corridor-wide partnership).
- All partner agencies should follow similar research activities associated with their own policies and to identify any potential future conflicts with those policies. Any relevant policies should be shared with the group.
- The implementation group, identified in Section 4.1, should develop funding application strategies, including securing some level of local match funding, however small, from each partner agency and securing council and board resolutions on project partnership and commitment. These often are weighed heavily in consideration of grant funding awards.
- The implementation group should then begin the system engineering documents starting with the Concept of Operations and System Requirements, followed by the Validation Plan, Verification Plan, Systems Engineering Management Plan (SEMP), and the High Level Design.



- The implementation group should begin developing conditions scenarios and response plan strategies, including acceptable alternative signal timing plan changes from minimal to aggressive levels.

2018

- Caltrans should report on the progress made on new corridor ramp metering software and interconnection with local agency ramp terminus signals. It should include details on requirements for use of standards (TMDD), as described in Section 3.2 and Appendix 5.4, and ability to accept command and control from other software for ramp meter plans.
- The implementation group can then begin development of the detailed system design.
- The implementation group can also begin development of the various ICM components starting with the Arterial Management System to integrate the existing local systems to the ICM.
- The implementation group can also begin procurement of central control system and integration software based on leveraging other State ICM deployments such as the I-210 Connected Corridors, consulting with Caltrans HQ.
- The implementation group can then move to construct the necessary arterial performance monitoring system elements (e.g., Bluetooth, detectors, cameras, etc.) and the necessary arterial corridor trail-blazer signing.
- By the end of 2018, system integration should be started.

2019

- As the system is being constructed and implemented, system validation and acceptance testing and approval should be performed.
- Once the system is approved, training and development of organization staff should be conducted.
- By late 2019, system should be ready to operate.

This deployment schedule is accelerated and assertive when compared to most other ICM deployments to date. The US 50 ICM implementation should expect to take advantage of lessons learned to-date from the other ICM efforts in California (e.g., I-210 Connected Corridors, I-110 DCCM). Various system components from those efforts will likely be transferable to the US 50 ICM and can accelerate the implementation. It is also assumed that funding can be secured according to schedule and significant cost savings will also be available with the transferrable system components.

4.6 Procurement Strategy

Caltrans and its partners should work towards securing funding for the initial segment and phase work. Spending resources early in the first phase of the process to finalize the Concept of Operations and User Requirements will result in long term dividends. Not only is the use of System Engineering required for technology projects of this nature by the FHWA, but it has been shown many times to save developmental funds.

Though additional effort is required to document the needs of the participants, the dividends are returned by reducing “risk” for the developer who will be able to anticipate participant requirements. There will also need to be excellent communication and education of the requirements to the software developers who often are not well-versed or knowledgeable regarding traffic operations. As discussed



throughout this Plan, the partners should seek information from all available sources to support this effort, and the recently completed work on other ICM deployments should be very helpful in streamlining this process. Caltrans and the partnership should continue to use the known methods for securing funding and possibly seek special funding for “central control and integration”. The new Federal Administration that took office in January 2017 has indicated that infrastructure investments will be a high priority. ICM is likely a project that “qualifies” for this type of funding, and the District and Local agencies should continue to monitor the progress of funding opportunities and be prepared to apply if any grant funded programs are announced.

The following is a cost breakdown by project. These estimates have been prepared based on the current segment limits and features included in each phase. The segments and features could be modified by the partnership and a detailed cost breakdown has been provided in Appendix A, Section 5.1. The total cost for all phases is under \$33.5 million.

ICM Project Cost Estimate Summary

Segment 2 (Project #1)	\$20,692,000
Expand to Segments 1 & 3 (Project #2)	\$6,422,500
Add enhancements for full buildout (Project #3)	<u>\$7,950,000</u>
	\$35,064,500

Project #1 is the initial project and would provide the necessary infrastructure improvements in the City of Sacramento, Sacramento County, Rancho Cordova and Folsom as part of the Arterial Management System (AMS). This system will focus on the Folsom Blvd corridor from Howe/Power Inn to Folsom Blvd.

The largest portion of this project is to begin the effort to develop and integrate the central control system, update the ramp meters and install the fiber optic conduits and cabling. One million dollars has been estimated to cover the design, engineering and support costs for this phase, which totals \$20.69 million dollars.

Project #1

Segment 2 desired essential elements

Segment 2 AMS Integration (Phase 1)	\$16,642,000
Central Control Systems & Integration (Phase 1)	\$3,050,000
Design, Engineering and Support (Phase 1)	<u>\$1,000,000</u>
Subtotal:	\$20,692,000

Project #2 would add the field elements in West Sacramento, City of Sacramento and El Dorado County necessary for the first phases of work. These elements would be directly integrated into the central control system. Depending on the timeframe between technologies, some minor modification may be required but the costs should be very minimal and the initial effort should take the potential of new technologies into account when designing and building the software in Project #1. The total estimated cost for this project is \$6.42 million dollars.

Project #2

Expand to Segments 1 & 3



Segment 1 AMS Integration (Phase 1)	\$3,452,500
Segment 3 AMS Integration (Phase 1)	<u>\$2,970,000</u>
Subtotal:	\$6,422,500

Project #3 would add the enhancements of all segments from Phase 2 and include the necessary work for integration into the central control software. An additional \$1 million dollars is estimated for the design, engineering, and support costs associated with this phase. After Project #3, the system will be fully operational and the benefits should be measurable from within the system itself through performance gains in the transportation network.

Project #3

Add enhancements for full buildout of the system

Segment 1 AMS Integration – enhanced (Phase 2)	\$1,760,000
Segment 2 AMS Integration – enhanced (Phase 2)	\$600,000
Segment 3 AMS Integration – enhanced (Phase 2)	\$4,040,000
Central Control Systems & Integration – enhanced (Phase 2)	\$550,000
Design, Engineering and Support (Phase 2)	<u>\$1,000,000</u>
Subtotal:	\$7,950,000

To take full advantage of the benefits from the ICM deployment, some additional features could be considered in the future. Across the State, other areas have, or are in the process of completing this type of work either in advance of or in conjunction with the implementation of ICM. A High Occupancy Toll (HOT) lane study was completed a few years ago in Sacramento and it was determined to be not cost effective at that time.

Caltrans or SACOG might consider reviewing that report to determine if conditions have changed or travel patterns developed that might support a High Occupancy Vehicle (HOV) lane to HOT lane conversion along US 50. Cost estimates for this work have been provided based on per-mile costs for similar segments recently constructed in the San Francisco area.

Most of the US 50 ICM corridor does have ramp metering installed. However, some of the earlier and more complex ramp meter locations do not have HOV bypass lanes. While not critical for the ICM corridor HOV ramp meter, bypass lanes can positively affect the number of HOV vehicles in the mix. The number of occupants required for HOV status could be reviewed to determine if 3-plus might provide additional incentives and decrease the number of vehicles along the corridor.

The local agencies may determine as part of the implementation work that they have bottlenecks on the arterial network that could benefit from increasing the capacity along those routes when used as alternates. While increasing capacity on the arterial network is not necessarily desired, the benefit for a minor investment could be regionally beneficial.

Other capital improvements for consideration

• Conversion of HOV lane to HOT lane (Segment 2)	\$38,000,000
• Conversion of HOV lane to HOT lane (Segment 3)	\$14,000,000
• Ramp widening and improvements	TBD in Design

- Arterial widening and improvements

TBD in Design

4.7 Potential Funding Sources

The partnership should explore and apply for all sources of potential funding and not limit itself to only one or two programs. Through exposure resulting from the funding application process, the ICM concept will gain a wider knowledge base. If funds are awarded from multiple applications for the same phase of the ICM project, it might be possible to accelerate a future phase to take advantage of the award. Agencies should continue to leverage all investment including those projects completed through the encroachment permit process.

Agencies continue to have their operational budgets reduced and increasingly must demonstrate effectiveness and efficiency in managing public funding while meeting the needs of their constituent base. As grants become increasingly difficult to obtain, the ability to show how well a project uses past investments resonates with funding agencies. All funding applications should include a statement illustrating how the ICM project or phase is maximizing all previous investments. A direct citing of projects that the ICM project is coordinating with should be included whether or not the previous project is completed or not. If a compounding of benefits is anticipated or can be verified through the past performance indicators, it also should be included as part of the application.

All agencies should take advantage of encroachment permit projects to increase investment in areas of need. All encroachment permit applications should be reviewed for potential inclusion of ICM components along the appropriate corridors. If inclusion of ICM components is not possible through the permit process, consideration should be given to avoid future conflicts due to the improvements and potential conflicts with ICM components.

A review of available funding programs has been completed and a review of each program, award agency, and website links is provided for each.

- Local Agency Transportation funds – This program is mostly oversubscribed; however, depending on the specific agency providing the funds, some of the fund may be earmarked for transportation congestion mitigation. These fund sources are very flexible in their use and are eligible for use as matching funds for all other sources of funding.
 - o Builder Development Fees / Major Street Construction Fund – Called different names depending on jurisdiction, funds are secured through valuations of new building construction.
 - o Gas Tax Funds – Administered by State Board of Equalization and distributed by State Controller.
 - o Measure A funds – These funds begin at City/Regional level and are administered by the Sacramento Transportation Authority (STA). Typical awards can be secured either directly or through the Sacramento Area Council of Governments (SACOG) Regional Funding Round process.
 - o http://www.sacta.org/p_measurea.html
- SHOPP (State Highway Operation and Protection Program) – This is a program administered by Caltrans for use on State-only routes. The program can provide up to 100% project funding.

These funds are eligible for use as matching funds to Federal Aid and could be used as part of a multi-agency project.

- o <http://www.dot.ca.gov/hq/transprog/shopp.htm>
- SAFE (Service Authority for Freeways and Expressways) – SACOG or the Capitol Valley Service Authority for Freeways and Expressways (CVR-SAFE) administer these funds, but the call for projects is likely to be administered separately from the Regional Funding Round process. Funding should be available to Sacramento and El Dorado County. For use on Freeways for driver aid projects, including congestion reduction, traveler information and re-routing improvements for which the nexus with ICM would be easily identified. The CVR-SAFE funds can provide up to 100% project funding, but the program is very limited in available funding. These funds would be eligible for use as matching funds for all sources of Grant funding.
 - o http://www.sacog.org/sites/main/files/file-attachments/5-cvrs-safe_grant_funding_program_6-2016.pdf
- HSIP (Highway Safety Improvement Program) – This is considered a core Federal-Aid program, with specific goals and objectives that projects must provide to be eligible for funding. The ICM Project as planned supports the safety goals and objectives of:
 - o Intersection Safety
 - o Roadway Safety Data and Analysis
 - o Pedestrian and Bicycle Safety

Typical funding of 90% of project costs (\$100,000 to \$10 million) apportionment dependent. The calls for projects are on one or two year cycles typically. This program is administered by Caltrans: Office of Local Assistance

- o <http://dot.ca.gov/hq/LocalPrograms/hsip.html> or <http://safety.fhwa.dot.gov/hsip/>
- NHPP (National Highway Performance Program) – The federal FAST Act authorization was a funding source. This program is currently administered by Caltrans, which may transfer up to 50% of NHPP funds, made available each fiscal year, to the National Highway Freight Program, Surface Transportation Block Grant Program, Transportation Alternatives, Highway Safety Improvement Program, and Congestion Mitigation and Air Quality Improvement Program. Caltrans appears to be focusing funds towards “bridges and their repair” per their website.

Typical funding of 80% of project costs, but over matching of ‘Local Funds’ could make a project appear more competitive.

Federal Guidance reads: NHPP funds may be obligated only for a project on an "eligible facility"; that is, a project, part of a program of projects, or an eligible activity supporting progress toward the achievement of national performance goals for improving infrastructure condition, safety, congestion reduction, system reliability, or freight movement on the NHS. Projects must be identified in the Statewide Transportation Improvement Program (STIP)/Transportation Improvement Program (TIP) and be consistent with the Long-Range Statewide Transportation Plan and the Metropolitan Transportation Plan(s).



ICM Projects fall under the federal eligible activity of “j. Capital and operating costs for traffic and traveler information monitoring, management, and control facilities and programs. The project or activity must be associated with an NHS facility.” Most routes utilized on the US 50 ICM proposed project are located on the NHS.

- o <http://www.fhwa.dot.gov/specialfunding/nhnp/>
- SACOG Regional Funding Round (Sacramento Area Council of Governments) – Regional Funding Round) Process continues to evolve, but a project should be listed in a Regional Planning document to be competitive. The US-50 ICM should be included in the pending Regional ITS Master Plan update to satisfy this potential requirement.

The Funding program source is determined by SACOG as part of the award process. This is a very competitive program that is highly oversubscribed. Potential funding programs include:

- o Congestion Mitigation and Air Quality (CMAQ)
- o Regional Surface Transportation Program (RSTP)
- o State Transportation Improvement Program (STIP)
- o Active Transportation Program (ATP) funds

Typical funding level is a maximum of 80%, requesting less than 80% funding can make a project more competitive (over match). In the past, Multi Agency project applications have proven to be very competitive. Letters of support and coordination can be very advantageous and typically have not included support from the larger employers or tax/revenue generators.

Project inclusion or being a component project directly working towards a regional project/goal can be advantageous. The regional goals of greenhouse gas reduction, congestion mitigation, and transportation coordination encouragement should be highlighted in this application.

- o <http://www.sacog.org/regional-funding-programs>

4.8 Operations and Maintenance (O&M)

As with any project, operations and maintenance (O&M) costs involved with construction/implementation should be accounted for. For an ICM project, these include software, computers and support costs; field-based infrastructure; and the operational personnel requirements to keep approved plans up-to-date and the system running and responding properly. The method of requesting, funding, and implementing changes will all need to be planned for.

Available choices include a hosted system where the O&M costs can be paid as an annual fee and upgrades paid as they are released. The other more typical State-preferred option is self-ownership where software revisions are paid for as implemented and hardware is replaced periodically.

Most computer hardware systems have a life of 5-7 years and software typically has about a five-year life if not routinely upgraded or improved. Technologies will change and obsolescence should be considered if self-ownership is preferred. Depending on development costs, independent fully-customized software can be very expensive and have a relatively short life cycle. If custom software is being considered, it would be advisable to follow another region’s efforts with the expectation that upgrade costs can be split in the future among agencies.



Most of the basic field infrastructure is represented in some form within many of the partner agencies. Training on field equipment maintenance will be needed when multiple agencies use the same equipment and inventory levels increase. Maintenance of field elements for new products or by agencies that have not previously operated specific elements can also require additional training.

Ongoing staffing levels and personnel costs for the Operations Branches/Departments have historically presented a challenge across the region. Personnel will be required to keep the system running and responding properly. The system will require monitoring and potentially new pre-approved timing plans developed.

However, deploying more automated systems as part of the day-to-day running of the ICM package may reduce the daily staff workload. This would allow operators to focus on more pressing aspects of their jobs; however, it would not remove the need for monitoring and new development work. As with all technology based projects, it is likely that the initial workload will be greater up front as the operators are learning the new system. The workload should decrease over time as the agency advances along the learning-curve; however, the workload will never completely disappear. The total amount of time that personnel in the individual agencies spend on incident management depends on the quality of the work produced during the software development process. Personnel will be required to operate the systems for incidents outside of the ICM corridor as those incidents would not be addressed as part of this implementation.

Another use of operational and planning personnel time will be associated with the change control process. Very little is known now about how or when the change control process will be implemented, as it will be developed in association with the software design. Initiating change and securing approvals for a multi-agency system can be challenging as a desired change on one agency's behalf could adversely affect another agency's operational strategies. The change control process should not be overly complicated and most major systems will never be changed once developed. Building a process to control necessary change will take some effort, but ultimately will not require large amounts of staff time to administer.



5 Appendix

5.1 Appendix A: Project Element / Cost Estimates by Segment and Phase

SEGMENT 1 - Downtown Urban Core (I-80 to Hornet Drive - Howe/Power Inn)

	Unit(s)	Unit Cost	Phase 1			Phase 2	
			Cost	Subtotal		Cost	Subtotal
City of West Sacramento (Segment 1)							
System Detection (ICM)	8	\$3,000	\$24,000	\$758,000		\$690,000	
Bluetooth Readers (ICM)	8	\$8,000	\$64,000				
Traveler Information Signs - 50% Phase 1, 50% Phase 2	18	\$10,000	\$90,000		\$90,000		
Signal Central System Upgrade	Lump Sum	\$200,000	\$200,000				
Controller Upgrades	14	\$2,500	\$35,000				
Detection Upgrades	1	\$5,000	\$5,000				
Intersection Video Surveillance	2	\$50,000	\$100,000				
Signal Communication	15	\$10,000	\$150,000				
Turning Movement & Bike Detection	18	\$5,000	\$90,000				
Stop Sign to Signal Upgrade - Phase 2	2	\$300,000	\$0		\$600,000		
City of Sacramento (Segment 1, West of Hornet Drive - Howe/Power Inn)							
System Detection (ICM)	17	\$3,000	\$51,000	\$1,577,000		\$1,070,000	
Bluetooth Readers (ICM)	17	\$8,000	\$136,000				
Traveler Information Signs - 50% Phase 1, 50% Phase 2	34	\$10,000	\$170,000		\$170,000		
Signal Central System Upgrade	Lump Sum	\$0	\$0				
Controller Upgrades	70	\$2,500	\$175,000				
Detection Upgrades	82	\$5,000	\$410,000				
Intersection Video Surveillance	1	\$50,000	\$50,000				
Signal Communication	39	\$10,000	\$390,000				
Turning Movement & Bike Detection	39	\$5,000	\$195,000				
Stop Sign to Signal Upgrade - Phase 2	3	\$300,000	\$0		\$900,000		
Caltrans D-3							
Signal Controller Upgrade (Segment 1)	7	\$2,500	\$17,500	\$1,117,500		\$0	
Controller Cabinet and Communication Upgrades	5	\$50,000	\$250,000				
HOV Ramp Metering Modifications	6	\$100,000	\$600,000				
Intersection Video Surveillance (Segment 1)	5	\$50,000	\$250,000				
			\$3,452,500		\$1,760,000		



SEGMENT 2 - Suburban Sacramento County (Hornet Drive - Howe/Power Inn to Folsom Blvd. - Iron Point LRT Station)

	Unit(s)	Unit Cost	Phase 1		Phase 2	
			Cost	Subtotal	Cost	Subtotal
City of Sacramento (Segment 2, East from Hornet Drive - Howe/Power Inn)						
System Detection (ICM)	5	\$3,000	\$15,000	\$2,740,000		\$0
Bluetooth Readers (ICM)	5	\$8,000	\$40,000			
Traveler Information Signs (VMS) - 100% Phase 1	8	\$10,000	\$80,000			
Traveler Information Signs (Static) - 100% Phase 1	2	\$5,000	\$10,000			
Signal Central System Upgrade	Lump Sum	\$200,000	\$200,000			
Controller and Cabinet Upgrades	10	\$50,000	\$500,000			
Detection Upgrades	10	\$5,000	\$50,000			
Intersection Video Surveillance	9	\$50,000	\$450,000			
Signal Communication	3	\$10,000	\$30,000			
Turning Movement & Bike Detection	3	\$5,000	\$15,000			
Fiber conduit (linear foot)	9,000	\$100	\$900,000			
Fiber cabling (linear foot)	15,000	\$10	\$150,000			
New signalized intersection	1	\$300,000	\$300,000			
Stop Sign to Signal Upgrade - Phase 2	0	\$300,000	\$0			
County of Sacramento (Segment 2)						
System Detection (ICM)	6	\$3,000	\$18,000	\$3,736,000		\$600,000
Bluetooth Readers (ICM)	6	\$8,000	\$48,000			
Traveler Information Signs (VMS) - 100% Phase 1	14	\$10,000	\$140,000			
Traveler Information Signs (Static) - 100% Phase 1	6	\$5,000	\$30,000			
Signal Central System Upgrade	Lump Sum	\$200,000	\$200,000			
Controller and Cabinet Upgrades	8	\$50,000	\$400,000			
Detection Upgrades	8	\$5,000	\$40,000			
Intersection Video Surveillance	11	\$50,000	\$550,000			
Signal Communication	20	\$10,000	\$200,000			
Turning Movement & Bike Detection	4	\$5,000	\$20,000			
Fiber conduit (linear foot)	19,000	\$100	\$1,900,000			
Fiber cabling (linear foot)	19,000	\$10	\$190,000			
New signalized intersection	0	\$300,000	\$0			
Stop Sign to Signal Upgrade - Phase 2	2	\$300,000	\$0			
City of Rancho Cordova (Segment 2)						
System Detection (ICM)	6	\$3,000	\$18,000	\$591,000		\$0
Bluetooth Readers (ICM)	6	\$8,000	\$48,000			
Traveler Information Signs (VMS) - 100% Phase 1	15	\$10,000	\$150,000			
Traveler Information Signs (Static) - 100% Phase 1	6	\$5,000	\$30,000			
Signal Central System Upgrade	Lump Sum	\$200,000	\$200,000			
Controller Upgrades	0	\$2,500	\$0			
Detection Upgrades	15	\$5,000	\$75,000			
Intersection Video Surveillance	1	\$50,000	\$50,000			
Signal Communication	0	\$10,000	\$0			
Turning Movement & Bike Detection	4	\$5,000	\$20,000			
Stop Sign to Signal Upgrade - Phase 2	0	\$300,000	\$0			
City of Folsom (Segment 2, West to Folsom Blvd. - Iron Point LRT Station)						
System Detection (ICM)	2	\$3,000	\$6,000	\$908,000		\$0
Bluetooth Readers (ICM)	2	\$8,000	\$16,000			
Traveler Information Signs (VMS) - 100% Phase 1	2	\$10,000	\$20,000			
Traveler Information Signs (Static) - 100% Phase 1	2	\$5,000	\$10,000			
Signal Central System Upgrade	Lump Sum	\$200,000	\$200,000			
Controller and Cabinet Upgrades	3	\$50,000	\$150,000			
Detection Upgrades	0	\$5,000	\$0			
Intersection Video Surveillance	3	\$50,000	\$150,000			
Signal Communication	0	\$10,000	\$0			
Turning Movement & Bike Detection	3	\$5,000	\$15,000			
Fiber conduit (linear foot)	3,100	\$100	\$310,000			
Fiber cabling (linear foot)	3,100	\$10	\$31,000			
Stop Sign to Signal Upgrade - Phase 2	0	\$300,000	\$0			



SEGMENT 2 - Suburban Sacramento County (Hornet Drive - Howe/Power Inn to Folsom Blvd. - Iron Point LRT Station) continued

	Unit(s)	Unit Cost	Phase 1			Phase 2	
			Cost	Subtotal		Cost	Subtotal
Caltrans D-3							
System Detection (ICM)	9	\$3,000	\$27,000	\$8,667,000		\$0	
Bluetooth Readers (ICM)	9	\$8,000	\$72,000				
Traveler Information Signs (VMS) - 100% Phase 1	9	\$10,000	\$90,000				
Traveler Information Signs (Static) - 100% Phase 1	2	\$5,000	\$10,000				
Fiber conduit (linear foot)	52,800	\$100	\$5,280,000				
Fiber cabling (linear foot)	52,800	\$10	\$528,000				
Signal Controller Upgrade (Segment 2)	0	\$2,500	\$0				
Signal Cabinet and Communication Upgrades	1	\$50,000	\$50,000				
Signal Detection Upgrades	2	\$5,000	\$10,000				
HOV Ramp Metering Modifications	21	\$100,000	\$2,100,000				
Intersection Video Surveillance (Segment 2)	10	\$50,000	\$500,000				
			\$16,642,000			\$600,000	

SEGMENT 3 - Suburban Sacramento County & El Dorado County (Folsom Blvd. - Iron Point LRT Station to Cameron Park Drive)

	Unit(s)	Unit Cost	Phase 1			Phase 2	
			Cost	Subtotal		Cost	Subtotal
City of Folsom (Segment 3, East from Folsom Blvd. - Iron Point LRT Station)							
System Detection (ICM)	7	\$3,000	\$21,000	\$337,000		\$340,000	
Bluetooth Readers (ICM)	7	\$8,000	\$56,000				
Traveler Information Signs - 50% Phase 1, 50% Phase 2	8	\$10,000	\$40,000		\$40,000		
Signal Central System Upgrade	Lump Sum	\$0	\$0				
Controller Upgrades	12	\$2,500	\$30,000				
Detection Upgrades	0	\$5,000	\$0				
Intersection Video Surveillance	3	\$50,000	\$150,000				
Signal Communication	0	\$10,000	\$0				
Turning Movement & Bike Detection	8	\$5,000	\$40,000				
Stop Sign to Signal Upgrade - Phase 2	1	\$300,000	\$0		\$300,000		
El Dorado County (Segment 3)							
System Detection (ICM)	10	\$5,000	\$50,000	\$1,218,000		\$3,700,000	
Bluetooth Readers (ICM)	10	\$8,000	\$80,000				
Traveler Information Signs - 50% Phase 1, 50% Phase 2	20	\$10,000	\$100,000		\$100,000		
Signal Central System Upgrade	Lump Sum	\$200,000	\$200,000				
Controller Upgrades	13	\$6,000	\$78,000				
Detection Upgrades	0	\$5,000	\$0				
Intersection Video Surveillance	2	\$50,000	\$100,000				
Signal Communication	46	\$10,000	\$460,000				
Turning Movement & Bike Detection	20	\$7,500	\$150,000				
Stop Sign to Signal Upgrade - Phase 2	9	\$400,000	\$0		\$3,600,000		
Caltrans D-3							
Signal Controller Upgrade (Segment 3)	6	\$2,500	\$15,000	\$1,415,000		\$0	
Signal Cabinet and Communication Upgrades	6	\$50,000	\$300,000				
HOV Ramp Metering Modifications	8	\$100,000	\$800,000				
Intersection Video Surveillance (Segment 3)	6	\$50,000	\$300,000				
			\$2,970,000			\$4,040,000	



Central Control Systems & Integration

	Units	Unit Cost	Phase 1			Phase 2	
			Cost	Sub Total		Cost	Sub Total
Transit Integration							
Sacramento Regional Transit - Clever Devices (AVL - interface)	Lump Sum	\$150,000	\$0	\$100,000		\$150,000	\$250,000
Yolo Bus Interface - Mentor Engineering (AVL - interface)	Lump Sum	\$100,000	\$100,000				
El Dorado Transit - Route Shout (AVL Interface)	Lump Sum	\$100,000	\$0			\$100,000	
Parking Integration							
Sacramento City Parking Availability (interface)	Lump Sum	\$100,000	\$0	\$600,000		\$100,000	\$300,000
Parking Management System & Interface (6 - Phase 1, 2- Phase 2)	8	\$100,000	\$600,000			\$200,000	
Active Transportation Integration							
Bike Trail Volume Counters (2 mile spacing ARBT)	10	\$20,000	\$200,000	\$400,000			\$0
Multimodal Hub, Bike/Ped Integration	Lump Sum	\$200,000	\$200,000				
Caltrans D-3							
Signal Central System Upgrade	Lump Sum	\$200,000	\$200,000	\$900,000			\$0
Ramp Meter Central System Upgrade (if ICM integrated w/ STARNET)	Lump Sum	\$200,000	\$200,000				
Dynamic Corridor Ramp metering	Lump Sum	\$500,000	\$500,000				
ICM System Integration							
Communication Upgrades for Integration	Lump Sum	\$100,000	\$100,000	\$1,050,000			\$0
CCTV Sharing and Control Interface	Lump Sum	\$150,000	\$150,000				
ICM System - (DSS, Data Hub, etc.)	Lump Sum	\$500,000	\$500,000				
Response plans & Signal timing development	Lump Sum	\$300,000	\$300,000				
				\$3,050,000		\$550,000	

Engineering and Support

	Unit(s)	Unit Cost	Phase 1			Phase 2	
			Cost	Subtotal		Cost	Subtotal
System Engineering, Design & Construction Support							
Design, Engineering, Construction Management	Lump Sum	\$1,000,000	\$1,000,000	\$1,000,000		\$1,000,000	\$1,000,000
			\$1,000,000			\$1,000,000	
		Subtotal Phase 1:		\$27,114,500			
					Subtotal Phase 2:		\$7,950,000

5.2 Appendix B: Benefit/Cost Estimates

There have been many recent studies that have shown real benefits achieved with: advanced corridor-wide ramp metering system and operations, advanced central control traffic signal operations, advanced proactive incident management operations, advanced corridor traveler information, and ICM deployment. The following are few examples of the study results:

- Studies have shown that corridor-wide advanced ramp metering systems (such as the coordinated bottleneck algorithm) can increase mainline traffic flows by over 60%, reduce travel times by over 45%, and reduce collisions by nearly 40%, while maintaining less than 3 minutes' delay at the ramps. (Source: R. Bertini, 2006)
- Studies have shown that corridor-wide advanced signal system with signal coordination can reduce delays by 14% to 44% and travel times by 8% to 41%. (Source: IDAS Database)
- Studies have shown that corridor-wide adaptive signal system can reduce delay over the coordinated signal system by 34% to 76%, reduce travel times by 15% to 55%, stops by 30% to 95%, collisions by 17% to 30%, and fuel and emissions by 20% to 30%. (Source: E. Basic, 2002; R. Chandra, 2012)
- Studies have shown that corridor-wide advanced incident management programs can reduce queues by 50%, clearance times by 11% to 36%, travel times by up to 25%, reduce collisions by up to 50%, reduce delays by 10% to 45%, and increase traffic throughput by 8% to 22%. (Source: RITA, 2011; Cisco Systems, 2003)
- Studies have shown that enhanced traveler information system results in benefit to cost ratio of 16:1 to 25:1 and modal shift from car to transit of up to 4%, nearly 8% when travel time savings were greater than 20 minutes. Studies have also shown that motorist who select better routes can reduce their carbon footprint by 20% during their daily commutes. Studies have also shown that customer satisfaction with regional 511 deployment range from 68% to 92%. (Source: RITA, 2011)
- Studies have shown that ICM deployment with arterial signal integration can result in 246,000 annual person-hours travel time savings, over 10% improvement in travel time reliability, over 300,000 gallons of fuel saved annually, and over 3,000 tons of emissions saved annually, (Source: V. Alexiadis, 2011)

The US 50 ICM deployment will incorporate these elements along the US 50 corridor. The I-15 ICM in San Diego is said to be yielding 10% to 15% mobility performance benefits. With the added advanced features in the US 50 ICM deployment proposed, additional benefits are expected from the wider coordination anticipated between the partners.

Per the U.S. Department of Transportation¹, simulation models indicate benefit-to-cost ratios for combined ICM strategies can range from 7:1 to 25:1. Figure 12 illustrates benefit-to-cost ratios of different ICM systems based on various analysis, modeling and simulation (AMS) studies. Based on these results, it is anticipated that the US 50 ICM combined strategies deployment could yield at least 10:1 benefit-to-cost ratio.

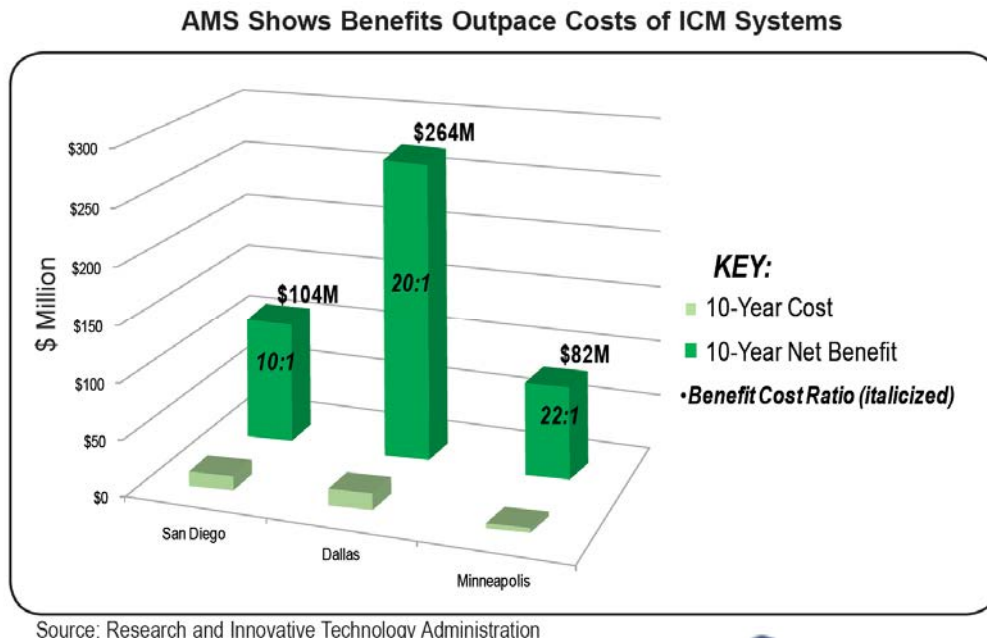


Figure 12: ICM System Benefit/Cost Ratios



5.3 Appendix C: Project Development Participants

Caltrans

Agency	Name	E-Mail	Phone
D3 Traffic Operations	Andrew Brandt	andrew.brandt@dot.ca.gov	530-741-4318
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D3 Traffic Operations	Jim Graham	jim.graham@dot.ca.gov	916-372-8522
D3 Planning	Sue Takhar	sukhvinder.takhar@dot.ca.gov	530-741-4564
D3 RTMC (electrical)	Dean Campbell	dean.campbell@dot.ca.gov	916-859-7960
D3 Traffic Ops (signals)	Steve Block	Steve.block@dot.ca.gov	530-634-7619
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D3 RTMC (IM)	Brian Alconcel	brian.alconcel@dot.ca.gov	916-859-7979
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D3 Planning	Jeff Morneau	jeffrey.morneau@dot.ca.gov	916-274-0638

Local/Regional/Federal Agencies

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County of Sacramento	Reza Moghissi	moghissir@SacCounty.NET	
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City of Folsom	Mark Rackovan	mrackovan@folsom.ca.us	916-351-3370
City of Folsom	Gary Mitchell	gmitchell@folsom.ca.us	
EDCTC	Woody Deloria	wdeloria@edctc.org	530-642-5263
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FHWA	Steve Pyburn	steve.pyburn@dot.gov	916-498-5057



5.4 Appendix D: Traffic Management Data Dictionary (TMDD) v3.03d Volume 1

A concept of operations describes the ways a proposed system will be used from the users' perspective. The concept of operations is one of the first stages of the systems engineering process. It is also typically used on a project to ensure that the system developers understand the users' needs. The concept of operations also serves as the starting point for users to select those operational features that may be appropriate for a specific implementation.

For TMDD, the concept of operations identifies and documents the various operational needs (features) that transportation operations personnel may have for TMDD information to fulfill their duties. Users can become familiar with the operational features addressed by TMDD and determine whether or not a feature is appropriate for their specific implementation. If a feature is appropriate, then procurement specification should be structured to require support for the operational feature and all of the mandatory requirements related to that feature.

Scope

TMDD v3.03 is consistent with the *U.S. National ITS Architecture Version 7.0*. This section summarizes the scope of the TMDD relative to the National ITS Architecture. Section 4 of this document provides a more detailed assessment of those aspects of the National ITS Architecture covered by the standard. From a National ITS Architecture viewpoint, this standard identifies and describes the standard services that may be provided by a traffic management subsystem to other (external) center subsystems or system terminators of the National ITS Architecture. The external center subsystems may be traffic management subsystems, other center subsystems, or system terminators identified in the national ITS architecture. The external center subsystems (or terminators) may be located physically in the same building or at a remote location.

Figure 13 presents a view of the interfaces covered by the TMDD in the form of an interconnect diagram. The National ITS Architecture defines a set of information flows (called architecture flows in the National ITS Architecture description) for each interface shown in the diagram. Where the TMDD addresses all of these information flows, the interconnect is shown as a solid line on the diagram. Where the TMDD addresses only some of the information flows defined for the interface, an "*" is shown on the interconnect. The complete details of the information flows covered by the standard are given in Section 4. As shown on Figure 13 by the shaded boxes, the TMDD is meant to address the interface from a traffic management center (TMC) to another external traffic management center, but in fact a number of other interfaces are completely or partially covered. Each type of center is shown only once on the figure, but multiples of each center type exist in many cases and each of their interfaces would be addressed by the standard.

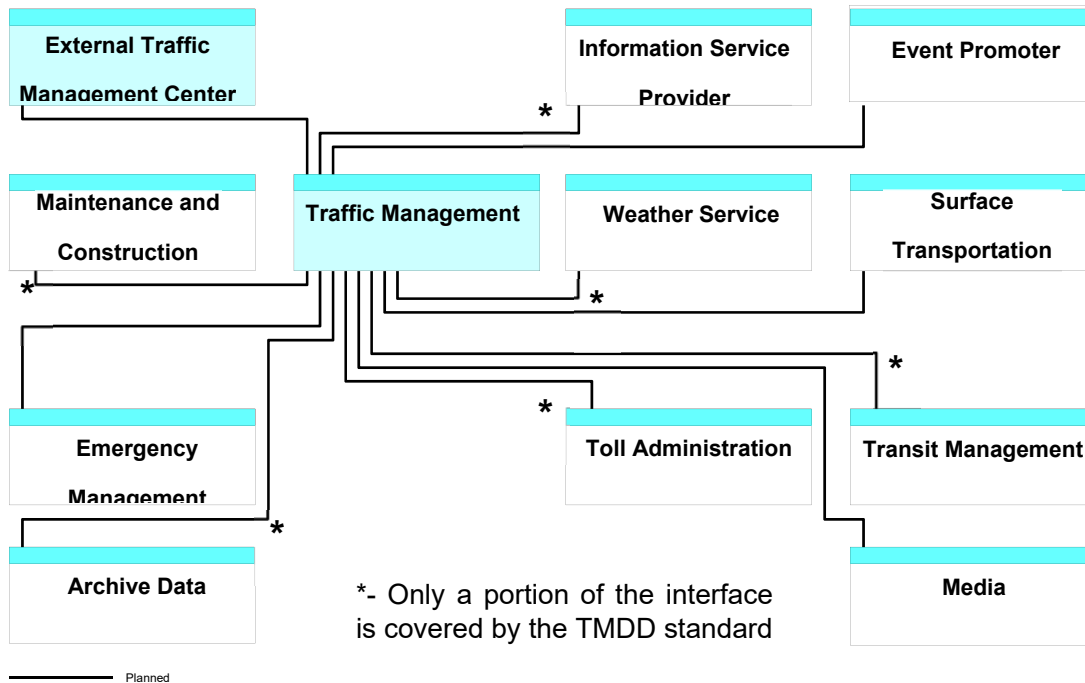


Figure 13: Traffic Management Center Interconnect Diagram

The TMDD standard defines the interface communications from an owner center (OC) to an external center (EC). Figure 14 shows a conceptual picture for the operational environment that surrounds the C2C interface covered by this standard. Where the information transfer relates to field devices (as shown in the figure), the owner center will usually be a TMC. For other types of information transfers (e.g., event information) the owner center is the center that originates (and therefore “owns”) the information.

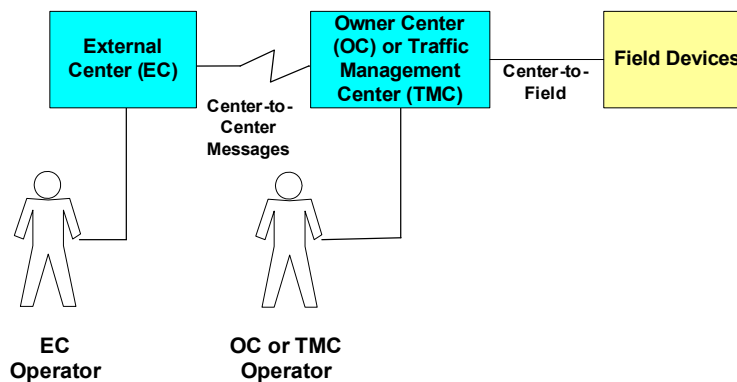


Figure 14: External TMC Communications Environment

The TMDD supports communications regarding information about centers with their owning organization and the entities managed by the center. A typical arrangement of entities is shown in Figure 13.

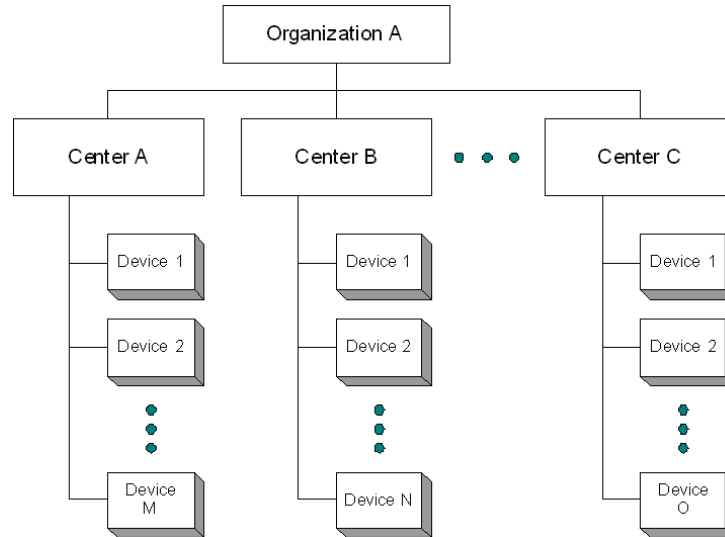


Figure 15: Typical Arrangement of Organization, Center and Devices

User Classes

Classes of users are important to C2C operations only to the extent that they expose the need to have levels of access to information or services. The user classes typically found in the Advanced Traffic Management System (ATMS) environment are Data Users and Operations Users.

Data users receive data from the TMC. They may use the data for specific purposes typically determined by an agreement with the data provider. There are many types of centers that might use data created by a TMC. These include:

- External Traffic Management
- Emergency Management
- Transit Management
- Maintenance and Construction Operations
- Archived Data Management
- Information Service Providers
- Media
- Weather Service
- Surface Transportation Weather Service

In addition, the TMC itself may be a user of data obtained from the following centers:

- Media
- Event Promoters
- External Center

Operations users may use the information from a device or service and may also contribute to it (changing timing patterns of a signal controller or posting a message to a dynamic message sign). This class of user may also share device control as provided by other centers and may use sensitive information by agreement with the information provider. This type of user is primarily an external TMC, but in some cases centers, such as Emergency Management, may share operations of devices, including operational control.



- 5.5 Appendix E: US 50 ICM Corridor Description and Existing/Planned Corridor Analysis**
- 5.6 Appendix F: US 50 ICM Deployment Alternatives and Potential Strategies**

The *US 50 ICM Corridor Description and Existing/Planned Corridor Analysis* report and the *US 50 ICM Deployment Alternatives and Potential Strategies* report are provided for reference.

**CORRIDOR DESCRIPTION AND
EXISTING AND PLANNED CORRIDOR ANALYSIS**



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1. INTRODUCTION

This document describes the United States (US) 50 transportation corridor selected by the California Department of Transportation (Caltrans) for the potential future deployment of an Integrated Corridor Management (ICM) system. It also provides a summary of the existing corridor assets for the potential future ICM deployment.

The US 50 corridor is a section of the US 50 freeway through Yolo, Sacramento, and El Dorado counties passing through the cities of West Sacramento, Sacramento, Rancho Cordova, and Folsom, and the unincorporated areas of Rosemont, El Dorado Hills, and Cameron Park. It further includes the arterials running parallel to the facility, public transit systems, park and ride facilities, parking structures and surface lots, and bicycle and pedestrian facilities.

1.1. PROJECT DEFINITION

The purpose of this project is to develop a partnership-based ICM Implementation Plan (Plan) for a portion of US 50 within the US 50 Corridor System Management Plan (CSMP) limits from Enterprise Blvd. in eastern Yolo County, through Sacramento County, to Cameron Park Blvd. in western El Dorado County. The Implementation Plan will be jointly led by Caltrans District 3 Transportation Planning and Traffic Operations staff, with substantial input by partner regional and local agencies.

The overall goal of this ICM is to achieve performance gains by enabling transportation system managers, transportation control systems, vehicles, and travelers within the corridor to work together in a highly coordinated manner. The primary objective of the US 50 ICM is to reduce congestion and improve mobility within the US 50 corridor through the coordinated management of the US 50 freeway, key surrounding arterials, supporting local transit services, and other relevant transportation components. The Plan will serve as the planning level phase of ICM on US 50. Information, findings, and consensus gained from the Plan will be heavily utilized during subsequent stages of the ICM deployment process.

The US 50 corridor is ideal for ICM deployment because it has multimodal characteristics and alternative routes and transportation modes available. The corridor has light rail and bus transit, bicycle and pedestrian facilities, parallel arterial routes, and park and ride lots. It also has high-occupancy vehicle (HOV) lanes, ramp metering, advanced signal operations, and intelligent transportation system (ITS) infrastructure for incident management and traveler information.

In addition to considering the needs of individual stakeholders, the system will benefit from the experiences and lessons learned identified through other recent successful ICM projects, both in the United States and abroad. The deployed system will be an important element of Caltrans' strategic response to the State of California's objectives of improving the performance of transportation systems and enhancing the livability, sustainability, and economic performance of the state.



Appendix E

Corridor Description and Existing and Planned Corridor Analysis

1.2. DOCUMENT CONTENT

This document provides a description of the corridor selected for the development of the US 50 ICM system. Specific elements presented in this document include:

- Corridor boundaries & jurisdictional environment
- Existing transportation systems
- Major trip generators within the corridor
- Existing transportation management assets within the corridor.



Appendix E Corridor Description and Existing and Planned Corridor Analysis

2. CORRIDOR BOUNDARIES & JURISDICTIONAL ENVIRONMENT

Figure 1 maps the cities and unincorporated county areas located within the US 50 ICM study corridor. The corridor extends from Enterprise Blvd. in eastern Yolo County, through Sacramento County, to Cameron Park Blvd. in western El Dorado County. It traverses through the Counties of Yolo, Sacramento, and El Dorado and includes the cities of West Sacramento, Sacramento, Rancho Cordova, and Folsom. Sacramento Area Council of Governments (SACOG) is the Metropolitan Planning Organization (MPO) for all three counties and the Regional Transportation Planning Authority (RTPA) for the Counties of Yolo and Sacramento. The El Dorado County Transportation Commission is the RTPA for the County of El Dorado. Affected transit agencies include YoloBus, Sacramento Regional Transit (RT), and El Dorado Transit.

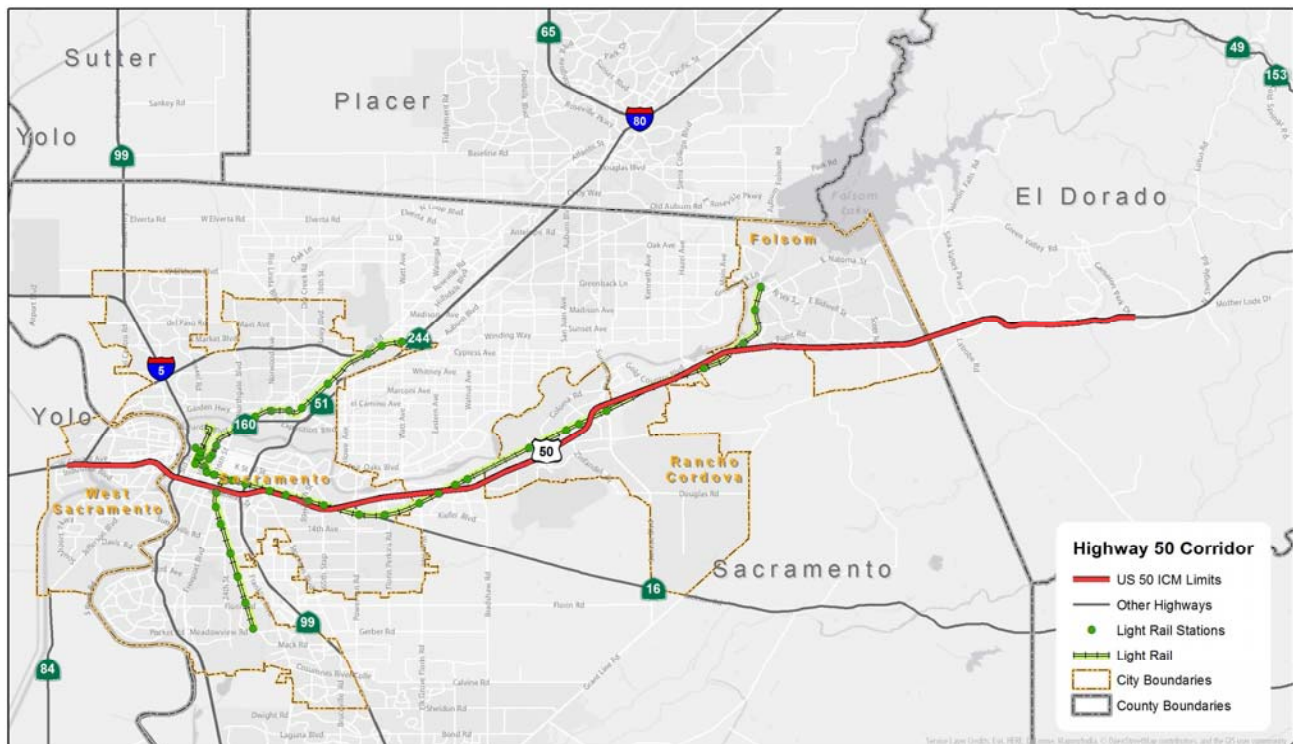


Figure 1 – US 50 ICM Corridor Study Area

The US 50 corridor is a mixture of urban communities in West Sacramento into Downtown Sacramento, and suburban communities to the east into El Dorado County. In general, median household income along US 50 gradually increases as the corridor traverses east into El Dorado County. Within the boundaries of the US 50 ICM corridor, the terrain type varies from flat to low foothills.

The US 50 corridor has several major destinations near the route, including downtown Sacramento with the new Golden 1 arena under construction at 547 L St.; California State University, Sacramento (CSUS), which lies adjacent to US 50 near the Howe Ave. interchange; and various shopping centers. It is also one of the two



Appendix E Corridor Description and Existing and Planned Corridor Analysis

primary access routes to Lake Tahoe and San Francisco Bay area. The corridor has light rail transit, local and express buses, bicycle and pedestrian facilities, and park and ride lots. There are multiple key parallel arterials in vicinity of the freeway corridor including W St., X St., P St., Q St., Broadway, Folsom Blvd., Iron Point Rd., and White Rock Rd. as examples.

Figure 2 shows the planned US 50 corridor widening and expansion along the corridor. As shown, a new carpool lane is planned through downtown Sacramento, along with various interchange modifications and auxiliary lanes.

For El Dorado County, there are multiple planned interchange improvements and auxiliary lanes included in the existing Capital Improvement Program (CIP), which are in the MTP/SCS and RTP and the proposed update to the County's CIP. Proposed I/C improvements within the study area are at El Dorado Hills Blvd/Latrobe Road I/C, Silva Valley Parkway I/C (on-going and future), Bass Lake Road I/C, Cambridge Road I/C and Cameron Park Drive I/C. There are also auxiliary lanes proposed between all of the aforementioned I/C's, and between El Dorado Hills Blvd/Latrobe Road I/C and the Empire Ranch I/C in Folsom.

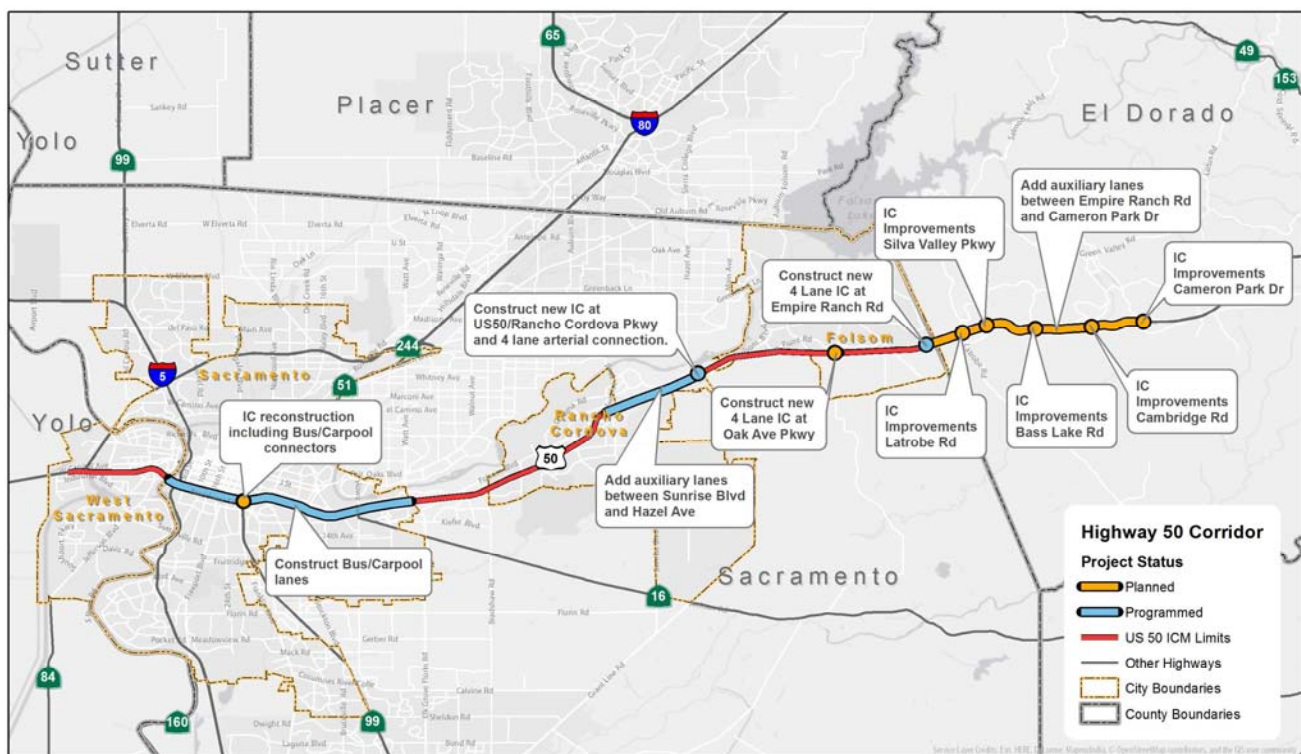


Figure 2 – US 50 Corridor Future Expansion



3. EXISTING TRANSPORTATION SYSTEMS

This section describes the various transportation systems that currently exist within the US 50 corridor. These systems include:

- US 50 freeway including segments with HOV lanes
- A network of urban arterials running predominantly parallel or perpendicular to the US 50 freeway
- Public transit systems, including a light-rail system, commuter express buses, and local bus transit services
- Park-and-ride facilities operated by various public transportation agencies and private companies
- Parking structures and surface lots supporting local retail, commercial and business activities
- A network of bike and pedestrian routes, both on local parallel streets and on the American River Trail.

3.1. FREEWAY AND HOV LANES

The proposed ICM system seeks to improve the management of a 36-mile section of the US 50 freeway. The section of interest extends from the Enterprise Blvd. / I-80 interchange in West Sacramento to Cameron Park Blvd. in El Dorado County.

As shown in **Figure 3**, the US 50 freeway typically provides four general-purpose traffic lanes on the western half of the corridor to Watt Ave., except for three lanes in each direction crossing the Sacramento River, with additional auxiliary lanes between some interchanges. On the eastern half of the corridor, four general-purpose lanes travel between Watt Ave. and Sunrise Blvd. with the addition of an HOV lane. The HOV lane extends between Sunrise Blvd. and Folsom Blvd. with three general-purpose lanes, and from Folsom Blvd. east past the end of the ICM corridor at Cameron Park Blvd. with two general-purpose lanes. Additional auxiliary lanes exist between some interchanges, and the lane configuration is the same in both east and west directions along US 50.



Appendix E Corridor Description and Existing and Planned Corridor Analysis

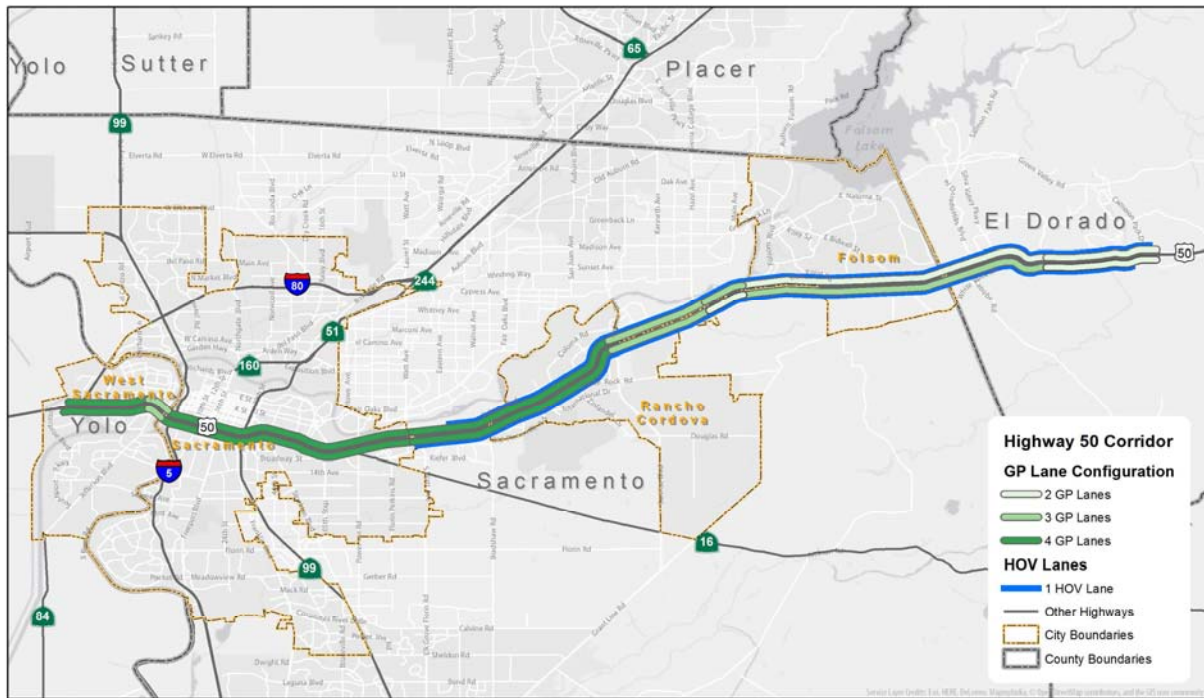


Figure 3 – Freeway Lane Configuration

3.2. SUPPORTING ARTERIALS

3.2.1. CITY OF WEST SACRAMENTO (YOLO COUNTY)

- **West Capitol Ave.** – operates as a four-lane roadway through the eastern half of the route from Grand St. to Harbor Blvd. From Harbor Blvd. to the west, the route alternates between one and two lanes in each direction at alternating sections of the route. The adjacent development in the western half is mostly low-density residential and industrial land use. City government offices, library, and small commercial businesses dominate the eastern half.
- **Industrial Blvd.** – four-lane roadway parallel to US 50 on the southern side of the freeway. The arterial predominantly run through a light industrial area and provides access to the Port of West Sacramento.



Appendix E
Corridor Description and Existing and Planned Corridor Analysis

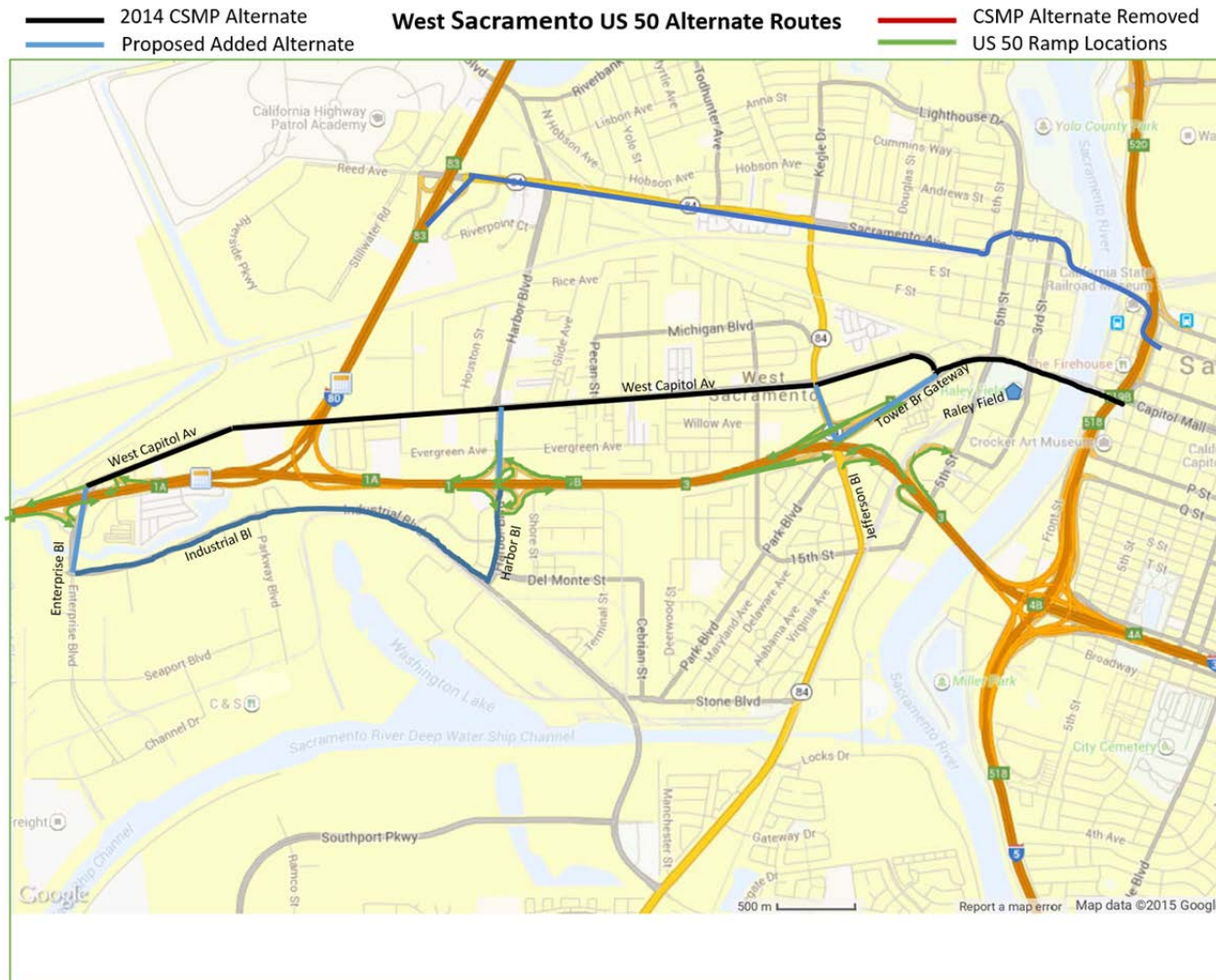


Figure 4 – Key Arterials along US 50 (West Sacramento Segment)



Appendix E

Corridor Description and Existing and Planned Corridor Analysis

- **Reed Ave. / Sacramento Ave.** – operates as a four-lane roadway from I-5 to Jefferson Blvd. From Jefferson Blvd. to the east, the route is two lanes to the I St. Bridge. The adjacent development in the western half is commercial and industrial land use.
 - **I Street Bridge** – is 100 years old and the lanes are too narrow to serve buses, there are no bicycle lanes, and sidewalks are too narrow to meet accessibility standards. The cities of West Sacramento and Sacramento completed the Sacramento River Crossings Alternatives Study in 2011, which concluded that a North Market crossing (C st. to Railyards Blvd.), upstream of the existing I Street Bridge, was needed to replace the I Street Bridge. The new bridge will provide a new bicycle, pedestrian, and automobile crossing. The proposed bridge would include a moveable center span to allow passage for watercraft. Navigation of the Sacramento River takes precedence to vehicle crossings according to current US Coast Guard regulations. The environmental documentation and preliminary engineering process should be completed by mid-2016. The existing rail line will be maintained according to the Alternatives Study.
- **Tower Bridge Gateway** – a radial four-lane divided facility that merges with US 50 and travels east to the Tower Bridge crossing of the Sacramento River. This provides an alternative particularly for commuter traffic heading into and out of downtown Sacramento from the US 50 corridor. The arterial predominantly runs through a commercial and expanding 2-3 story residential developments. Raley Field, home to the River Cats baseball team, is a major trip attractor in the area. Crossing the Sacramento River is the Tower Bridge, a vertical lift bridge. When the bridge is moving, it can cause delays along this corridor.
 - **Tower Bridge** – is a vertical lift bridge across the Sacramento River, linking West Sacramento to Downtown Sacramento. The bridge is maintained by Caltrans as part of State Route 275 and connects West Capitol Avenue and Tower Bridge Gateway in West Sacramento with the Capitol Mall in Sacramento. The bridge began operation in 1935. The railroad tracks were removed in 1963 and the roadway was restriped for four automobile lanes. Navigation of the Sacramento River takes precedence to vehicle crossings according to current US Coast Guard regulations.
- **Future South Market Bridge Crossing** – would provide connectivity the Pioneer Bluff, a planned redevelopment area along the West Sacramento riverfront, and the Docks development project, Miller Park, and the Broadway commercial district in Sacramento. This area has the highest level of existing population and employment that is not served by a bridge.

3.2.2. CENTRAL CITY OF SACRAMENTO (SACRAMENTO COUNTY)

- **W St. and X St.** – pair of three-lane, one-way streets on each side of US 50 used as travel alternatives to US 50. W St. carries traffic westbound from 29th St. to 3rd St., while X St. carries traffic eastbound from 5th St. to Alhambra Blvd. Adjacent frontage is small business and residential.
- **Broadway** – a parallel four-lane facility a block south of X St. between 3rd St. and Alhambra Blvd. Broadway continues south and east to 65th St. as a four-lane facility. The arterial travels through predominant business area parallel to US 50, then travels out to 65th St. through small business and residential communities.



Appendix E

Corridor Description and Existing and Planned Corridor Analysis

- **P St. and Q St.** – pair of three-lane, one-way streets parallel to US 50 travelling between I-5 to the west and SR 51 area to the east. There is no direct connection to SR 51 from P St. or Q St. for access to US 50. Options are to use the 29th St. / 30th St. couplet for SR 51 access or Stockton Blvd. for direct US 50 connection. The arterials are south of downtown heart of Sacramento and predominantly runs through a commercial and multistory offices on the west end and dense residential neighborhood toward the east. These routes would provide alternative to east-west US 50 travel if W or X Streets were inaccessible along with US 50.



Appendix E
Corridor Description and Existing and Planned Corridor Analysis

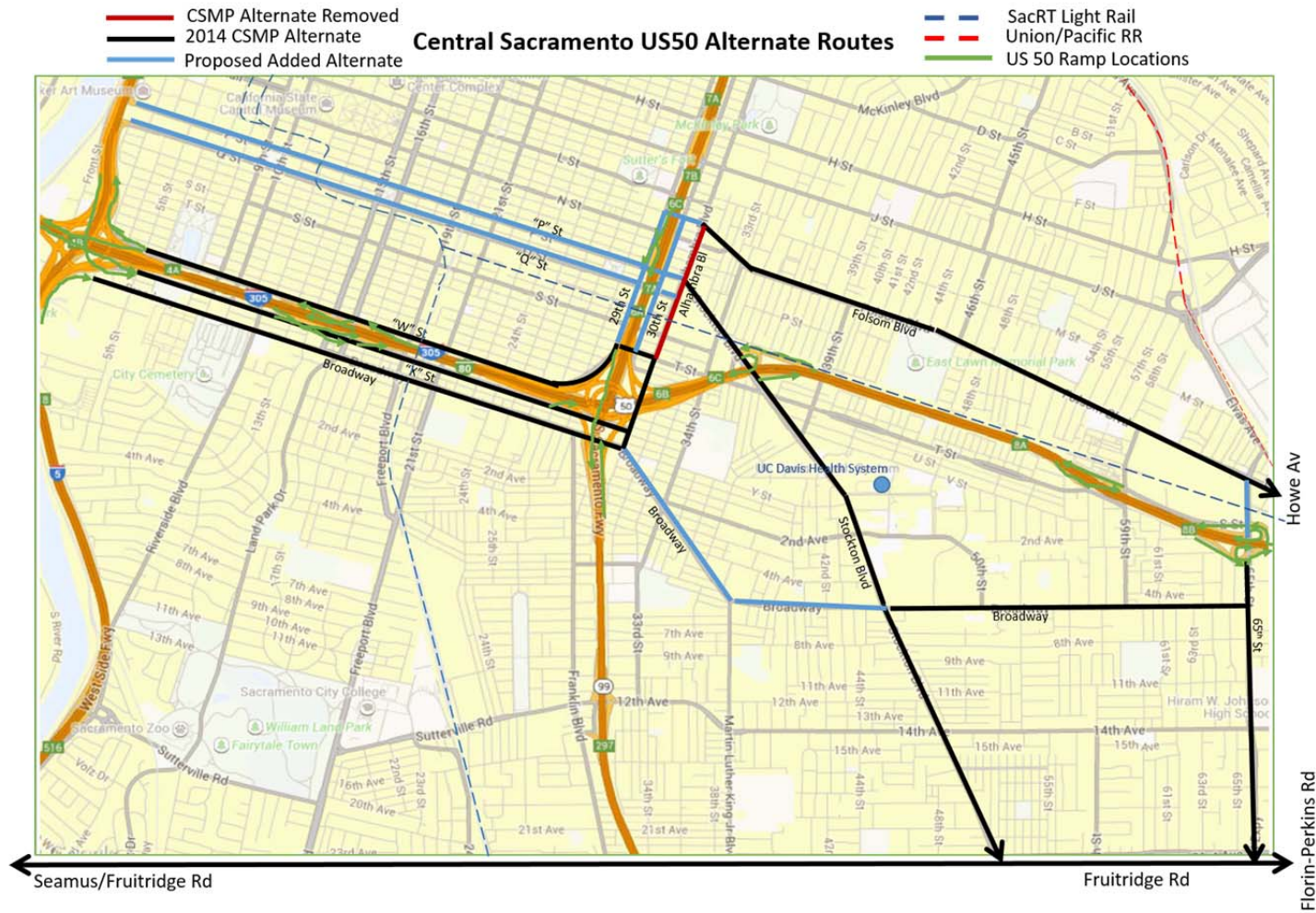


Figure 5 – Key Arterials along US 50 (Central Sacramento Segment)

Appendix E
Corridor Description and Existing and Planned Corridor Analysis

- **Seamas Ave. / Fruitridge Rd.** – a parallel four-lane facility 1.75 to 2.5 miles south of US 50. The arterial extends seven miles from I-5 near the Sacramento River to South Watt Ave. Although the greatest distance from US 50 of the parallel alternate routes, it is the most continuous route with two lanes in each direction. Seamus Ave. extends a half-mile from I-5 to South Land Park Dr. and continues to the eastern end as Fruitridge Rd. On the western end of the arterial, adjacent residential property backs up to Fruitridge Rd. with access limited to collector roadways. From just west of the State Route 99 (SR 99) freeway to the eastern end at South Watt Ave., the frontage is a mix of single-family homes and small retail commercial businesses.
- **Folsom Blvd.** – operates as two-lane parallel arterial with two-way left turn lane from Alhambra Blvd. to Horner Dr. west of Howe Ave. – a distance of 3.5 miles. There is a short four-lane segment between 59th St. and 65th St. The two-lane segments include bike lanes on both sides of the arterial. The arterial crosses under the North/South Union Pacific railroad and under US 50 just west of Howe Ave. The frontage is a mix of residential units with driveways, and large and small commercial operations. Large trip attractors include the University of California, Davis Medical Center near SR 51 and CSUS adjacent to and north of Folsom Blvd. between 65th St. and Howe Ave. CSUS has a total of 28,000 students and almost 3,000 staff. Folsom Blvd. continues from west of Howe Ave. to the east for 15 miles as a four-lane facility – to be discussed in the Mid-East and East Sacramento County reports below.

3.2.3. MID-EAST SACRAMENTO (SACRAMENTO COUNTY)

- **Folsom Blvd.** – operates as a parallel 15-mile, four-lane facility between Hornet Dr. (west of Howe Ave.) east to Blue Ravine Rd. in Folsom. In that stretch, Folsom Blvd. crosses under US 50 three times. The Sacramento RT Gold Line light-rail line joins and runs adjacent to Folsom Blvd. on the south side from Florin Perkins Rd. to its eastern terminus at the Historic Folsom Station near downtown Folsom – a total of 13 stations along this 15.5 mile stretch. As the facility travels east through Rancho Cordova and ending in Folsom, the housing density gradually decreases. Land uses also include some big box retailers as well as retail commercial and office commercial. In Rancho Cordova between Zinfandel Dr. and Hazel Ave., there is significant office park development. Major trip attractors include Aerojet Rocketdyne, an aerospace corporation with its own off-ramp, and Mather Airport, a major air cargo hub.
- **Fair Oaks Blvd.** – a short portion of the arterial can operate as an alternative route to US 50, positioned north of the American River and US 50. It operates as a parallel four-lane facility between Howe Ave. and Watt Ave. Both Howe Ave. and Watt Ave. are American River crossings. Major land uses include a mixture of residential and commercial-retail uses. The intersections of Fair Oaks/Howe and Fair Oaks/Watt are among the busiest intersections in Sacramento County.
- **Old Placerville Rd. / Rockingham Dr.** – From Watt Ave. to Zinfandel Dr. the parallel alternatives south of US 50 are limited. Old Placerville Rd. begins at Bradshaw Rd. located one-half mile south of US 50. The arterial runs to Routier Rd. as two lanes with two-way left-turn lane through an area with single-family residential on the north and large industrial businesses on the south. From Routier Rd. to Rockingham Dr. the arterial winds its way as four lanes with a two-way left-turn lane. Old Placerville Rd. turns right onto Rockingham Dr. then continues as four lanes to Mather Field Rd. Commercial offices including technology and health industries dominate the land use.
- **International Dr. / White Rock Rd.** – From Watt Ave. to Zinfandel Dr. the parallel alternatives south of US 50 are limited. Both International Dr. and White Rock Rd. operate as parallel four-lane facilities with



Appendix E

Corridor Description and Existing and Planned Corridor Analysis

landscaped median as they travel from Mather Field Rd. to Sunrise Bl. The Zinfandel Dr. and Sunrise Bl. intersections are nearly 1.5 miles south of US 50. The land use is dominated by large commercial businesses including technology and health industry campus environments with residential communities interspersed.

- **Coloma Rd.** – operates as a four-lane facility from the Sunrise Blvd. north of US 50 and travels west to Folsom Blvd. The arterial travels through residential communities and provides access to Cordova High School and Hagen Community Park with American River access.



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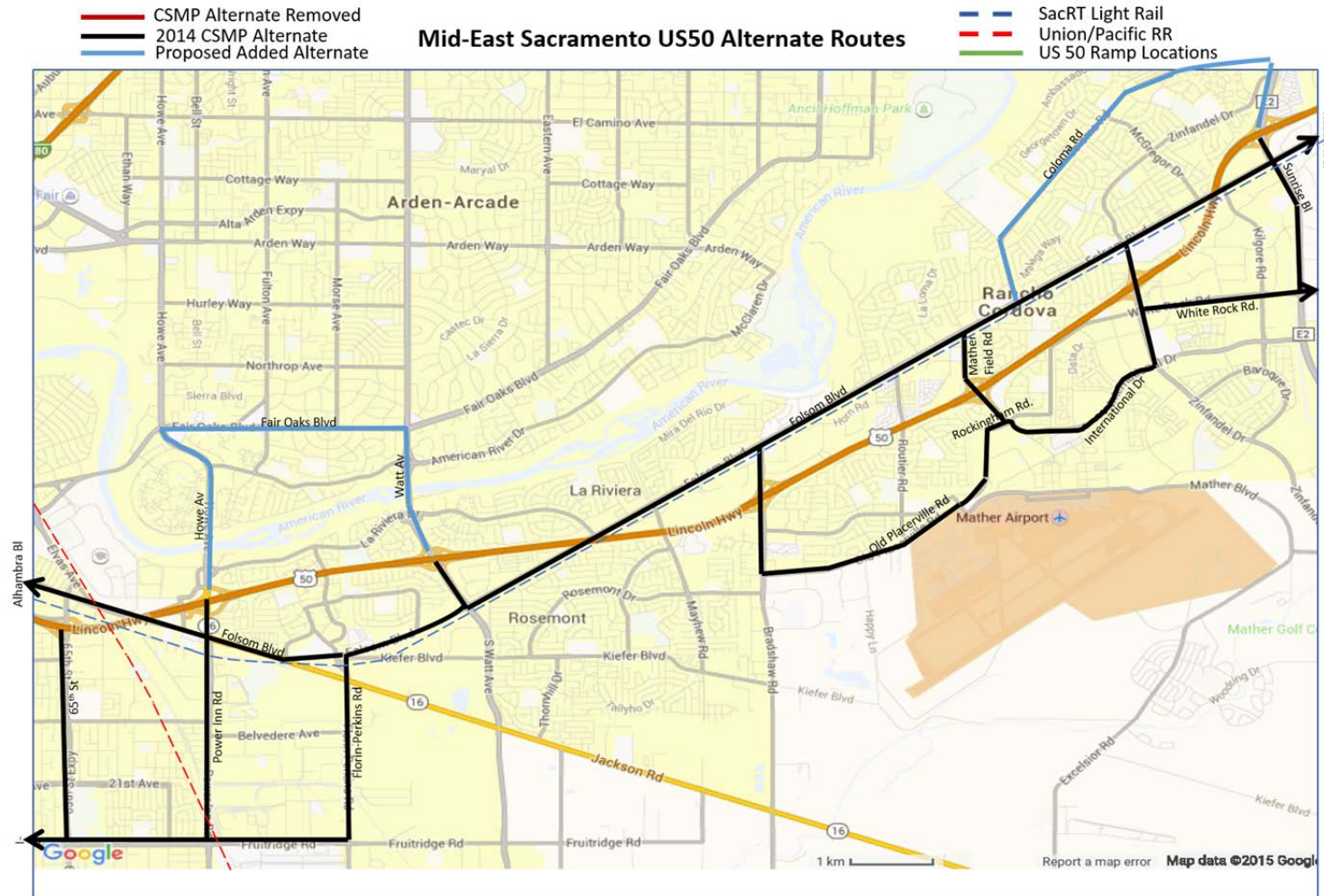


Figure 6 – Key Arterials (Mid-East Sacramento Segment)



Appendix E Corridor Description and Existing and Planned Corridor Analysis

3.2.4. EAST SACRAMENTO COUNTY & WEST EL DORADO COUNTY

- **White Rock Rd.** – operates as a two-lane parallel facility south of US 50 from Sunrise Blvd. to Latrobe Rd. in El Dorado County – a distance of 12 miles. The stretch from Grant Line Rd. to Latrobe Rd. is scheduled for improvement as part of the Capital Southeast Connector project from SR 99 to US 50, discussed in more detail below. A short portion on the eastern end near Latrobe Rd. has been recently upgraded to 4-lanes.
- **Iron Point Rd.** – operates as six lanes and four lanes alternately through its six-mile length from Folsom Blvd. to Empire Ranch Rd. The arterial snakes its entire length with landscaped median, separate left and right turn lanes, and bike lanes on both sides. Major trip attractors along the segment are Intel Corporation, Century 14 and Palladio 16 Cinemas, and large retail commercial facilities and malls. The commercial establishments are predominantly on the south side between Iron Point Rd. and US 50. Land use on the north side of the arterial is primarily single-family residential. Iron Point Rd. currently dead-ends at the El Dorado County line, but there are plans to extend Iron Point Rd. to an extension of Saratoga Rd. in El Dorado County, which would lead to access to El Dorado Hills Blvd.
- **[Future] Capital Southeast Connector – Folsom / El Dorado section** - The 7.5-mile Capital Southeast Connector alignment in Folsom and El Dorado will run along White Rock Rd. from Prairie City Rd. to Latrobe Rd. south of US 50, as shown in **Figure 7**. The corridor in Folsom will be limited to signalized at-grade intersections at Empire Ranch Rd., Scott Rd., Oak Ave. and Prairie City Rd. Those intersections will be replaced in the future with interchanges based on levels of service, safety considerations and available funding. This section is estimated to cost \$47.7 million and construction is anticipated to begin in 2018.

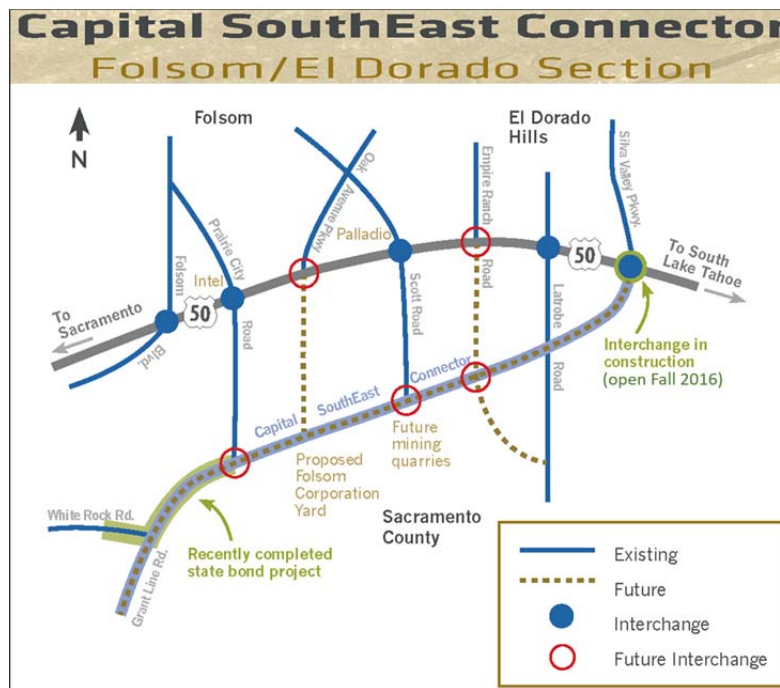


Figure 7 – Capital Southeast Connector (Folsom/El Dorado Section)



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Corridor Description and Existing and Planned Corridor Analysis

- **Green Valley Rd.** – operates as a four-lane facility From Sophia Parkway to Francisco Dr. with a two-way left turn lane and bike lane on each side. From Francisco Dr. the arterial meanders as a two-lane road through the rolling foothills to Cameron Park Dr. and beyond in El Dorado County. Cameron Park Dr. at US 50 is 3.5 miles away. The land use is a mixture of single-family homes and open land consisting of recreational areas and ecological reserves. The area is experiencing rapid growth.
- **Serrano Parkway** – operates as a two-lane road as it snakes along the hillside between El Dorado Hills Blvd. and Silva Valley Parkway. The median is landscaped between left turn lane pockets. Bike lanes are on both sides of the facility. From Silva Valley parkway, the arterial starts east as a four-lane facility with landscaped median and bike lanes transitioning into two lanes from Village Dr. to Bass Lake Rd. US 50 is 1.5 miles from the Bass Lake Rd / Serrano Parkway intersection. Land use is mostly single-family homes with occasional open land areas waiting for development. Between Silva Valley Parkway and Cameron Park Drive, there are no alternative routes on the south side of US 50.
- **Country Club Dr.** – operates as a two-lane road as it traverses along the foothills, sometimes adjacent to US 50 between Bass Lake Rd. and Cameron Park Dr. There are multiple stop signs along this route. Land use on the north side of Country Club Dr. is undeveloped land near Bass Lake Rd., except Holy Trinity Church, then becomes predominantly single-family neighborhoods. The south side is undeveloped land along US 50 with a slender sliver of land near Cameron Park Dr. with a mixture of residences and non-residential development.



Appendix E
Corridor Description and Existing and Planned Corridor Analysis

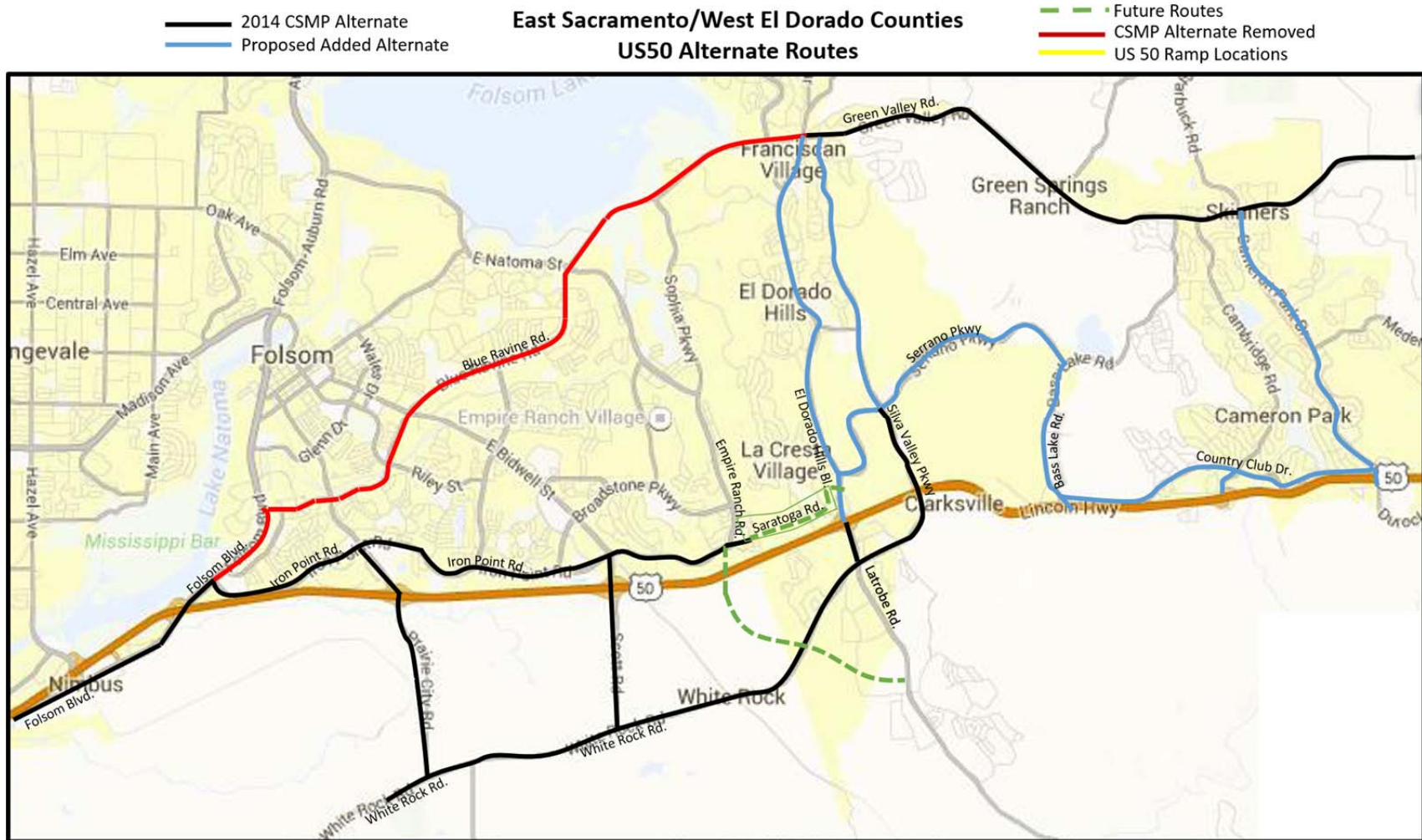


Figure 8 – Key Arterials (East Sacramento / West El Dorado Segment)

Appendix E
Corridor Description and Existing and Planned Corridor Analysis

3.2.5. CONNECTOR ROADS

Several north-south arterials may be used as connector roads to reach the parallel roads listed above from US 50. North of US 50 there are few bridges over the American River between Howe Ave. and the City of Folsom. They include Howe Ave., Sunrise Blvd., Hazel Ave, and Folsom Blvd. Any incident on these bridges can cause severe backups along the arterial corridors.

- **Enterprise Blvd. / Harbor Blvd.** – succession of four-lane roadways connected to US 50. The arterials predominantly run through a light industrial area and provide the primary access to the Port of West Sacramento.
- **29th St. and 30th St.** – Pair of three-lane, one-way Streets on each side of SR 51 between T St. and Capitol Ave. used as travel alternatives. T St. carries traffic southbound, provides access to southbound US 51 to US 50, and to W-X Streets for US 50 access. 30th St. carries northbound traffic, provides access to Stockton Blvd. and Folsom Blvd. as alternates to US 50 east of downtown.
- **Stockton Blvd.** – operates as a four-lane facility with two-way left turn lane between SR 51 and Fruitridge Rd. The arterial provides direct access to Broadway and Fruitridge Rd. parallel arterials.
- **65th St.** – operates as a four-lane facility with combination of two-way left-turn lane and landscaped median south to Broadway and Fruitridge Rd. To the north 65th St. crosses Sacramento RT light-rail at the University / 65th St. station near Folsom Blvd.
- **Power Inn Rd. / Howe Ave.** – South of US 50 the arterial operates as a six-lane facility to 14th Ave. and four lanes with two-way left-turn lane to Fruitridge Rd. Union Pacific Railroad crosses Power Inn just north of Fruitridge Rd. North of US 50, Howe Ave. approaches the American River Bridge from both northbound and southbound as six lanes but crosses the river as a four-lane facility.
- **Watt Ave.** – operates as a six-lane facility between Fair Oaks Blvd. and Folsom Blvd. including across the American River. There is a new dedicated transit lane on Watt Ave. from north of the interchange to the existing Watt/Manlove light-rail station at Folsom Blvd. There is a continuous bicycle and pedestrian pathway separated from vehicular traffic along the east side of Watt Ave. between La Riviera Dr. and Manlove Rd., with grade separated undercrossings at the freeway ramps.
- **Bradshaw Rd.** – operates as a six-lane facility between Folsom Blvd. and Old Placerville Rd. The arterial crosses Sacramento RT light-rail near the Folsom Blvd. intersection.
- **Mather Field Rd.** – operates as a four-lane facility north to Folsom Blvd. and crosses Sacramento RT light-rail near the intersection with Folsom Blvd. The arterial operates as a six-lane facility from US 50 to Old Placerville Rd. and International Dr.
- **Zinfandel Dr.** – operates as a four-lane through facility with additional lanes for US 50 access and left and right turns at Folsom Blvd. and White Rock Rd. The arterial crosses Sacramento RT light-rail near the intersection with Folsom Blvd.
- **Sunrise Blvd.** – operates as a six-lane facility between Coloma Rd. to the north and White Rock Rd. to the south.
- **Hazel Ave.** – operates as a four-lane facility in the short distance to Folsom Blvd.
- **Prairie City Rd.** – operates as two to three lanes from US 50 north to Iron Point Rd. In the southbound direction from Iron Point Rd., there are two lanes. From US 50 south, the arterial transitions into a two-lane facility travelling through open range to White Rock Rd. two miles away.

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- **Scott Rd. / E Bidwell St.** – North of US 50, E. Bidwell St. is a six-lane facility with a landscaped median. From US 50 south, Scott Rd. transitions into a two-lane facility travelling through open range land to White Rock Rd. two miles away.
- **Empire Ranch Rd. (Future I/C)** – once constructed the arterial will connect to Iron Point Rd. north of US 50. The land south of US 50 is undeveloped open range today. There are plans associated with the Capital Southeast Connector project to extend the arterial across US 50 to connect with White Rock Rd. to the south and possibly extend to Latrobe Rd. in the future.
- **Latrobe Rd. / El Dorado Hills Blvd.** – operates as a six-lane facility from US 50 in both north and south directions to Serrano Parkway and White Rock Rd. respectively. The land is generally commercial between Serrano Parkway and White Rock Rd. Attractors are the Raley's Shopping Center, El Dorado Hills town center, the Regal Cinemas 14 and IMAX. The west side of Latrobe Road north of White Rock Road contains the Blue Shield headquarter and another currently vacant industrial building. The area on both sides of Latrobe Rd. is undergoing rapid growth.
- **Silva Valley Parkway** – From the interchange with US 50 the arterial will connect to both Serrano Parkway and Green Valley Rd. north of US 50. Land use is mostly single-family homes with occasional open land areas waiting for development. To the south of US 50, the arterial swings west to connect and become White Rock Rd. Between Silva Valley Parkway and Cameron Park Drive on the south side of US 50, there are no alternative routes.
- **Bass Lake Rd.** – operates as a two-lane rural facility from US 50 to Serrano Parkway. Single-family subdivisions are present near Serrano Parkway and land is clear along Bass Lake Rd. for similar development to occur in the near future. Between Silva Valley Parkway and Cameron Park Drive, there are no alternative routes on the south side of US 50.
- **Cameron Park Dr.** – operates as a two-lane facility to Green Valley Rd. 3.5 miles north of US 50. The land uses in this section is a mixture of commercial and industrial uses as well as single-family homes of 1-5 dwelling units (DU)/acre.

3.3. PUBLIC TRANSIT SERVICE

This section provides information about public transportation services offered to travelers within the US 50 corridor. These services include:

3.3.1. REGIONAL TRANSIT BUS NETWORK

- **Sacramento Regional Transit District (RT)** – operates approximately 69 fixed routes that cover a 418 square-mile service area. Buses operate 365 days a year using 205 buses powered by compressed natural gas (CNG) and 23 shuttle vans daily from 5 a.m. to 11 p.m. every 12 to 60 minutes, depending on the route. RT's community bus program provides smaller circulator "Neighborhood Ride" buses to seven neighborhoods in Sacramento County. Passenger amenities include 32 bus and light-rail transfer centers and 23 park-and-ride lots with 10,113 parking spaces. RT also serves over 3,100 bus stops throughout Sacramento County. Bus weekday ridership has reached an average of approximately 50,000 passengers per day. A portion of the RT system route map is shown in **Figure 9**.



Appendix E Corridor Description and Existing and Planned Corridor Analysis

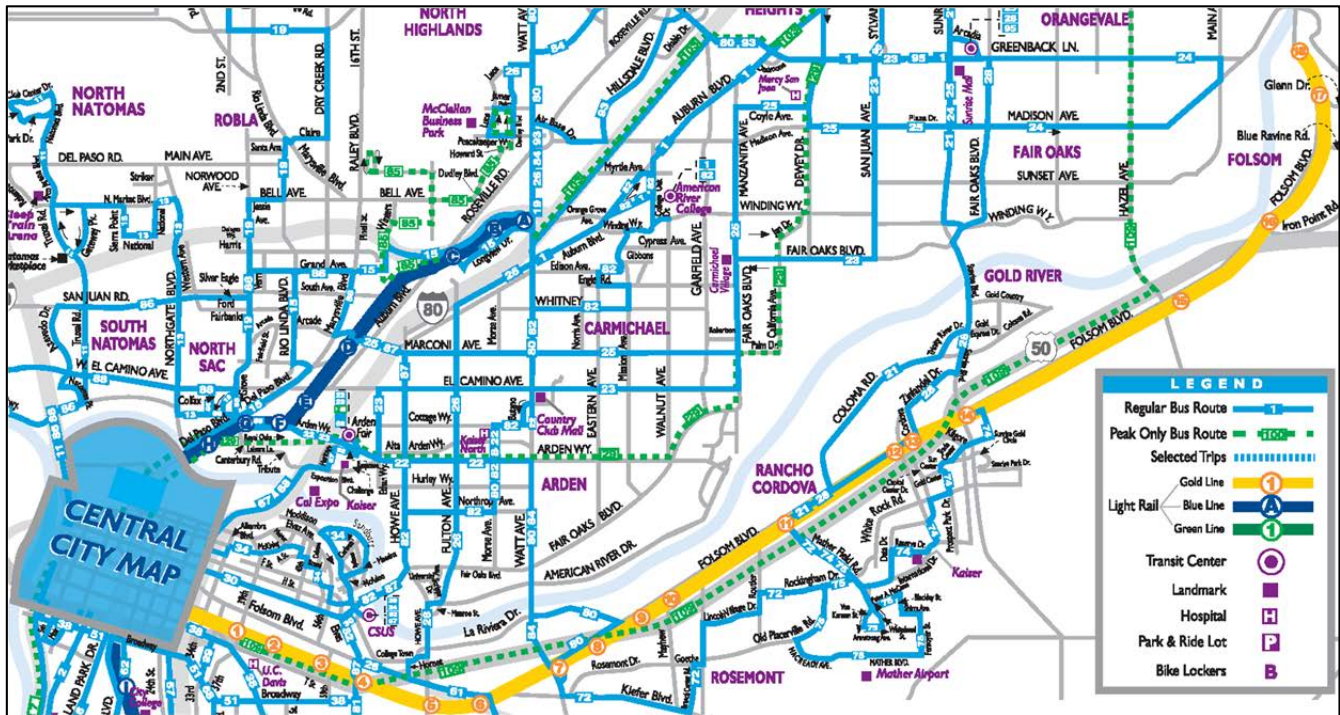


Figure 9 – Sacramento RT Bus Network (US 50 corridor) Map

3.3.2. LIGHT-RAIL TRANSIT LINES

- Sacramento RT – operates 42.9 miles of light-rail transit (LRT) every day with weekday services operating between 4 a.m. and midnight using 76 light-rail vehicles with service every 15 minutes during the weekday, and every 30 minutes in the evening and on weekends. Weekday light-rail ridership averages approximately 47,000 passengers per day. The RT system map is shown in **Figure 10**.

RT's 23-mile Gold Line directly serves the US 50 corridor between Folsom and downtown Sacramento with 29 stations. Nine stations provide free parking, with the Power Inn Station charging a \$1.00 daily parking fee. All LRT stations have bike lockers, payphones, and parking with access for disabled riders. Most of the stations lie within one-mile of a US 50 interchange. The in-vehicle transit time from Downtown Folsom to the Sacramento Valley station in downtown Sacramento takes approximately 59 minutes during the a.m. peak period commute period.

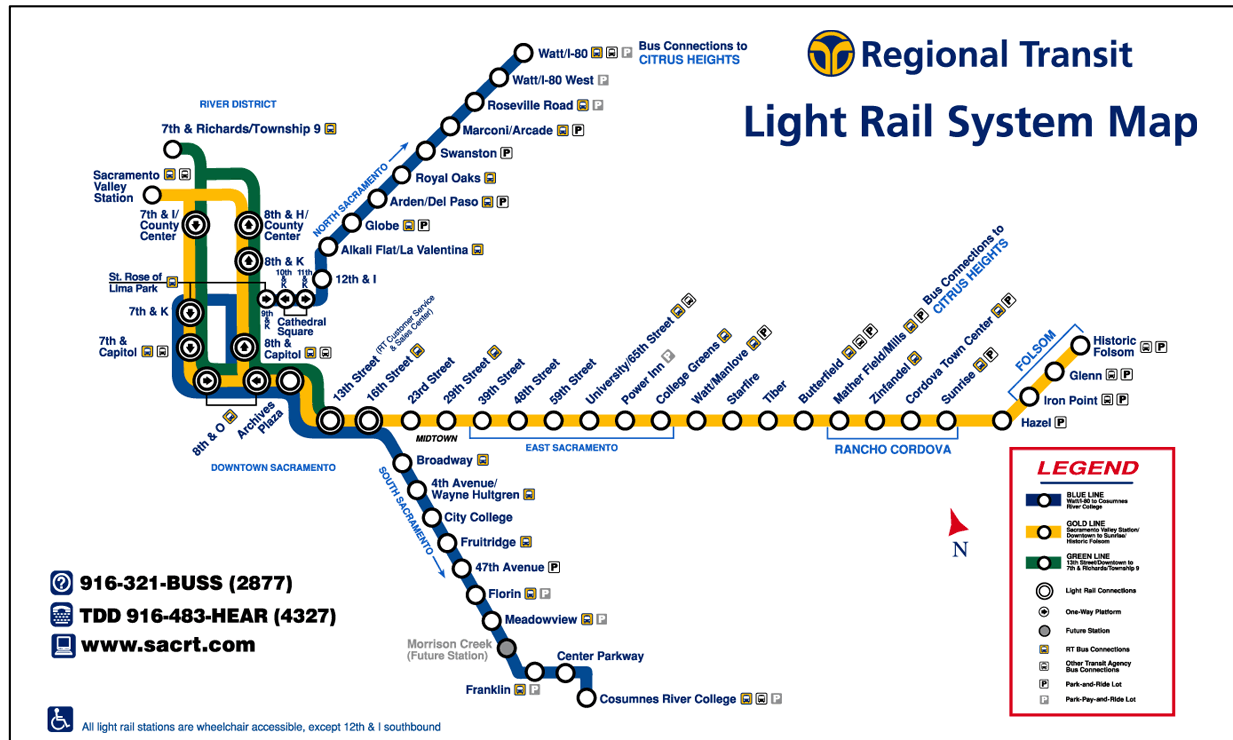


Figure 10 – Sacramento Regional Transit Light-Rail System Map

3.3.3. COMMUTER EXPRESS BUSES

- **Yolo County Transportation District (YCTD)** – administers Yolobus that operates local and intercity bus service 365 days a year in Yolo County and neighboring areas. Yolobus serves Davis, West Sacramento, Winters, and downtown Sacramento along US 50, I-80, and I-5, and makes connections with Sacramento RT buses and light-rail in Sacramento. Yolobus is the only public transportation agency connecting Sacramento International Airport to downtown Sacramento, Davis and other communities. Yolobus operates two commuter and express lines along US 50.
- **El Dorado Transit** – provides connections into Folsom and Sacramento where it meets other Regional transit providers for access to many local communities. The Sacramento Commuter provides 11 trips in the morning from park and ride locations in Western El Dorado County to downtown Sacramento and 11 return trips in the afternoons Monday through Friday, as well as reverse commute trips twice daily. The morning commute begins at Central Park and Ride around 5 a.m. and heads westbound to Downtown Sacramento along US 50. The route operates on arterials east of the US 50 ICM corridor and stops along four park and ride lots west of Cameron Park Blvd.: Central Park and Ride, Placerville Station Transfer Center, El Dorado County Fairgrounds, Ponderosa Road, Rodeo Rd. / Coach Ln., Cambridge Road, El Dorado Hills and Vine St. & Mercedes Ln.



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3.3.4. FUTURE DOWNTOWN / RIVERFRONT STREECAR

- The project includes design and construction of an initial 3.3 mile streetcar line with stations at Civic Center, Garden Street, Riverfront Street and Raley Field on the West Sacramento side, and extending across the Tower Bridge to the Sacramento Valley Station, Convention Center and Midtown Sacramento. A Revised environmental document is currently being prepared for the project. Estimated completion date is in late 2017.

3.3.5. DIAL-A-RIDE SERVICE

All three transit providers serving the US 50 ICM corridor provide parallel dial-a-ride paratransit services that meet Americans with Disabilities Act (ADA) requirements.

3.4. PARK AND RIDE FACILITIES

Figure 11 maps the park and ride facilities (including those at Sacramento RT LRT stations and commuter/express bus routes described above) currently in operation near US 50 in Sacramento and El Dorado Counties owned by public agencies. Most park and ride lots in the Sacramento region are free of charge as long as they are being used for rideshare purposes and offer approximately 3,700 spaces. In addition to the parking facilities at the LRT stations, the following facilities lie adjacent to the corridor. In addition, there are various facilities operated by private entities (e.g., colleges, malls, churches) through cooperative agreements with public transportation agencies.

- **Rodeo Rd. Park and Ride** – operating just south of US 50 on Rodeo Rd. and Coach Ln. This lot has 57 parking spaces with around 15-20 spaces used on an average day.
- **Cambridge Rd. Park and Ride** – just north of US 50 on Cambridge Rd. and Cameo Dr. near Cameron Park. This lot offers 75 spaces and has an average use of 60-65 spaces. It also has two bike lockers and racks.
- **El Dorado Hills Park and Ride** – served by both the Sacramento Commuter as well as 50 Express. It is located in the northeast quadrant of White Rock Rd. and Latrobe Rd. in Town Center. This is a multi-modal facility (120 spaces) and is often at capacity during peak use.
- **Vine St. & Mercedes Ln. Park and Ride** – lies a short distance from El Dorado Hills Park and Ride; it serves the overflow from that location with 90 spaces. It is near Regal Cinemas in Town Center.
- **Iron Point Rd. / Folsom Blvd.** – lies in the southeast quadrant north of US 50 with 70 spaces.
- **Gold River (Hazel Ave. / Tributary Point Dr.)** – lies in the northeast quadrant north of US 50 with 30 spaces.



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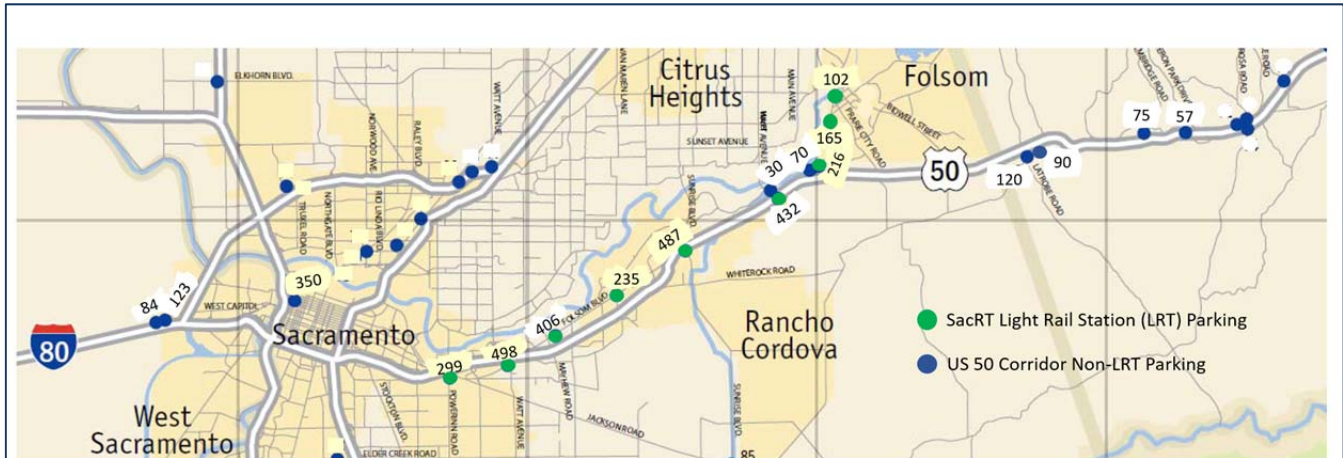


Figure 11 – Map of US 50 Park and Ride Lots (# of Spaces)

3.5. GENERAL PARKING FACILITIES

General parking facilities include city-operated and private off-street facilities that motorists may use to park their vehicle near business, commercial, retail, and educational areas. As shown in **Figure 12** Error! Reference source not found., many of these facilities are found around downtown Sacramento. Additional facilities are sprinkled throughout the US 50 corridor around major event venues, regional commercial centers, and local commercial and business areas.

In downtown Sacramento, many of the garages are fully utilized by employees of adjacent businesses holding monthly parking permits and only operate from Monday through Friday. However, several facilities also operate as public parking on nights and weekends. Many of the parking garages further sell monthly permits for residents who do not have off-street parking, while some garages offer preferential parking for city employees, emergency services, or electric vehicles.

Most of the mapped facilities charge an hourly fee for parking. Public parking facilities generally offer lower rates than private facilities. Across all types of facilities, hourly fees vary from \$1 to \$10. Many facilities also have a fixed daily rate or a maximum daily fee. Depending on the location and the operator, daily parking fees are typically capped between \$5 and \$20.



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Figure 12 – City of Sacramento Parking Structures and Surface Lots

3.6. BIKE WAYS

Figure 13 provides a view of a portion of the bike paths within the Sacramento Region along US 50. This map came from the Sacramento County Bikeway Master Plan. The complete Northwest Bicycle Master Plan Wall Map can be downloaded from the following website which allows the reader to zoom into specific areas:

<http://www.sacdot.com/Pages/BikewayMasterPlan.aspx>



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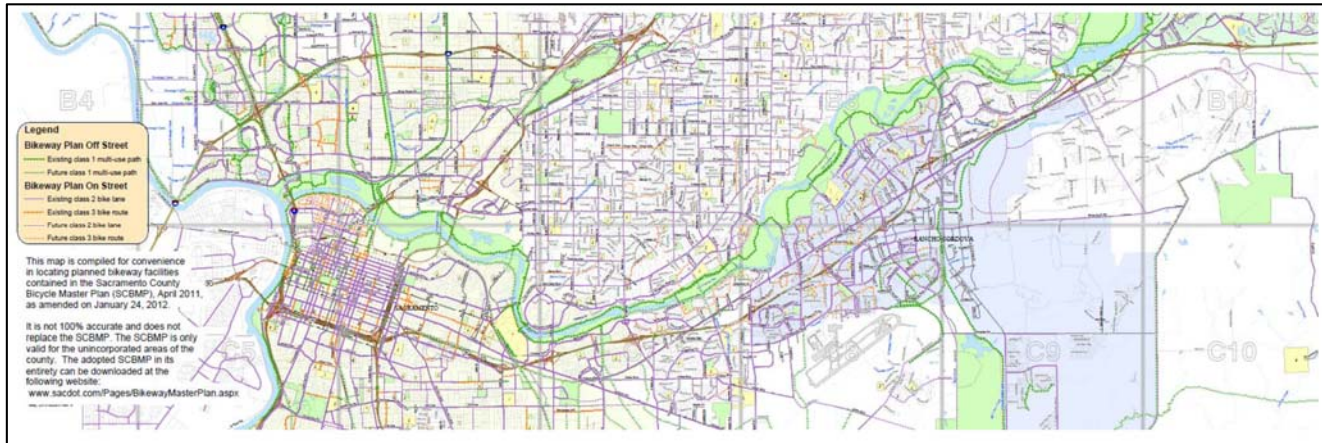


Figure 13 – Sacramento Area Bike Paths

Bicycle facilities in the corridor are not actively managed in the same manner as motor vehicle facilities. However, there are traffic operation systems that serve bicyclists such as dedicated bicycle lanes, bicycle detection loops at signalized intersections, video detection, other non-loop type detection, and bicyclist activated signal change buttons. The City of Sacramento is installing video detection at some locations. **Figure 14** shows the bike routes listed in the Caltrans 2014 *US-50 Transportation Concept Report and Corridor System Management Plan*.

US 50 Bicycle Routes (from 2014 US50 CSMP)			
Location	Bike Routes		
City	Route	From	To
City of West Sacramento	West Capitol Av.	Yolo Causeway	Tower Bridge
City of Sacramento	Tower Bridge	W. Capitol Av.	Capitol Mall
	Capitol Mall	Tower Bridge	3rd/5th Streets
	3rd/5th Streets	Capitol Mall	T St.
	T St.	3rd/5th Streets	65th St.
	65th St.	T St.	4th Av.
	4th Av.	65th St.	Redding Av.
	Redding Av.	4th Av.	Folsom Bl.
	Folsom Bl.	Redding Av.	State Univ. Dr. E.
	State Univ. Dr. E.	Folsom Bl.	Guy West Bridge
	Guy West Bridge	State University Dr. East	Am. Riv. Pkwy. Bike Trail
	Alhambra Bl.	2nd Av.	Folsom Bl.
	Folsom Bl.	Alhambra Bl.	Watt Av.
	2nd Av.	Riverside Bl.	34th St.
	Riverside/11th St.	T St.	2nd Av.
	18th/21st/34th Sts.	T St.	2nd Av.
	Am. River Pkwy. Bike Trail/Jedediah Smith Memorial Trail		
Unincorp.	La Riviera Dr./College Town Dr.	Folsom Bl.	State University Dr. East
Location	Bike Routes		
City	Route	From	To
City of Rancho Cordova	Watt Av. Trail	Am. Riv. Bike Tr.	La Riviera Dr.
	Folsom Bl.	Watt Av.	Bradshaw Rd.
	Folsom Bl.	Bradshaw Rd.	Iron Point Rd.
	Folsom S. Canal Tr.	S. of Kiefer Bl.	Am. Riv. Bike Tr.
City of Rancho Cordova	American River Parkway Bike Trail/Jedediah Smith Memorial Trail		
	American River Parkway Bike Trail/Jedediah Smith Memorial Trail		
Rancho	American River Parkway Bike Trail/Jedediah Smith Memorial Trail		
Unincorp.	Sunrise Bl. Trail	Am. Riv. Bike Tr.	Folsom Bl.
	Hazel Av. Trail	Am. Riv. Bike Tr.	Folsom Bl.
City of Folsom	Am. River Pkwy. Bike Trail/Jedediah Smith Memorial Trail		
	Iron Point Road	Folsom Bl.	Empire Ranch Rd.
	Blue Ravine Road	Folsom Bl.	Green Valley Rd.
	Humbog-Willow Creek Trail	Folsom-Auburn Rd.	Natoma St.
Unincorp.	Natoma St.	H.-W. Crk. Trail	Green Valley Rd.
Unincorp. El Dorado County	Green Valley Rd.	SAC/ELD Cty. Line	Cameron Park Dr.
	Green Valley Road	Cameron Park Drive	Placerville Drive

Figure 14 – US 50 Bicycle Routes (2014 US 50 TCR/CSMP)



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The American River Parkway, considered the “jewel of Sacramento”, is a 23-mile parkway that runs along the American River near US 50 and consists of many smaller parks and boat launching points as shown in **Figure 15**.

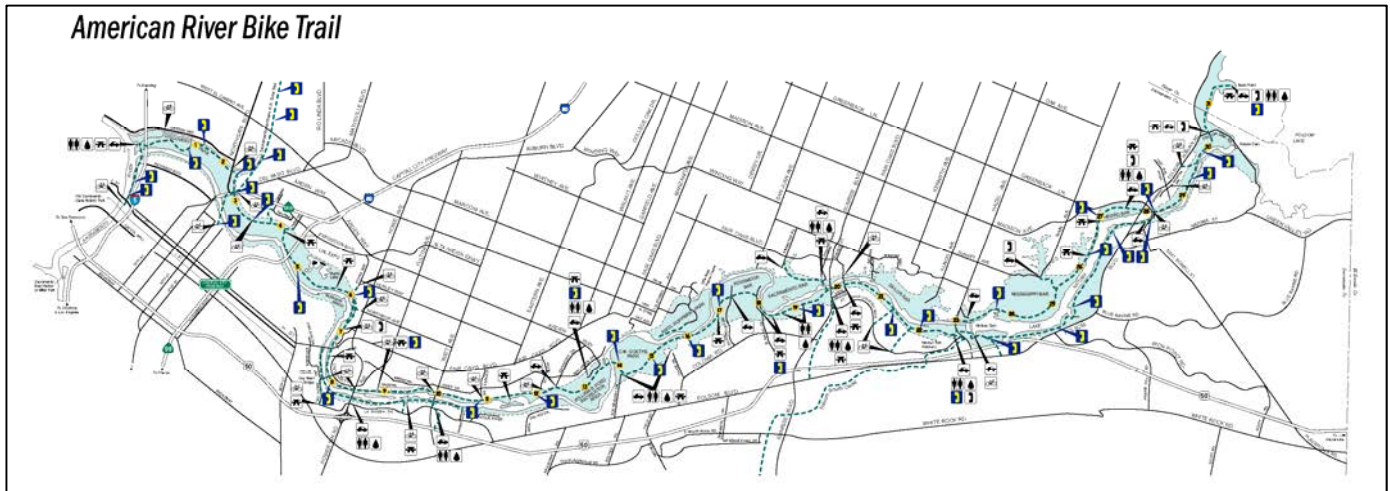


Figure 15 – American River Parkway Bike Trail



4. TRIP GENERATORS

Recurring and periodic trip patterns within the US 50 corridor are strongly influenced by the institutions, businesses centers and facilities located within the corridor. Key trip generators within the corridor include:

- Commercial areas
- Industrial areas
- Educational institutions
- Medical centers
- Event venues

4.1. COMMERCIAL AREAS

Figure 16 maps the main commercial areas (non-retail) within the corridor. Large employers are noted below - two are internationally known companies.

- **Aerojet Rocketdyne Inc.** – Aerojet Rocketdyne is an American rocket and missile propulsion manufacturer providing propulsion to space, missile defense, strategic, tactical missile and armaments customers throughout the world. Aerospace and Defense Products and Systems employs 4,400 people in Rancho Cordova south of US 50 between Hazel Ave. and Prairie City Rd.
- **Intel Corporation** – Intel's Folsom campus is approximately 15 miles outside of Sacramento. With seven buildings totaling over 1.5 million square feet of office, test floor, and lab space, Intel Folsom is one of the largest Intel sites and a large private sector employer in the area with roughly 6,000 employees. As a research and development campus, Folsom employees create, test, and validate new products including chips and chipsets, as well as desktop, mobile, and server processor products.
- **Mather Commerce Center** – The City of Rancho Cordova is home to a former military base converted to one of the largest business parks in the Sacramento region, now known as Mather Commerce Center—a 5,800-acre mixed-use complex that currently contains 80 firms employing 5,000 people. Four industry sectors account for over half of Rancho Cordova's total 2012 employment of around 47,000: Finance and Insurance; Administrative and Support and Waste Management and Remediation; Manufacturing; and Construction—each with employment levels of 4,000 or greater. The City's employment composition in these sectors significantly exceeds proportions seen at the county and statewide levels.
- **Science, Technology, Engineering and Math (STEM) Industries** – The Sacramento Region is home to a biotechnology and life sciences community, Volcano Therapeutics and Thermogenesis Corporation in Rancho Cordova; and Siemens Healthcare Diagnostics in West Sacramento are representative of the region's biotechnology sector. West Sacramento also houses the Cardinal Health and McKesson pharmaceutical distribution centers. The Sacramento Region's biotechnology and life sciences industries now houses more than 100 biotechnology and medical device companies and 15,000 life sciences employees.



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- **Government Employment** – Being the capitol of the state of California, significant number of state government employees work within downtown Sacramento. Sacramento City offices, Federal, and some County offices are also located in the downtown area. Sacramento County services are largely located on Bradshaw Rd. less than a mile south of US 50.

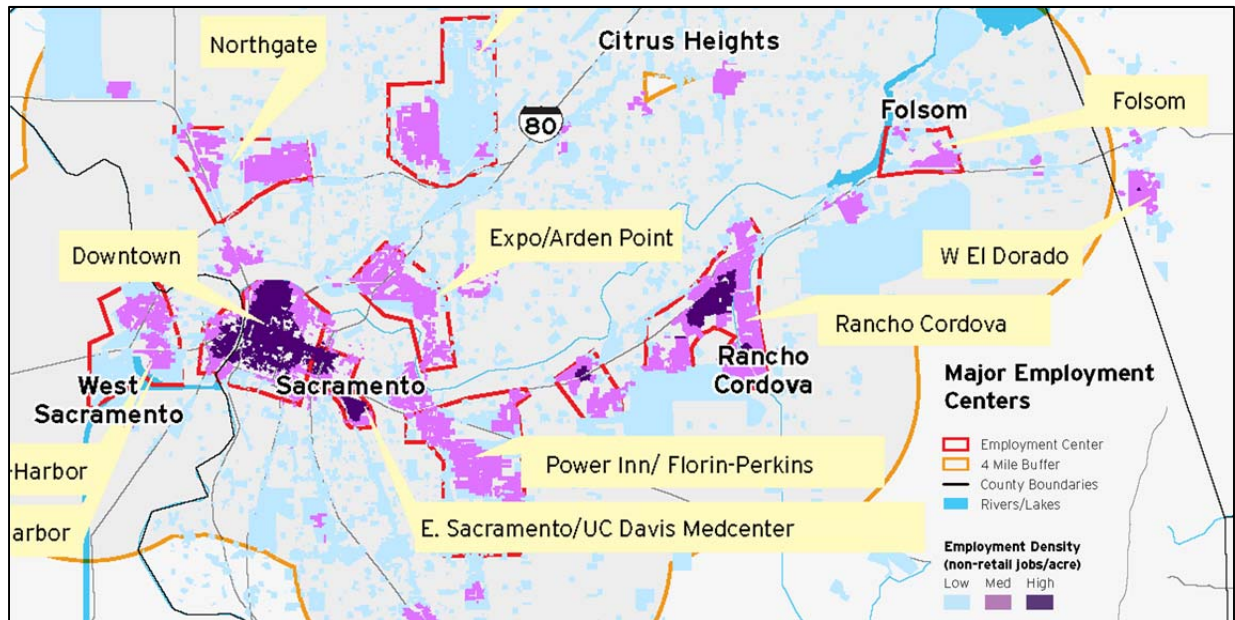


Figure 16 – Commercial Areas (Non-Retail)

The concentration of retail activities will also be found within these mapped hot spots. Areas with a high concentration of retail stores are important for the development of traffic management strategies, as these areas will often generate a high concentration of trips during weeknights, weekday days, and around holidays. Major regional shopping malls labeled in **Figure 17** include:

- **Old Town Sacramento** – The 28 acres on the Sacramento’s historic waterfront were the site of the raising of the Streets, the founding of the Transcontinental Railroad, the terminus of the Pony Express, and the home of California’s first business district, fueled by gold, agriculture and the river. Old Sacramento is a shopping and entertainment district as well as a tourist destination.
- **Pavillions** – An outdoor 77,711 sq. ft. shopping center with a village atmosphere along Fair Oaks Blvd. between Howe Ave. and Watt Ave.
- **Loehmann's Plaza Shopping Center** – This 135,500 sq. ft. outdoor shopping center is east of downtown Sacramento between Howe Ave. and Watt Ave.
- **Broadstone Plaza** – A regional center with over 532,000 sq. ft. of regional “Big Box” retailers, restaurants, and shop tenants at East Bidwell St. and Broadstone Parkway in Folsom.
- **Palladio at Broadstone** – More than 50 stores, entertainment, and restaurants at East Bidwell St. and Broadstone Parkway in Folsom.



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- **Folsom Premium Outlets** – An 80 store outdoor shopping mall located off US 50 at the Folsom Blvd. exit.
- **Folsom's Historic Sutter St.** – Folsom's Sutter St. has over 80 businesses and hosts community events. It is accessible by the Sacramento RT Gold Line at the Historic Folsom Station and is about five miles north of US 50.
- **El Dorado Hills Town Center** – El Dorado Hills Town Center is in the downtown district of El Dorado Hills and western El Dorado County, 20 miles east of Sacramento. Occupying 100 acres of land and, at completion, one million square feet of buildings, is a new mixed-use development. The Market Place at Town Center is a center for groceries, dining, services, and shopping.
- **Cameron Park Commercial Area** – Cameron Park is a community of more than 15,000 residents located in El Dorado County, California, approximately 30 miles east of Sacramento and 70 miles west of South Lake Tahoe. Today, it is a rural mix of large ranches, residential, and business properties that are growing.

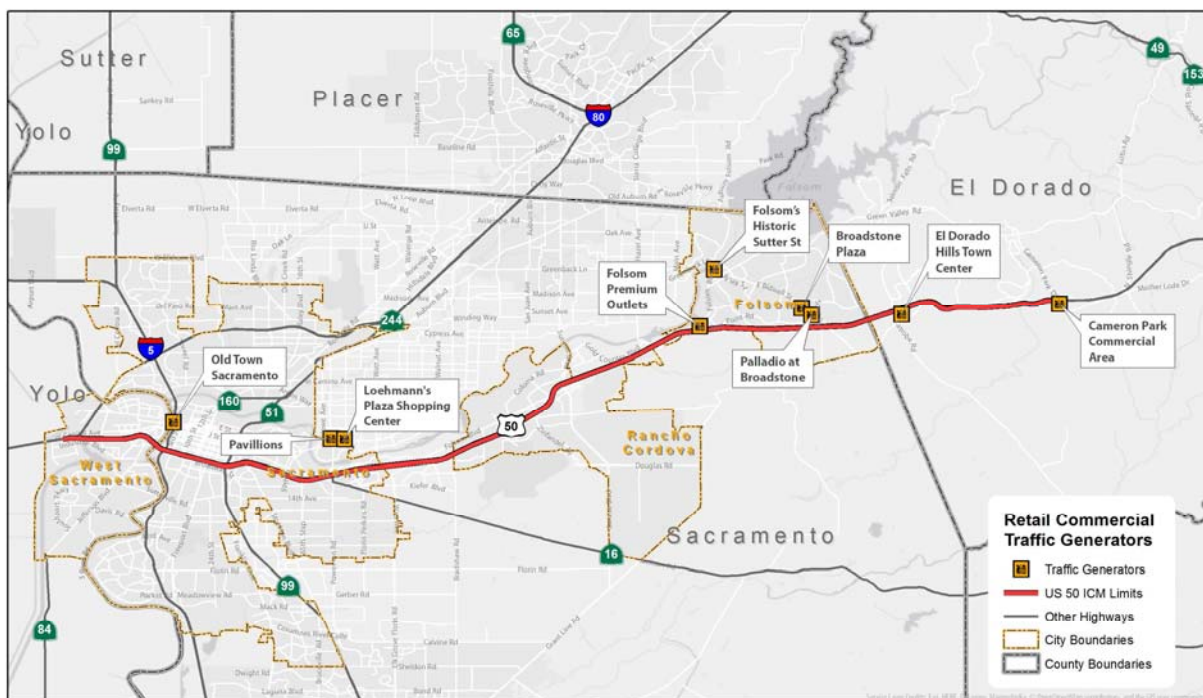


Figure 17 – Retail Commercial Traffic Generators

4.2. INDUSTRIAL AREAS

Warehouse and distribution centers are few along the US 50 corridor. The most significant traffic generators are:



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- **Port of West Sacramento** – is the leading export facility for rice in California. It opened in 1963 and remains an important infrastructure asset to the City of West Sacramento and the greater region. It admits international ocean-going vessels through a deep-water channel connecting it in West Sacramento with San Francisco Bay. The port's specialty is handling rice (bagged and bulk), as well as general bulk and project cargo. The port could see a large potential for cargo growth with cement imports, but it must overcome financial and structural challenges to do so.
- **Florin/Fruitridge Industrial Park** – the Florin/Fruitridge Industrial Park lies about two miles south of US 50 on Florin Perkins Rd.
- **Sacramento Mather Airport (MHR)** – Just 14-miles east of downtown Sacramento off of US 50, Mather Airport is the designated airport to capture regional air cargo growth. Currently, United Parcel Service (UPS) operates out of a 20,000 square foot facility. It also has additional warehouse, office, auto parking and trucking operations area that comprise 23 acres and has a 43-acre campus designated for future cargo growth. It is also home to the California Capital Air Show that attracts 100,000 attendees each fall.

4.3. EDUCATIONAL INSTITUTIONS

Universities and colleges can generate significant traffic to and from their campuses, particularly early in the morning and early evening, when multiple classes often start at the same time, and late afternoon and late evening, when classes end. There are several universities and community colleges in the area, but three stand out as traffic generators.

- **California State University, Sacramento (CSUS)** – is a four-year public university in the city of Sacramento. There are seven academic colleges offering 58 undergraduate majors. The campus is located on 300 acres with 3,500 trees; designated a Tree Campus USA. Enrollment in 2014 was 29,349.
- **Folsom Lake College** – is a comprehensive, public community college providing exceptional educational opportunities to the communities of eastern Sacramento and western El Dorado counties. The college serves approximately 8,700 students. The Master Plan calls for the college to grow to accommodate 15,000-20,000 students. In 2011, the Folsom Lake College Visual and Performing Arts Center opened to the public. The Harris Center includes an 850-seat main theater, a 200-seat city stage, and a 100-seat recital hall.
- **Sacramento City College** – is an accredited community college with located less than two miles away from US 50. Approximately, 24,000 students were enrolled in 2013 with over 800 faculty and staff as well. The main campus sprawls across 73 acres while the Davis and West Sacramento Centers cover only 9.5 additional acres.

There are many public and private elementary, middle and high schools within the study area, in addition to universities and community colleges. While large educational institutions can account for a significant portion of trips within the corridor, elementary, middle and high schools also generate a certain amount of trips. While the number of trips generated is smaller than large institutions, these trips tend to all occur at the same time (i.e., when school starts and ends). Depending on local conditions, such a sudden surge in traffic, coupled with crossing guards periodically stopping traffic to



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let students cross arterials, schools may significantly affect traffic operations on streets and arterials near each school. These often, though, are not located specifically on the major arterials.

4.4. MEDICAL CENTERS

While medical centers do not typically generate a large rush of traffic, the coming and going of employees, patients and visitors may generate noticeable traffic, particularly around the larger centers. Ambulances equipped with devices enabling them to preempt traffic signals may also cause significant disruptions to traffic patterns. As shown in **Figure 18**, major medical centers within the US 50 corridor include the following:

- **Sutter Medical Center** – of Sutter Health, Northern California's largest health network with 29 acute care hospitals, has more than 3,500 employees and specializes in primary care physicians and specialists, home health, occupational health, psychiatric care and more. The downtown Sacramento medical center consists of several facilities that include Ose Adams Medical Pavilion, Anderson Lucchetti Women's & Children's Center, and Sutter Center for Psychiatry. The Ose Adams Medical Pavilion provides emergency services that includes 54 beds, all fully equipped for extremely critically ill patients. They also offer a Pediatric Emergency Department with a separate waiting area and nurses and physicians specially trained in caring for children. Sutter Medical Center Sacramento is a teaching hospital for new physicians.
- **Mercy General Hospital** – is a not-for-profit hospital founded by the Sisters of Mercy, and has been at its current site in the heart of East Sacramento since 1925. The hospital has 342 beds and nearly 400 doctors. The Mercy Heart Institute and the Mercy Stroke Center are key features of the hospital.
- **UC Davis Medical Center** – is an academic medical center offering primary care for all ages, specialty care in 150 fields, and the latest treatment options and expertise for the most complex health conditions. The 619-bed acute-care teaching hospital maintains an annual budget of roughly \$1.7 billion. The Center is located on Broadway south of US 50 near downtown Sacramento.
- **Sacramento VA Medical Center** – is a 60-bed inpatient facility offering comprehensive health care services including medical, surgical, primary and mental health care. The medical center, which is comprised of 24 medical-surgical beds, 16 TCU beds, 10 ICU beds, 16 BHICU, and a four-room operating suite, also houses a cardiac catheterization lab, a gastrointestinal & endoscopy suite, angiography capability and 16,000 square-feet of research laboratory. The Center is located south of US 50 using the Mather Field/Rancho Cordova exit.
- **Mercy Hospital of Folsom** – Mercy Hospital of Folsom is a growing general acute care hospital providing medical surgical, intensive care, emergency, obstetrics and rehabilitation services to the vibrant communities of Folsom, El Dorado Hills, Cameron Park, Shingle Springs and Rescue. There are 106 licensed acute-care beds and 25 Emergency department beds. The hospital is located on E. Bidwell St. in central Folsom.



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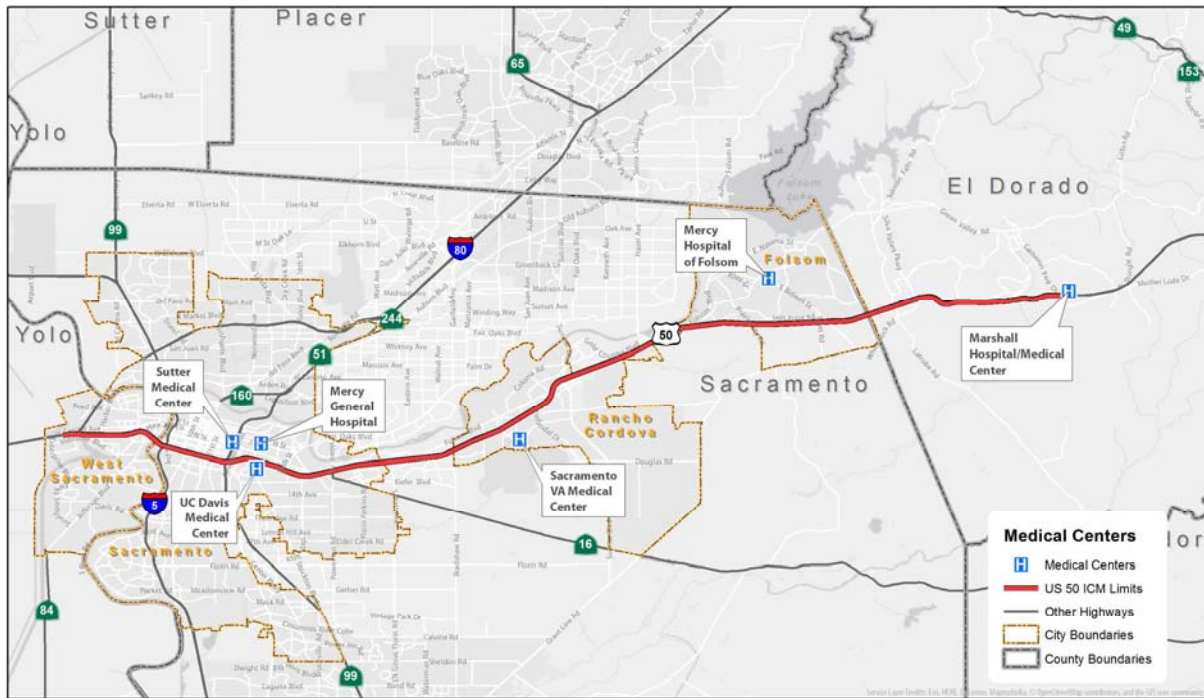


Figure 18 – Medical Centers

4.5. EVENT VENUES

Figure 19 – Event Venues maps major event centers and facilities that can on occasion generate unusual traffic or large traffic surges. The mapped facilities include:

- **[Future] Golden 1 Center** – The arena will host concerts, conventions and other sporting and entertainment events. Upon completion, it will replace Sleep Train Arena as the home of the Sacramento Kings of the NBA. The arena's capacity will be expandable to about 19,000 patrons, compared to Sleep Train Arena's 17,300. It sits partially on the site of the former Downtown Plaza shopping center. The \$477 million arena is expected to open for the 2016-17 season.
- **Sacramento Convention Center** – The complex is located in downtown Sacramento and consists of the Sacramento Convention Center, the Community Center Theater, the Memorial Auditorium, and the Jean Runyon Little Theater at the Memorial Auditorium.
- **California Capital Air Show** – Established in 2004, the annual California Capital Airshow averages 100,000 attendees per year and is held at Mather Airport located 10 miles from downtown Sacramento and adjacent to Rancho Cordova south of the US 50 ICM corridor.
- **Harris Center** – A performing arts venue comprised of three stages and located on the campus of Folsom Lake College at 10 College Parkway in Folsom, California. The facility operates as a \$50 million, 80,000 square foot regional arts center with theatre and music performances open



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to the public. It brings local and international artists, and is home to Folsom Lake College's visual and performing arts instructional offerings for the broader community.

- **Raley Field** – Located in West Sacramento, Raley Field is home to the Sacramento River Cats minor league baseball team in the Pacific Coast League. The stadium opened in 2000 and capacity is roughly 24,600 people.



Figure 19 – Event Venues



5. TRANSPORTATION MANAGEMENT ASSETS

This section describes existing transportation management assets and Intelligent Transportation Systems (ITS) assets supporting the operation of transportation systems and management of transportation activities within the study corridor. Elements reviewed in this section include:

- Traffic management centers
- Traffic monitoring systems
- Freeway ramp metering systems
- Arterial traffic management systems
- Incident/event management systems
- Transit management systems
- Traveler information systems

5.1. TRAFFIC MANAGEMENT CENTERS

Several traffic management centers currently support the management of traffic operations within the US 50 ICM corridor:

- Sacramento Regional Transportation Management Center (SACRTMC)
- Sacramento County Traffic Operations Center
- City of Sacramento Traffic Operations Center
- City of Folsom Traffic Operations Center
- City of West Sacramento Traffic Operations Center
- City of Rancho Cordova (Future System)

5.1.1. SACRAMENTO REGIONAL TRANSPORTATION MANAGEMENT CENTER (SACRTMC)

The Sacramento Regional Transportation Management Center (SACRTMC) is a facility jointly operated by Caltrans and the California Highway Patrol (CHP) and co-located with the CHP Sacramento Communication Center. Located near White Rock Rd. and Sunrise Blvd. and staffed 24 hours a day, seven days a week, this center is designed to help Caltrans staff manage traffic within the highly congested Sacramento metropolitan region and mountainous areas on I-80 and US 50. The focus is primarily state and Interstate highways in District 3 using an extensive network of sensors, cameras, changeable message signs (CMS), highway advisory radio (HAR), and Road Weather Information



Figure 20 – Sacramento Regional Transportation Management Center

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System (RWIS). The SACRTMC provides traveler information through media and provides dispatch for Caltrans resources.

At the heart of the SACRTMC is an Advanced Traffic Management System (ATMS) that enables system operators to monitor traffic conditions on regional freeways and to control various traffic management devices through a high-level, graphical user interface. Key functionalities supported by the SACRTMC ATMS include the ability to:

- Collect and process traffic data from inductive loop and microwave detectors
- Display traffic sensor data on electronic video map displays
- Access to video feeds from Closed-Circuit Television (CCTV) cameras
- Manage messages displayed on CMS
- Manage messages broadcast on HAR stations
- Link to Caltrans' lane closure tracking system
- Access CHP's Computer-Aided Dispatch (CAD) system

5.1.2. SACRAMENTO COUNTY TRAFFIC OPERATIONS CENTER (TOC)

Sacramento County has monitored their traffic signals for close to 40 years. The Sacramento County Traffic Operations Center (TOC) has been located in Rancho Cordova since 2001. The TOC houses the staff and equipment needed to operate, manage, and maintain traffic signals along the major arterials in Sacramento County.

The TOC can monitor and control remotely the operation of traffic signals connected to the Econolite Centrac's ATMS system. This system, which was initially deployed in 2001 and gradually expanded since then, now enables county staff to manage over 200 signalized intersections across the county areas and within cities for which a maintenance agreement has been made with the County. Within the US 50 corridor, this includes the city of Rancho Cordova.



Figure 21 – Sacramento County Traffic Operations Center

In addition to the traffic signals connected to the Centrac's system, Sacramento County has approximately 100 traffic signals controllers under the control of an older Multisonics Vehicle Management System (VMS) traffic signal control system. This system, while quite advanced for its installation in the 1970's, lacks the capabilities available with modern software-based traffic control systems. In the future, over 450 signals are envisioned to be connected to the Centrac's system. The TOC also has access to video feeds from 109 CCTV cameras and new sites are being added.



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Five individuals from the Sacramento County Transportation Department (SACDOT) are assigned to the TOC. The facility is staffed from 6:30 a.m. to 6:00 p.m. during weekdays, as well as during special events. While the TOC has been predominantly used to support traditional traffic signal operations, there has been growing interest in enhancing its ability, including developing abilities to support more adaptive signal operations and to provide video images to travelers.

5.1.3. CITY OF SACRAMENTO TRAFFIC OPERATIONS CENTER (TOC)

The City of Sacramento Traffic Operations Center (TOC) was launched around 1996 and is located in City Hall in downtown Sacramento. The TOC utilizes a computer-based traffic signal control system (TransSuite) that monitors traffic conditions and system performance. The system can actively select appropriate signal timing and staff can change timing manually, if required. Sensors can also detect the passage of vehicles, vehicle speed, and the level of congestion on local Streets. To supplement this information, CCTV surveillance equipment is being deployed at critical locations throughout the City with 110 locations already deployed and new sites being added.

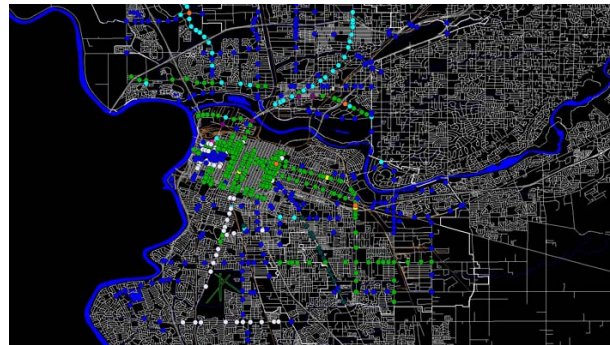


Figure 22 – City of Sacramento Traffic Operations Center

The City currently operates over 700 signalized intersections, of which approximately 300 are currently connected to the City's TOC. The facility is staffed from 7:00 a.m. to 9:00 a.m. and from 4:00 p.m. to 6:00 p.m. during weekdays, as well as during special events. While the TOC has been predominantly used to support traditional traffic signal operations, there has been growing interest in enhancing its ability, including developing abilities to support more adaptive signal operations and to provide video images to travelers.

5.1.4. CITY OF FOLSOM TRAFFIC OPERATIONS CENTER (TOC)

The City of Folsom Traffic Operations Center is located in City Hall. This center consists of three workstations connected to display monitors mounted on the wall for viewing of video and intersection data. Key functionalities of this TOC include the ability to monitor and control remotely the operation of traffic signals connected to the Econolite Centrac's ATMS system.

In addition to the traffic signals connected to the Centrac's system, Folsom has older 820A Series traffic controllers that interface with Peek Traffic Multisonics OSAM 32 On-Street Arterial Masters. The 820A OSAM also provides remote operations through an RS-232 port. Multisonics 820A controllers are networked into a regional traffic system using the Multisonics PC Central software package. This system, while it was quite advanced for its time, lacks the capabilities available with modern software-



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based traffic control systems. In the future, all signals are envisioned to be connected to the Centrac system, with approximately 80% of the City's signals are currently networked. The TOC can also access and manage video feeds from a network of 10 CCTV cameras with new sites being added.

Folsom Public Works has a Traffic Management Section Chief and a Traffic Control and Lighting Supervisor as staff assigned. The facility is staffed from 7:00 AM to 3:30 PM during weekdays, as well as during special events.

5.1.5. CITY OF WEST SACRAMENTO TRAFFIC OPERATIONS CENTER (TOC)

The City of West Sacramento Traffic Operations Center is located in City Hall. This center consists of a workstation and computer monitor for data management. Wall monitors exist to monitor their CCTV system. Staff has the ability to monitor and control the operations of their Naztec and 170 signal controllers. Staff access and manage video feeds from a network of 16 CCTV cameras.

West Sacramento Public Works has a Traffic Management Section Chief and an Engineering Assistant as staff assigned. The facility is staffed from 8:00 AM to 5:00 PM as well as during special events.

5.1.6. CITY OF RANCHO CORDOVA TRAFFIC OPERATIONS CENTER (TOC)

The City of Rancho Cordova is in the process of advertising for their own traffic control system. Their signals are being managed by Sacramento County through a maintenance agreement since City incorporation in 2003. Within the City of Rancho Cordova there are a mix of approximately 20 Naztec signal controllers and 13 Econolite traffic signals connected to the County's Centrac system along the designated alternate routes. In addition, Rancho Cordova currently has approximately 40 traffic signal controllers under the control of an older Sacramento County Multisonics Vehicle Management System (VMS) traffic signal control system. This system, while quite advanced for its installation in the 1970's, lacks the capabilities available with modern software-based traffic control systems. Sacramento County manages video feeds from approximately 30 CCTV cameras owned by the City.

5.1.7. EL DORADO COUNTY TRAFFIC OPERATIONS CENTER (TOC)

The County of El Dorado is in the process of completing installation of their traffic control system (Trafficware ATMS.NOW) and establishing communications with their signal controllers in the field. This center consists of a workstation and computer monitor for data management. . Staff will ultimately have the ability to monitor and control the operations of their Naztec, 2070, and 170 signal controllers.



5.2. TRAFFIC MONITORING SYSTEMS

This section provides a summary of systems that have been deployed along the US 50 corridor to monitor traffic demand and roadway conditions. These systems include:

- Freeway traffic detectors
- Arterial traffic detectors
- Travel-time monitoring
- CCTV cameras
- Performance Measurement System (PeMS)

5.2.1. FREEWAY TRAFFIC DETECTORS

Caltrans currently maintains an extensive network of traffic detectors on freeways. The following summarizes deployed field elements within the US 50 corridor:

Freeway mainline detectors shown in **Figure 23** maps the mainline detection stations maintained by Caltrans on US 50. Caltrans maintains 40 detection stations in the eastbound and westbound direction combined between Enterprise Rd. in West Sacramento and Cameron Park Dr. interchange in El Dorado County. Mainline detection stations are typically located just upstream of an on-ramp. Spacing between successive mainline detection stations varies between 300 feet to 1.3 mile, with an average of 0.5 mile. Single-loop in-pavement detectors are used at all detection stations. There are dual-loop locations, but not currently terminated to the controller to directly measure speeds. Consequently, all traffic detection stations only directly measure vehicle counts and loop occupancy. Speed estimates are provided for all mainline detectors from the vehicle counts and loop occupancy data.

- **HOV lane detectors** – in each direction, traffic detectors are deployed along the existing HOV lanes at the same locations as along the freeway mainline. Similar to the mainline detectors, these devices are used to obtain vehicle counts, loop occupancy data, and vehicle speed estimates.
- **On-ramp detectors** – all on-ramps along US 50 westbound, between Silva Valley Parkway and 15th St. in downtown Sacramento, are equipped with traffic detectors. From 15th St. west to the I-80 interchange, only Harbor Blvd. is instrumented. In the eastbound direction, Harbor Blvd. on-ramp in Yolo County is instrumented for on-ramp data collection. In Sacramento County to the El Dorado County line, Watt Ave. remains without eastbound on-ramp detection. In both directions, this is done using the passage detectors of the ramp metering system along US 50.
- **Off-ramp detectors** – off-ramps along US 50 from Harbor Blvd. in Yolo County to the El Dorado County line are equipped with traffic detectors. These are typically single-loops providing vehicle flow and loop occupancy data. They are primarily used to count the number of vehicles taking the ramps. The collected occupancy data may also be used to assess traffic conditions on the ramps. However, since the detectors are not currently linked to the traffic signals that may control traffic at the bottom of a ramp, the information they provide cannot currently be used



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to manage queues of vehicles that may threaten to spill onto the freeway mainline. Similar to the on-ramps, vehicle speeds are not estimated for these detectors.



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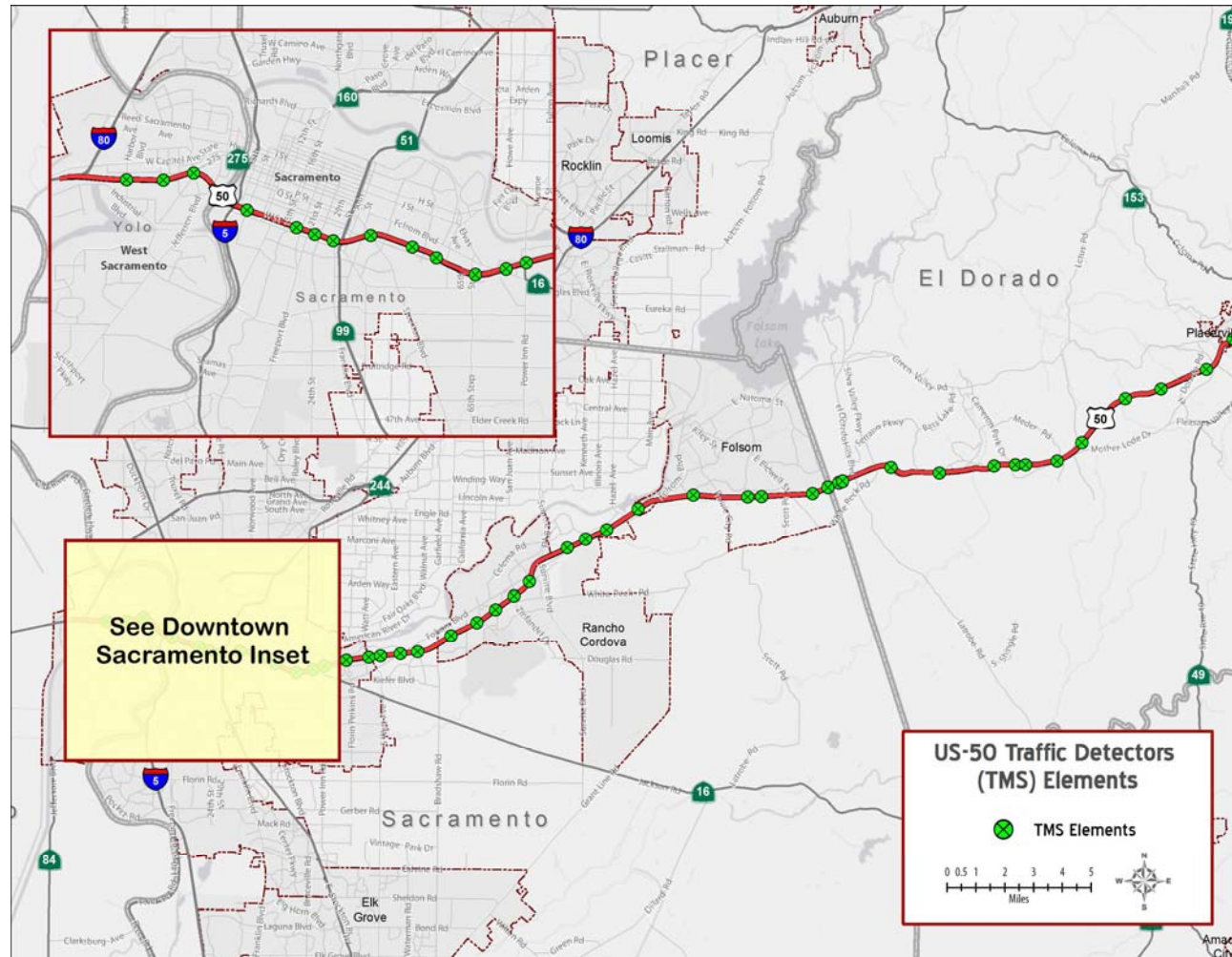


Figure 23 – Caltrans Mainline Freeway Traffic Detection Stations



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5.2.2. ARTERIAL TRAFFIC DETECTORS

Signalized intersections under the control of Sacramento County and the City of Folsom have traffic detectors installed on some of their approaches. These are traditional inductive loop detectors and some video detection systems used to support vehicle-actuated functionalities. Within the City of Sacramento, the downtown grid system of streets (I-5 to 35th St. east/west and C St. to Broadway north/south) are local Time-of-Day (TOD) operation with no detectors. Outside of the downtown area along the US 50 corridor, loop detectors are predominant, with approximately 30 intersections equipped with video detection in addition to loops; three intersections currently use only video detection. A growing number of intersections are being equipped with video detection systems.

Depending on the location, one or two of the following types of detectors may be present on the intersection approaches:

- **Stop line detectors** – detectors used to sense the presence of vehicles near the intersection stop line. Use of these detectors depends on their operational setting. When set in the “presence” mode, they are used to place calls to the signal controller for the display of a specific green phase whenever a vehicle is in the zone of detectors. When set in “passage” or “gap” time, they are used to monitor the interval between successive vehicles and to determine when to terminate an active green phase.
- **Advanced passage detectors** – detectors located some distance upstream of the stop line to sense approaching vehicles. These detectors are typically placed at a distance of three to five seconds behind the stop line and are used in actuated systems to place calls for an extension of the green signal each time a new vehicle is sensed to pass through the detection zone.

While most intersections are equipped with detectors, the availability of sensor data to conduct operational analyses depends on whether the generated data is forwarded to a central location. Depending on the system setup, individual detectors may be defined as local or system detectors. Local detectors strictly send their data to the local signal controller, whereas system detectors are also set to send information to a central traffic control system. In the former case, the collected data is typically dumped by the signal controller after use. In the latter, data may be available for retrieval from a central database.

The following provides a summary of the traffic flow data currently being collected by each agency:

- **Caltrans** – Caltrans-operated intersections along US 50 typically have detectors on most of their approaches to support actuated signal control. This includes both advanced and stop line detectors. Unfortunately, the information collected by these detectors is not currently forwarded to the regional TMC. Exception exists for Caltrans intersections operated by several of the local agencies. Historical data from the Caltrans intersections operated by the City of Sacramento (with the exception of Stockton Blvd) may be available through the TransSuite traffic control system. Caltrans intersections operated by Sacramento County communicate to



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the VMS system for traffic responsive operation in the County TOC, but no historical data is available. While a TransSuite traffic control system is currently being procured by Caltrans to support uniform statewide traffic signal operations, there is uncertainty as to when the intersections within the US 50 corridor will be connected to a system installed at the SACRTMC.

- **Sacramento County** – because of the age of the original traffic control system, legacy detection impairs data collection - many generations of hardware have been put in place. Speed is not measured and volume data is limited. Turning counts are not possible with existing detection configuration. With firmware upgrades to controllers, Centrac's can retrieve more extensive volume counts. Video detection has been evaluated and used for years for intersection control, particularly to substitute for bad loop locations, for bridge deck installations, and for specific needs of red-light enforcement. Presently there are approximately 24 intersections countywide with video detection. Video detection can operate the controller, but supplementary programming is necessary to layout count lines to count cars for volume collection.
- **City of Sacramento** – with the exception of intersections within the City's downtown street grid system, there is some type of vehicle detection. Loop detectors are predominant. Approximately 30 intersections are equipped with video detection in addition to loops. The City's primary setup is to use video only at the stop bar and loops for mid- and advanced-detection. The City's traffic signal control equipment has the capability to retrieve usable volume data and send to the TransSuite ATMS, but not obtained at this time. It would take additional setup and processing to get into a usable format whether coming from the loops or from video. Demand from within the City has been minimal.
- **City of Folsom** – the signalized intersections along US 50 operated by the city are equipped with traffic detectors for fully-actuated control. The City's traffic signal control equipment has the capability to retrieve usable volume and occupancy data and send to the Centrac's ATMS, but is only captured as needed for specific projects or studies. An example would be to monitor traffic response for a group of coordinated signals. Turning volume counts are not possible with existing detection configuration. Video detection is not currently used in the City.
- **West Sacramento** – most of the intersections along arterials of interest within the city are equipped with traffic detectors. Detection is performed through inductive loops at the intersections. Video detection is minimally used – at a couple of locations for side street monitoring. Generated detector data is not currently forwarded to a central location - is strictly used in a local control capacity. Further evaluation is needed of newer technology before implementing more widely.

5.2.3. TRAVEL TIME MONITORING SYSTEMS

Within the US 50 corridor Caltrans has plans to install 23 Bluetooth devices to measure travel times and travel patterns between specific points. **Figure 24** maps the proposed location of the devices. One device is currently in operation at Prairie City interchange.



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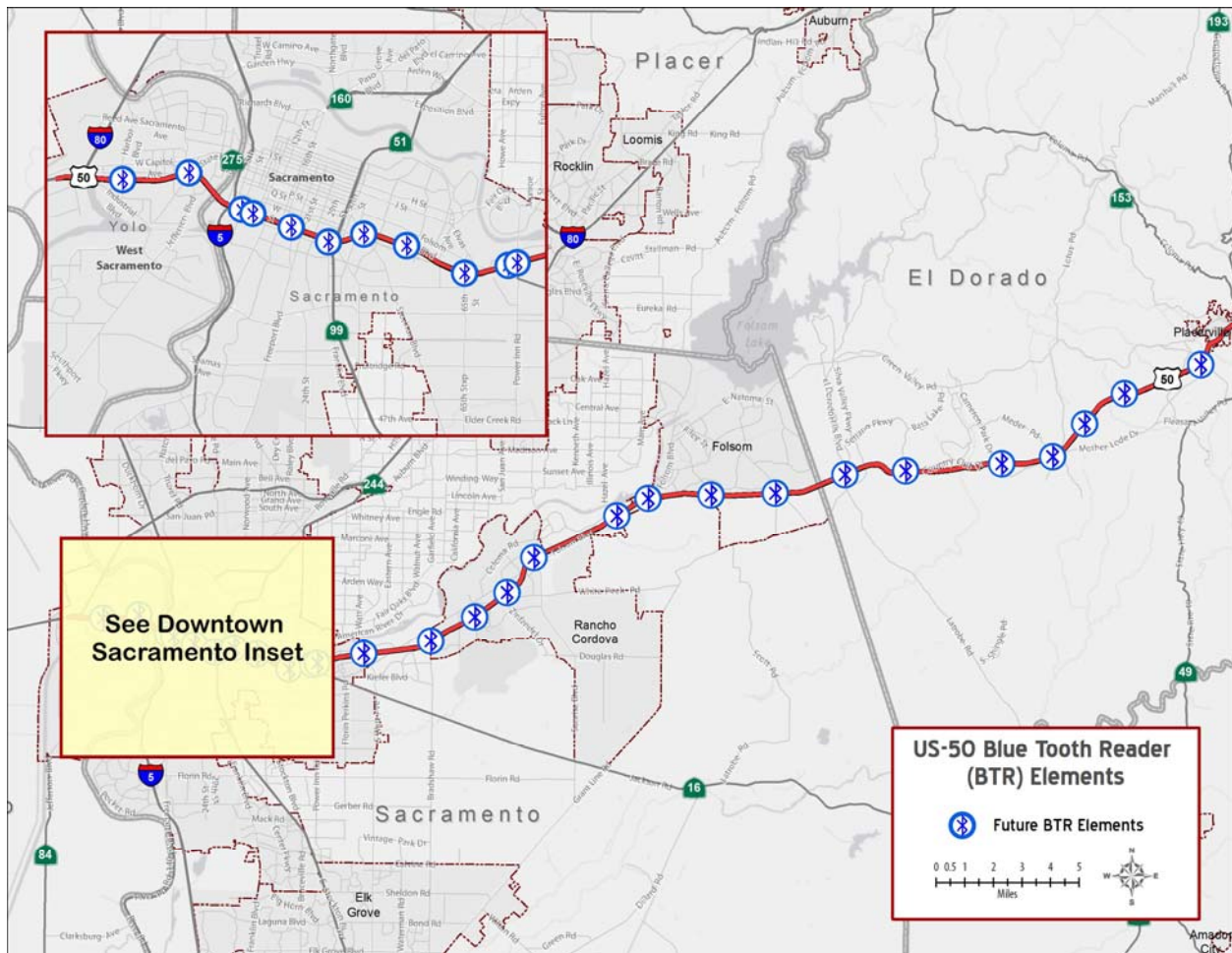


Figure 24 – Future Bluetooth Devices by Caltrans along US 50

Installation of these detectors typically involves installing field-processing units in existing traffic signal cabinets and establishing communication lines with a host data processing software. No additional communication infrastructure or poles would be required.

Sacramento County is starting to use Bluetooth devices at temporary locations – considering travel time studies along Watt Ave. between Jackson Hwy and Fair Oaks Blvd. No other agencies along the US 50 corridor are using Bluetooth devices.

5.2.4. CLOSED-CIRCUIT TELEVISION (CCTV) CAMERAS

Figure 25 maps the 19 CCTV cameras currently operated by Caltrans between Harbor Blvd. in West Sacramento and Cameron Park Dr. in El Dorado County along the US 50 freeway. Nine additional cameras are proposed within these limits for future installation.



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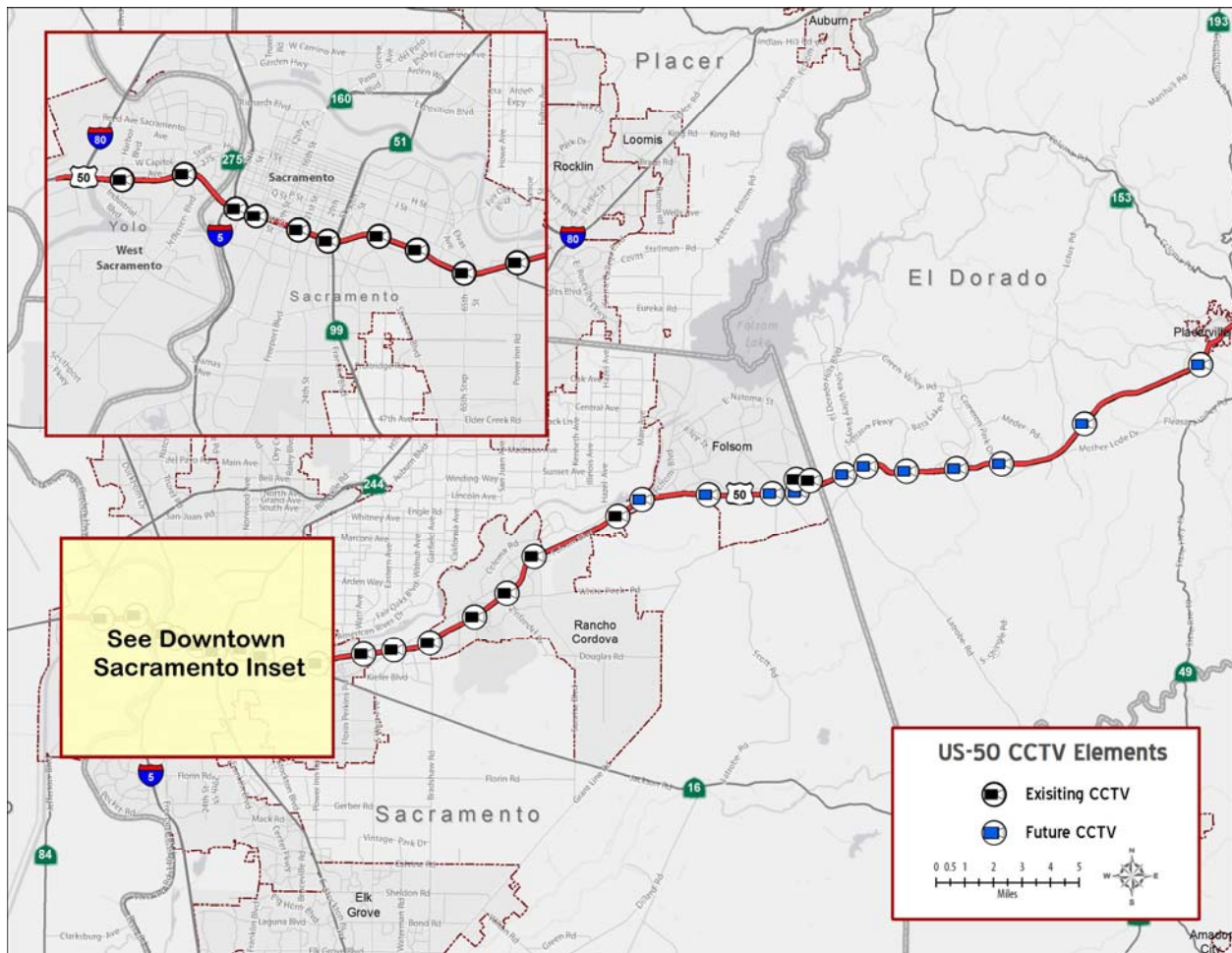


Figure 25 – Caltrans CCTV Camera Location

These cameras are available to the public through a feed accessible on a public website or shared with information service providers. As indicated, existing cameras provide a relatively good coverage (considering potential blockage by bridge peers, signs, etc.) of the freeway. Each camera has pan, tilt, and zoom capabilities and can be operated remotely from the SACRTMC.

In addition to the Caltrans-operated cameras, local jurisdictions also operate CCTV cameras to support their traffic management tasks. **Figure 26** maps the location of the local agency cameras along the US 50 corridor.

- **City of Sacramento** – currently operates 110 CCTV cameras citywide. They are aggressively adding more as funding allows. Along the suggested alternate routes within the US 50 corridor the city operates 23 CCTV cameras. The older cameras are analog with an encoder to convert to digital format. Newer cameras purchased are all digital. Video feeds from deployed cameras



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are available for display in the city's TOC. None is available to the public. Proprietary software provided by the camera vendors further allows panning, tilting, and zooming each camera.

- **Sacramento County** – currently operates 109 CCTV cameras to monitor traffic along key arterials. All are digital technology. Along the suggested alternate routes of US 50 the County operates 29 CCTV cameras, most owned by the City of Rancho Cordova. For all locations, the County's TOC can access the video feed directly. None is available to the public. Proprietary software provided by the camera vendors further allows panning, tilting, and zooming each camera.
- **City of Folsom** – currently operates 10 CCTV cameras, three along the suggested alternate routes within the US 50 corridor. All are digital technology. For all locations, the City's TOC can access the video feed directly. None is available to the public. Proprietary software provided by the camera vendors further allows panning, tilting, and zooming each camera.
- **City of West Sacramento** – currently operates 16 CCTV cameras. All are digital technology. For all locations, the City's TOC can access the video feed directly. None is available to the public. Proprietary software provided by the camera vendors further allows panning, tilting, and zooming each camera.



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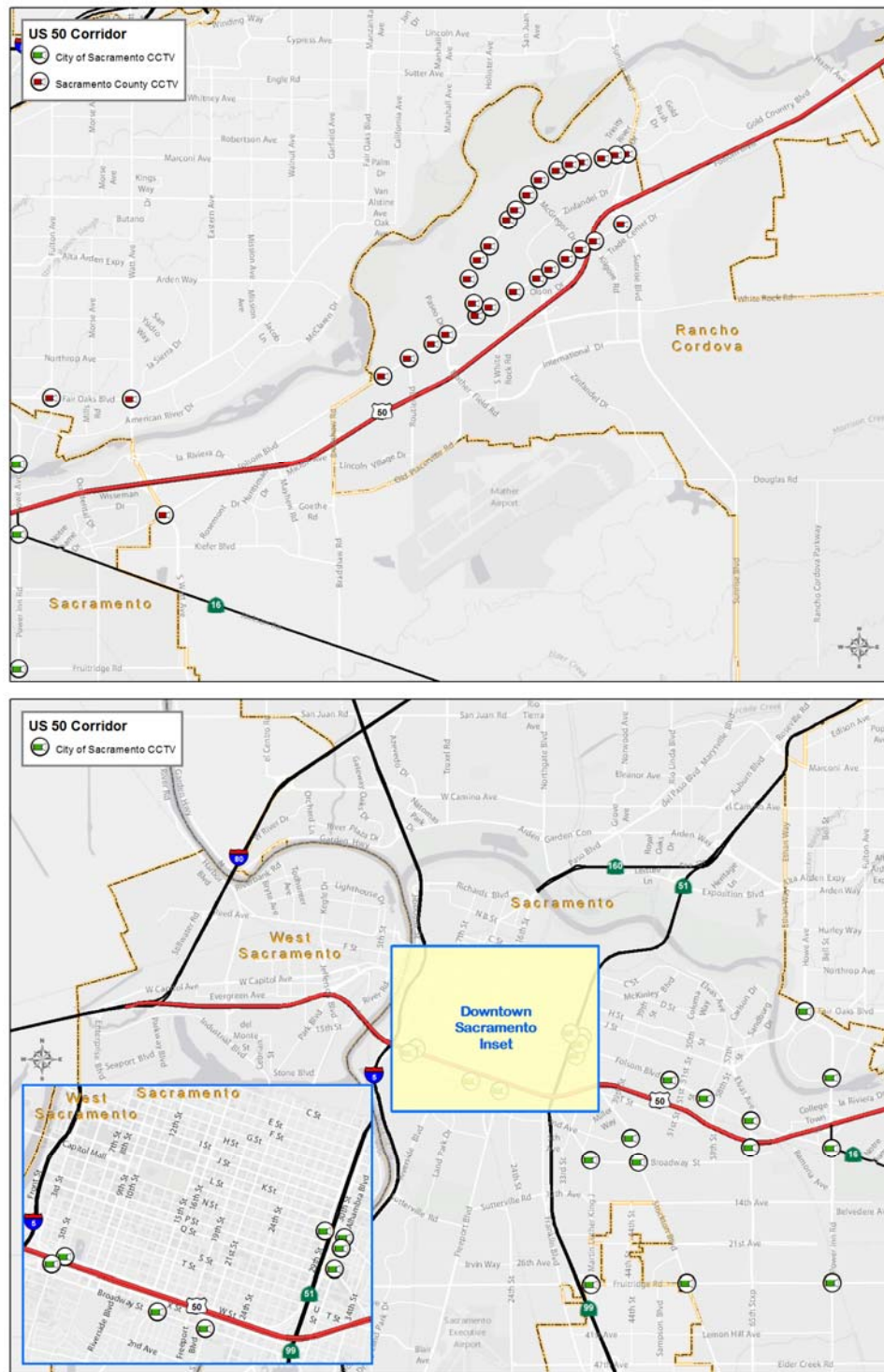


Figure 26 - CCTV Cameras Operated by the Local Jurisdictions



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5.2.5. PERFORMANCE MEASUREMENT SYSTEM (PEMS)

The Caltrans Performance Measurement System (PeMS) is a web-based tool that was developed by Caltrans and the University of California at Berkeley to retrieve, process, analyze and store data collected by traffic monitoring systems. A screenshot is shown in **Figure 27**. In operation since 1999, the system currently allows users to retrieve and analyze data from the following sources:

- Traffic detectors operated by Caltrans on freeway mainlines and ramps
- Caltrans' Lane Closure System
- Incident reports logged by the California Highway Patrol (CHP)

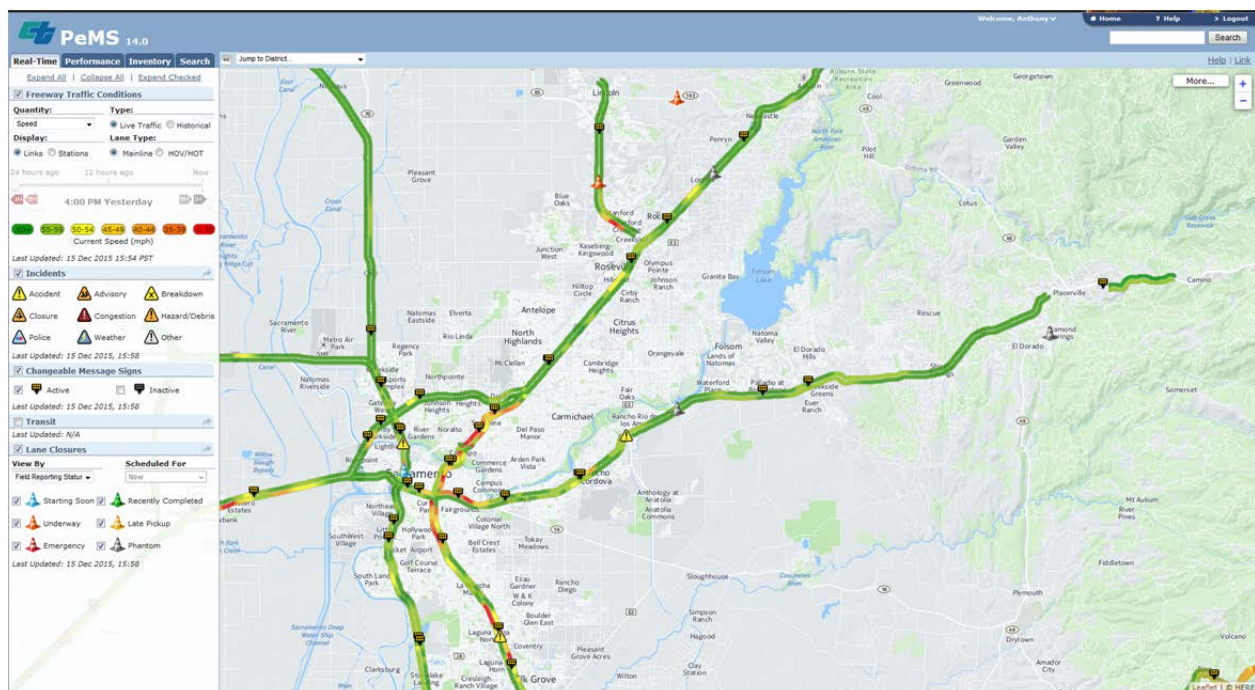


Figure 27 – PeMS Information System

In addition to providing access to real-time traffic sensor data, PeMS provides access to over ten years of historical data. The data analysis tools within PeMS further allow users to perform a wide range of investigations related to freeway operations. Among other things, the system may be used to retrieve information about the quality of data collected from traffic detectors; compile performance measures such as vehicle-miles traveled or delays for specific roadway segments, geographical areas, or periods; or develop regional aggregated traffic performance trends. It integrates a wide variety of information from Caltrans and other local agency systems including: traffic detectors, incidents, lane closures, toll tags, census traffic counts, vehicle classification, weight-in-motion and roadway inventory which are useful data for traffic analysis.



5.3. FREEWAY RAMP METERING SYSTEM

Ramp metering uses traffic signals at freeway entrances and freeway-to-freeway connectors to regulate the volume of traffic entering a freeway, as well as the spacing between entering vehicles. A long operational history has demonstrated that ramp metering has the potential to prevent freeway congestion, or at least delay its onset and reduce its severity, by eliminating problems associated with the entry of platoons of vehicles at freeway on-ramps. The result is increased freeway throughput, increased operating speeds, reduced delays and improved overall operations. Ramp metering also initiates smoother and safer merging operations, which, in turn, improves safety by reducing rear-end and sideswipe collisions.

Ramp meters are shown in Error! Reference source not found.. The US 50 on-ramps between Enterprise Rd. in West Sacramento and Silva Valley Rd. in El Dorado County are currently equipped with ramp meters in both the eastbound and westbound direction, with only three exceptions. Those exceptions are Jefferson Blvd. EB in West Sacramento before crossing the Sacramento River, 5th St. WB in downtown Sacramento before crossing the Sacramento River, and Folsom Blvd. EB loop near the city of Folsom. Planning for future installations include interchanges east of Silva Valley Parkway out to Cameron Park Dr. as traffic volumes dictate.

HOV lanes at metered ramps along US 50 are not metered. These lanes allow vehicles with two or more passengers to bypass the ramp meters completely.

Ramp metering on US 50 is deployed as traffic-responsive. In this mode of operation 3 to 4 fixed-time plans are available to implement within a control period, determined based on traffic flow data collected from the mainline traffic detectors.

On ramps where a single car is allowed to pass per green signal, the ramp meters can be programmed to allow between 240 and 900 vehicles/hour/lane. Where two or three vehicles are allowed per green signal, between 480 and 1320 vehicles/hour/lane can be allowed to enter the freeway mainline.



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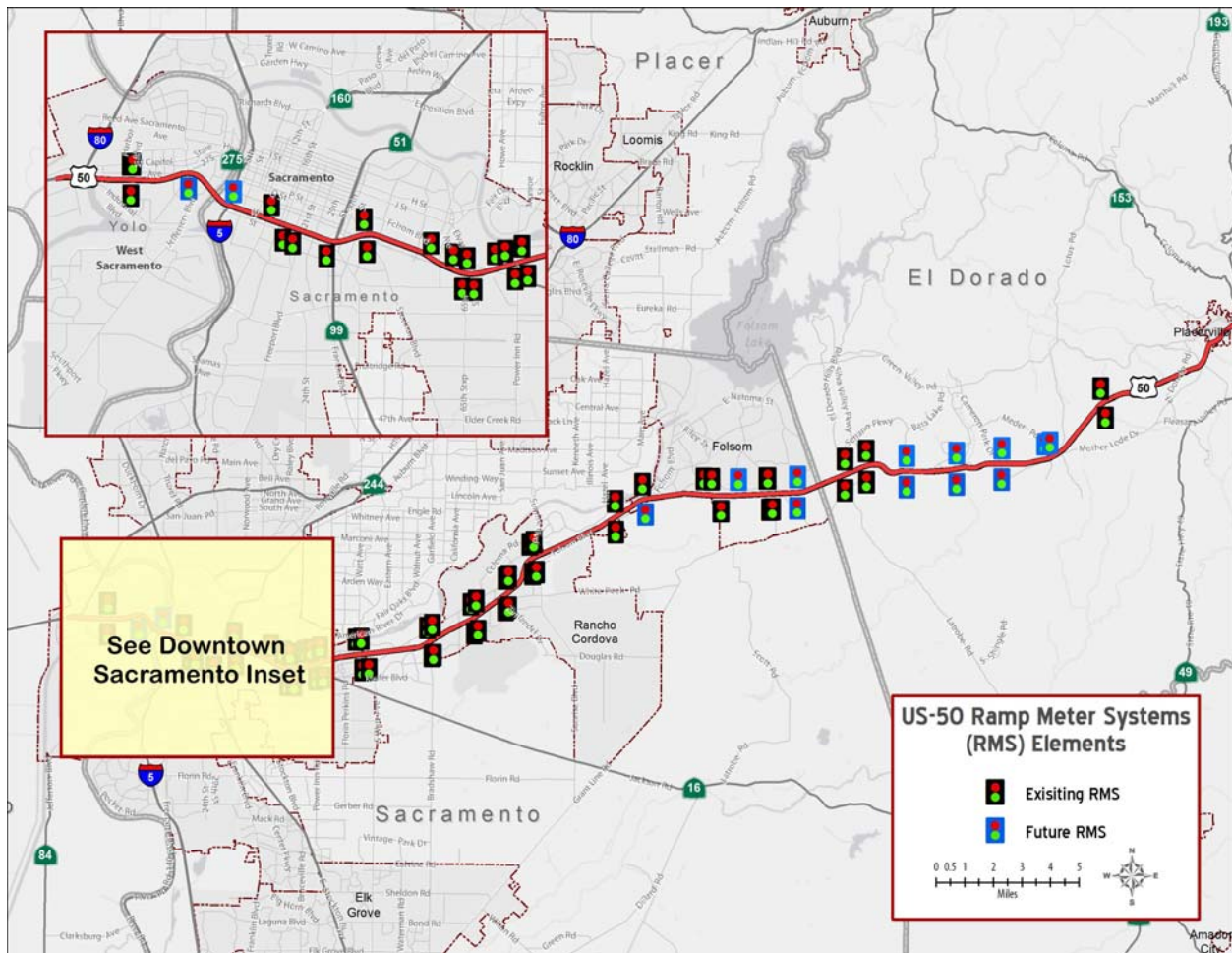


Figure 28 – Deployed Ramp Meters

5.4. ARTERIAL TRAFFIC MANAGEMENT SYSTEMS

Figure 29, Figure 30, and Figure 31 map the location, operational ownership, and type of control and system of the signalized intersections along key arterials within the US 50 corridor. A few stop-controlled intersections, pedestrian crossings, and railroad crossings are also mapped to help assess constraints to traffic management options.

AGENDA ITEM 10.4





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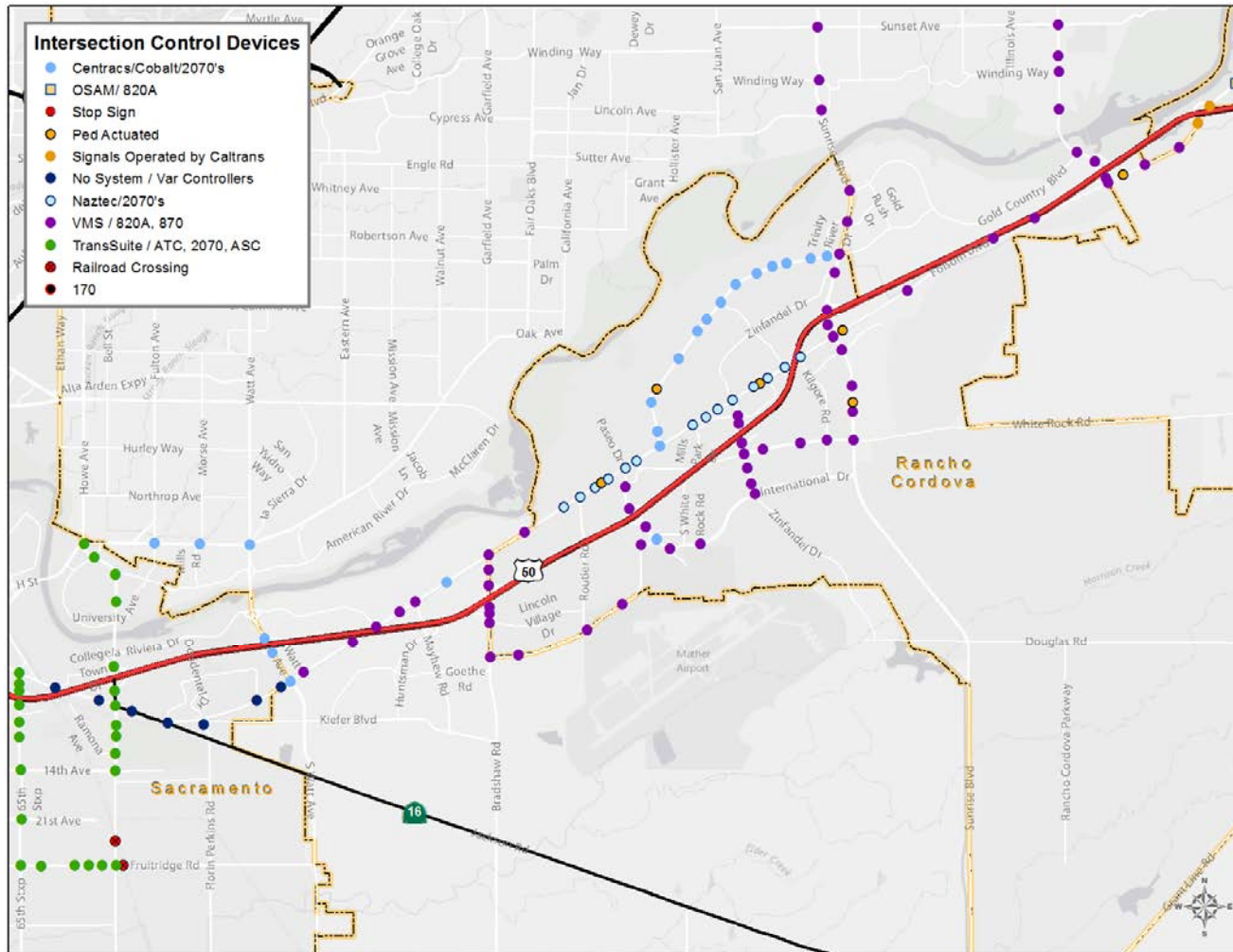


Figure 30 – Intersection Control within Sacramento County

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AGENDA ITEM 10.4





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To understand fully the operational context of the US 50, it is not sufficient to know simply where traffic signals are located. It is equally important to understand how these signals operate and what the capabilities are. To answer these questions, the following aspects of traffic signal control are discussed in more detail in the subsections that follow:

- Types of traffic signal control
- Multi-intersection signal synchronization
- Signal controllers
- Centralized control and monitoring capabilities

5.4.1. TYPES OF TRAFFIC SIGNAL CONTROL

Depending on the location, time of day and operating agency, individual traffic signals within the US 50 corridor may be operated according to one or more of the following modes:

- **Fixed-time or pre-time control** – mode of operation in which the signals cycle through the green, yellow and red indications following a predetermined sequence, without adjustment of the duration of each signal indication to the actual traffic demand in each cycle. Average historical traffic conditions are typically used to determine each signal duration.
- **Fully actuated control** – control using vehicle detection to trigger the display or determine the duration of specific phases. In this case, all approaches to an intersection are typically equipped with traffic detectors, either at the stop line, at some distance upstream from the stop line to provide detection three to five seconds before arrival, or at both the stop line and upstream location. The green signal is passed from one movement to next based on received detection calls, subject to maximum green constraints. Since phases without demand can be skipped, the phase sequence and phase duration can be entirely determined by the traffic demand.
- **Semi-actuated control** – type of actuated control using vehicle detection only for the minor movements. In typical setups, detectors may only be installed on the minor cross street and left-turn bays along the major street. The green signal is then programmed to dwell on the main traffic movement and is only transferred to a minor movement after a call for service is received. This again results in an operation in which the cycle length is variable.
- **Coordinated-actuated control** – variation of semi-actuated control in which a fixed cycle and a coordination reference point (offset) is imposed on the signal operation to promote synchronized operation with adjacent intersections. Similar to semi-actuated control, the duration of phases serving minor traffic movements is based on detection calls received. However, any unused green within the allotted time to minor phases is in this case transferred to the main phase.
- **Traffic-responsive control** – mode of operation in which the fixed-time plans to implement within a control period is determined based on traffic flow data collected from traffic detectors. Plan selection may be based on measured traffic volumes, observed traffic speeds, the directional distribution of traffic, time of day, special detection, and/or other inputs.



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Along the corridor, fully-actuated and coordinated-actuated are the dominant modes of operation during peak periods. Traffic-responsive control is used by Sacramento County along specific arterials and at critical intersections. Most of the intersections along major arterials are equipped with detectors allowing the signal controllers to adjust the duration of each phase to the actual traffic demand. During periods of low demand, the signals typically cycle through a set of phases without any defined cycle length. However, to enable synchronized operations with other signals, a specific cycle and offset is typically imposed at key intersections during peak periods. Only a few intersections may still operate in a fully actuated mode during this period.

5.4.2. MULTI-INTERSECTION SIGNAL SYNCHRONIZATION

To facilitate smooth progression across successive intersections, groups of signals along arterials often have their operation synchronized. This practice typically results in the imposition of a common cycle length to all intersections in the group, and in the establishment of fixed time points, or offsets, at which a reference phase must start at each intersection.

Several key arterials within the US 50 corridor have segments where signals are synchronized. Synchronization is planned in other segments as controllers are upgraded and communications is improved. While efforts have been devoted to coordinate traffic signals along key arterials, significant breaks in synchronization still exist, largely because of distance between signalized intersections and adjacent street parking and driveway friction. This is particularly true for segments of Folsom Blvd. in the City of Sacramento and Sacramento County, Stockton Blvd. and Fruitridge Blvd. in the City of Sacramento, and Capital Ave. in West Sacramento. Caltrans-owned intersections within the boundaries of Sacramento City and County are not obstacles to synchronization since operations have been released to each jurisdiction. In other jurisdictions along the US 50 corridor, Caltrans typically operates its signals independently from nearby city-controlled signals. Since most of these are operated in a vehicle-actuated mode throughout the day, they may not always operate with the same cycle as nearby signals. However, while no formal synchronization may exist, some indirect synchronization may still result from the implementation of signal timings designed to accommodate the cyclic traffic patterns that are normally produced by the nearby signals.

5.4.3. SIGNAL CONTROLLERS

There are two dominant types of signal controller used along the US 50 corridor. They include the newer Type 2070 used by all the agencies communicating to ATMS in their TOC's, and the Multisonics 820A controller tied to the antiquated VMS in Sacramento County and City of Folsom. Additionally, Folsom has several newer Cobalt family advanced transportation controllers in operation. Cobalt is designed to provide a combination of ATC controller open architecture functionality with the latest handheld technology and applications. The City of Sacramento is dealing with older controller technology within downtown street grid system in a time-of-day operations. Along the US 50 alternate routes within the City there are a mix of Traconex 390's, Econolite ASC2's, BiTrans 170's, as well as 2070's.



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5.4.4. CENTRALIZED CONTROL AND MONITORING CAPABILITIES

Figure 32 inventories the traffic management systems currently used by individual jurisdictions to control the traffic signals under their jurisdiction. The following key observations can be made from the data:

- A variety of commercial traffic control systems are used to support traffic signal operations. Systems in operation currently include systems developed by TransCore (TransSuite), Econolite (Centrac), and the Multisonics VMS traffic control system.
- Not all systems are currently set up to forward traffic detection data to the associated traffic operations center.
- While Caltrans does not currently operate a centralized traffic signal control system, the agency has recently procured a TransSuite system from TransCore for the monitoring and management of all traffic signals operated by the agency within California. While the system is currently operational at the City of Sacramento, it is still unknown when all Caltrans-operated intersections within the US 50 corridor will be connected to the centralized system.

Jurisdiction	Econolite Centrac	TransCore TransSuite	Multisonics VMS	Trafficware ATMS.NOW
Caltrans		●		
City of Sacramento		●		
Sacramento County	●		●	
City of Folsom	●		●	
City of West Sacramento				●
El Dorado County				●

Figure 32 – Local Jurisdiction Central Traffic Management Systems

5.5. INCIDENT/EVENT MANAGEMENT SYSTEMS

Assets used to assist with the management of incidents and events within the US 50 corridor include:

- Caltrans Planned Lane Closure System



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- California Highway Patrol (CHP) Computer-Aided Dispatch (CAD) system
- Freeway Service Patrol (FSP)
- Transportation Management Teams (TMT)

5.5.1. CALTRANS PLANNED LANE CLOSURE SYSTEM

Caltrans' Lane Closure System (LCS), shown in **Figure 33**, allows Caltrans traffic managers to track lane, ramp, and road closures due to incidents, construction and maintenance. This statewide system tracks active closures as well as all planned closures for the next seven days from any given day. District TMCs throughout the state can utilize this information to monitor both their own closures as well as those planned on highways in adjacent districts, as well as to coordinate closures with neighboring districts.

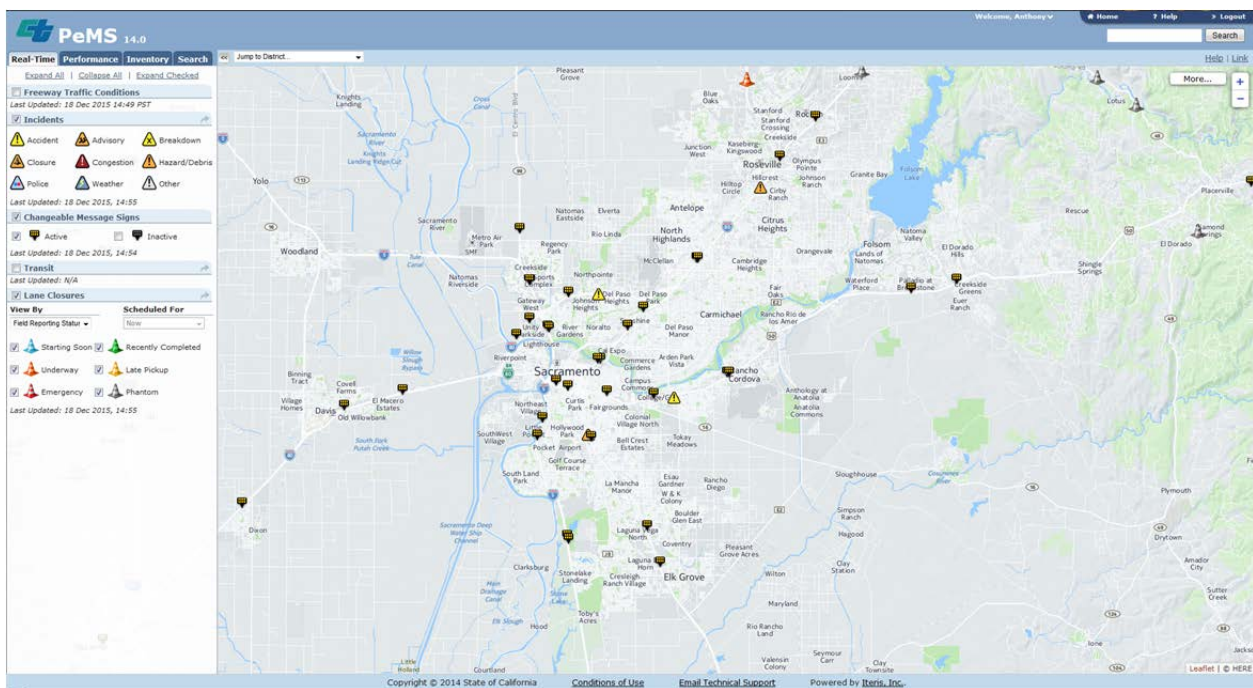


Figure 33 – Caltrans Planned Lane Closure System

5.5.2. CALIFORNIA HIGHWAY PATROL (CHP) COMPUTER-AIDED DISPATCH (CAD) SYSTEM

The CHP CAD system is a secure system used by the CHP to support dispatch and response functions. It links all dispatcher workstations, provides reliable and accurate incident information, and both standardizes operational procedures and decreases incident response times by eliminating previously used manual processes. Although not a Caltrans system nor originally intended for Caltrans use, this system has become one of the primary methods for disseminating incident information within TMCs as it is often the point of first notification for an incident and because it provides regular updates as a situation progresses.



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5.5.3. FREEWAY SERVICE PATROL (FSP)

The FSP is service supported by the Sacramento Transportation Authority, Caltrans, and the California Highway Patrol, with major funding assistance provided by SACOG as a component of its freeway call box program. It consists of privately owned tow trucks that patrol designated routes on congested urban California freeways and offer free help to stranded motorists. FSP services include changing flat tires, jump-starting dead batteries, refilling radiators and temporarily repairing leaking hoses, or providing a gallon of fuel. If the FSP cannot get a stranded car running within ten minutes, it will tow the vehicle to a nearby CHP designated Safe Zone. The FSP also assists emergency responders in clearing traffic accidents. The goal of the FSP is to maximize the effectiveness of the freeway transportation system by promptly removing disabled/stranded vehicles from the freeway.

The FSP program operates on the following Sacramento Freeways:

- SR 99 – Grant Line Rd. north to the SR 99/US 50 Interchange
- SR 51 – SR 99/US 50 Interchange northeast to the I-80 Interchange
- I-5 – Elk Grove Blvd. to the Highway 99 Interchange north of downtown Sacramento
- US 50 – I-80 in Yolo County east to Scott Road
- I-80 – Mace Blvd. in Yolo County to the Placer County Line

FSP typically operates Monday through Friday from 6:00 a.m. to 9:00 a.m. and from 3:00 p.m. to 6:30 p.m., except holidays.

5.5.4. TRANSPORTATION MANAGEMENT TEAMS (TMT)

A TMT is a group of Caltrans employees that can be dispatched from the SACRTMC 24 hours a day, to assist the CHP with emergency lane closures and entire freeway closures following an accident or emergency incidents such as spilled cargo or natural disasters that may obstruct the roadways. The TMT assists by monitoring freeway back-ups, performing traffic analyses, providing detour recommendations, helping with the cleanup of incident scenes. The TMT also communicates vital information to the SACRTMC and may use portable changeable signs to inform motorists of expected delays or recommend detour information.

5.6. TRANSIT MANAGEMENT SYSTEMS

This section provides a summary of the transit management systems currently deployed within the US 50 corridor. These types of management systems typically include:

- Automated vehicle locations (AVL) systems
- Automated passenger counting (APC) system
- Transit signal priority (TSP) systems



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5.6.1. AUTOMATED VEHICLE LOCATIONS (AVL) SYSTEMS

All three major transit providers along the US 50 corridor utilize AVL systems on fixed route buses. The different systems employed are summarized below.

The Sacramento RT full-size bus fleet is fully equipped with Clever Devices AVL. Currently, the RT trains do not have AVL, but are expected to implement them by late 2016, depending on funding availability. Sacramento RT full-size coaches are also equipped with the Clever Devices stop announcement feature implemented to meet ADA requirements. The system also collects real-time location data that is used to provide traveler information via the RTTracker website or Mobile Web App (www.sacrt.com/tracker1.stm) as shown in **Figure 34**. The time and location data is also used by RT for on-time performance evaluations and other planning purposes.

RT is demonstrating the Clear Devices IVN-4S driver control/on board computers in four Light-Rail Vehicles (LRVs). The development of a Train Time website is currently under development that will allow RT riders to obtain predictive train arrival information on the RTTracker website.

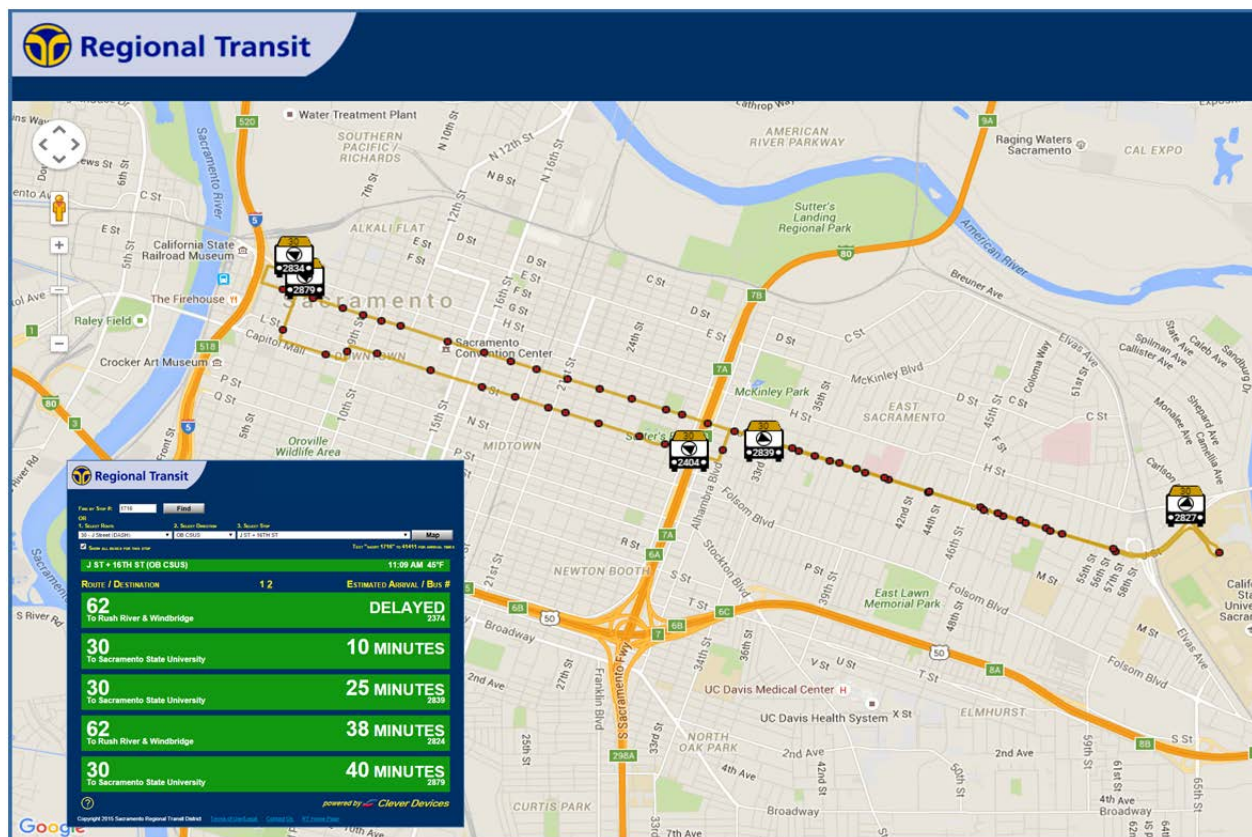


Figure 34 – Sacramento RT RTTracker Real-Time Bus Information



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Yolobus has used AVL technologies on its bus fleet since 2007. The current Ranger AVL technology allows transit operations staff to monitor the location, on-time performance and activity of buses as well as provide data for stop annunciators, in-vehicle LED signs, bus stop electronic signs and the Yolobus real-time trip-planning web site (avl.yctd.org/), illustrated in **Figure 35**.



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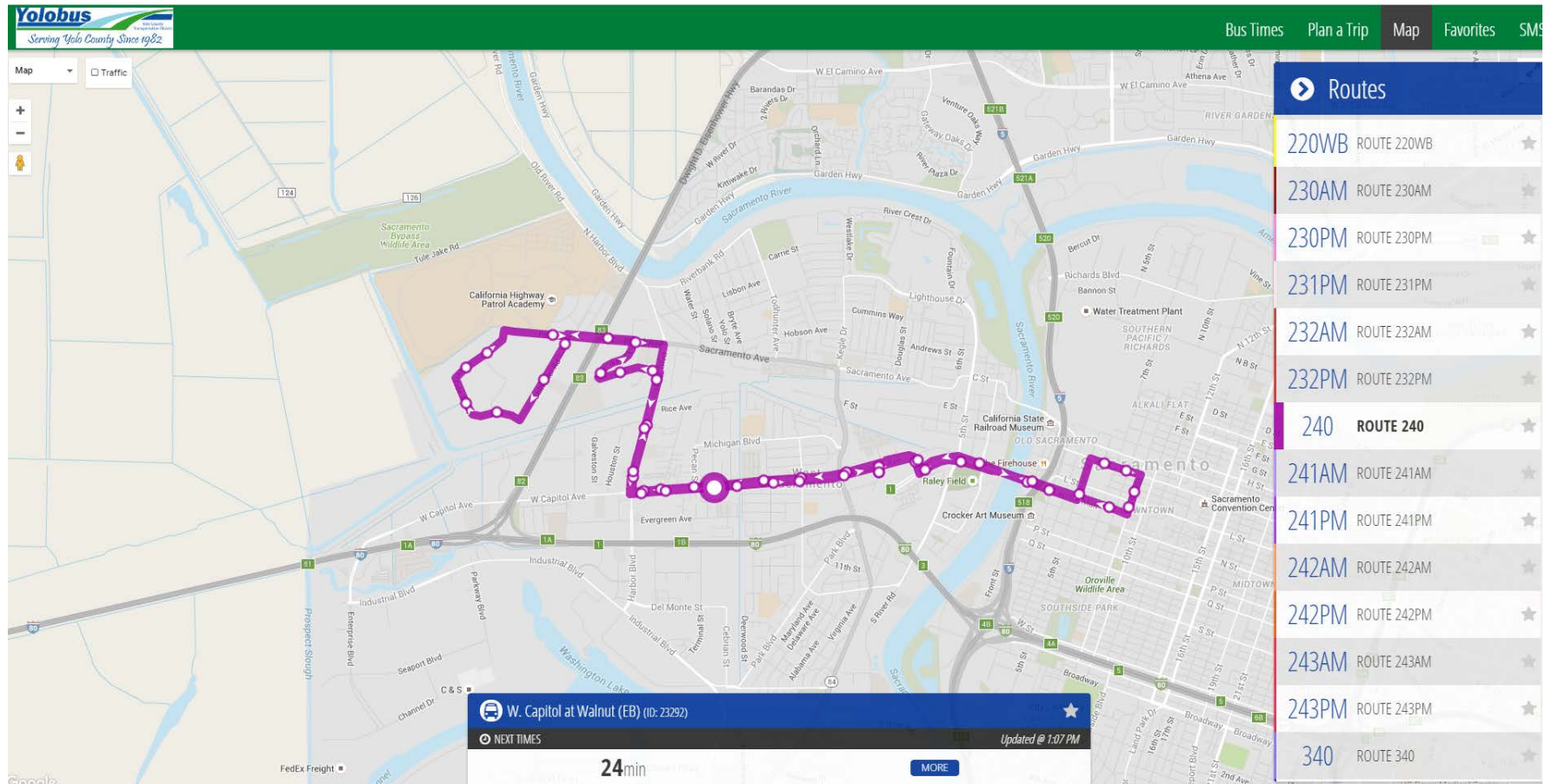


Figure 35 – Yolobus Real-Time Trip Planner



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El Dorado Transit has AVL technologies on all buses. This system provides passenger notifications via the *Routematch* system that allows users to text the bus stop number to the service and real-time bus arrival will be provided. El Dorado Transit uses the *RouteShout* web-based app (www.routeshout.com) as shown in **Figure 36**, below, to provide real-time information to travelers.

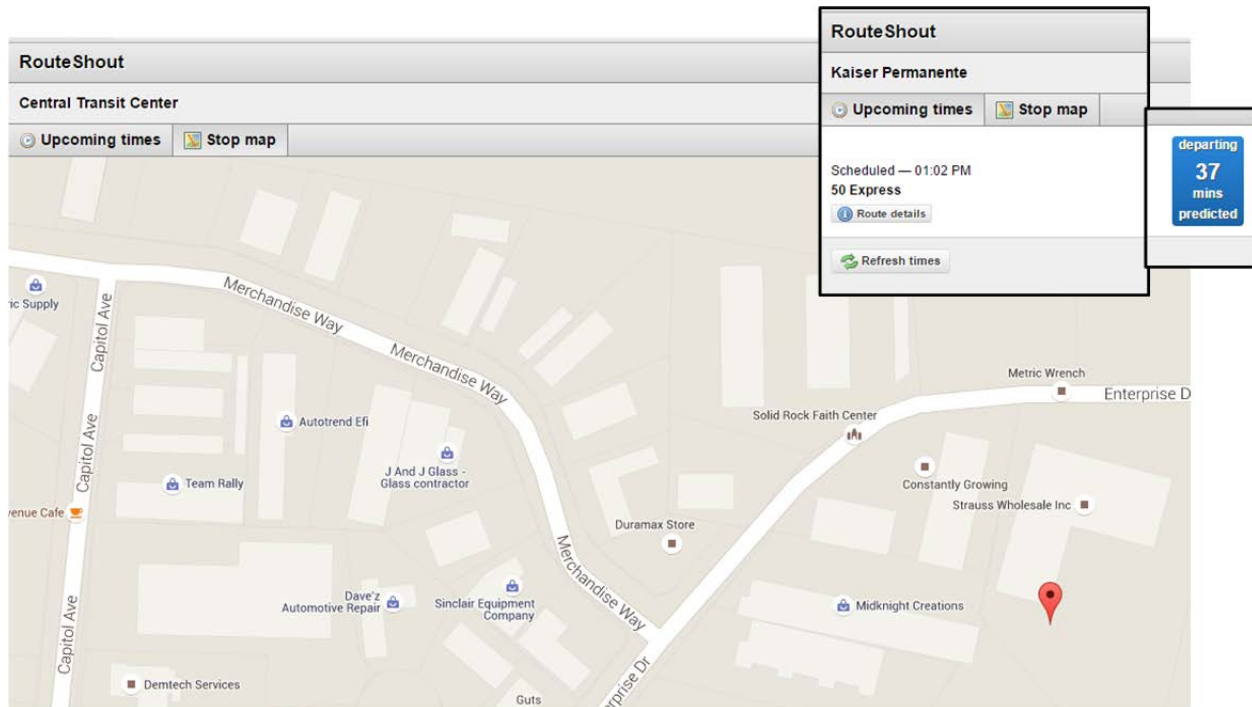


Figure 36 – El Dorado Transit *RouteShout* Real-Time Traveler Information

5.6.2. AUTOMATED PASSENGER COUNTING (APC) SYSTEM

Sacramento RT's full-size bus fleet is fully equipped with APCs that provide boarding and alighting data by time-of-day and location. An in-house system was developed to process data that had been collected using this system. RT does not utilize real-time passenger counts at this time. The RT trains do not have the APC system but are expected to implement them by late 2016, depending on funding availability.

Yolobus does not utilize APC technologies as of this date. Plans could change depending on funding availability.

El Dorado Transit does not currently have APC systems installed, but long-range planning documents have stated that APC systems will be investigated should funding become available.

5.6.3. TRANSIT SIGNAL PRIORITY (TSP) SYSTEMS



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Sacramento RT has not fully implemented TSP systems, but a 2006 transit priority demonstration project evaluation along Watt Avenue reported a four percent reduction in travel times for buses using the TSP, but did not show an overall improvement in travel time reliability for buses along that route. However, for RT trains all intersections have train as priority except downtown I Street and J Street.

Yolobus has not implemented TSP systems. Plans could change depending on funding availability.

El Dorado Transit has not implemented TSP systems, but planning documents indicate a desire for future implementation.

5.7. TRAVELER INFORMATION SYSTEMS

Information systems currently in operation along the US 50 corridor include the following:

- Changeable message signs (CMS)
- Highway advisory radios (HAR)
- STARNET / 511 traveler information services

5.7.1. CHANGEABLE MESSAGE SIGNS (CMS)

Caltrans TMC operators use CMS to inform motorists about traffic advisories, delays, and emergency conditions. Some CMS are also used to display estimated travel times to specific locations along the current freeway, as well as comparative travel times to a specific destination along the current freeway and an alternate freeway.

Figure 37 maps the location of Caltrans CMS's near the US 50 corridor. Only seven signs are located along the study section of US 50 – four westbound signs, three eastbound. There are plans for two future installations – one eastbound sign west of the I-5/US 50 interchange, one westbound sign east of Cameron Park Blvd.



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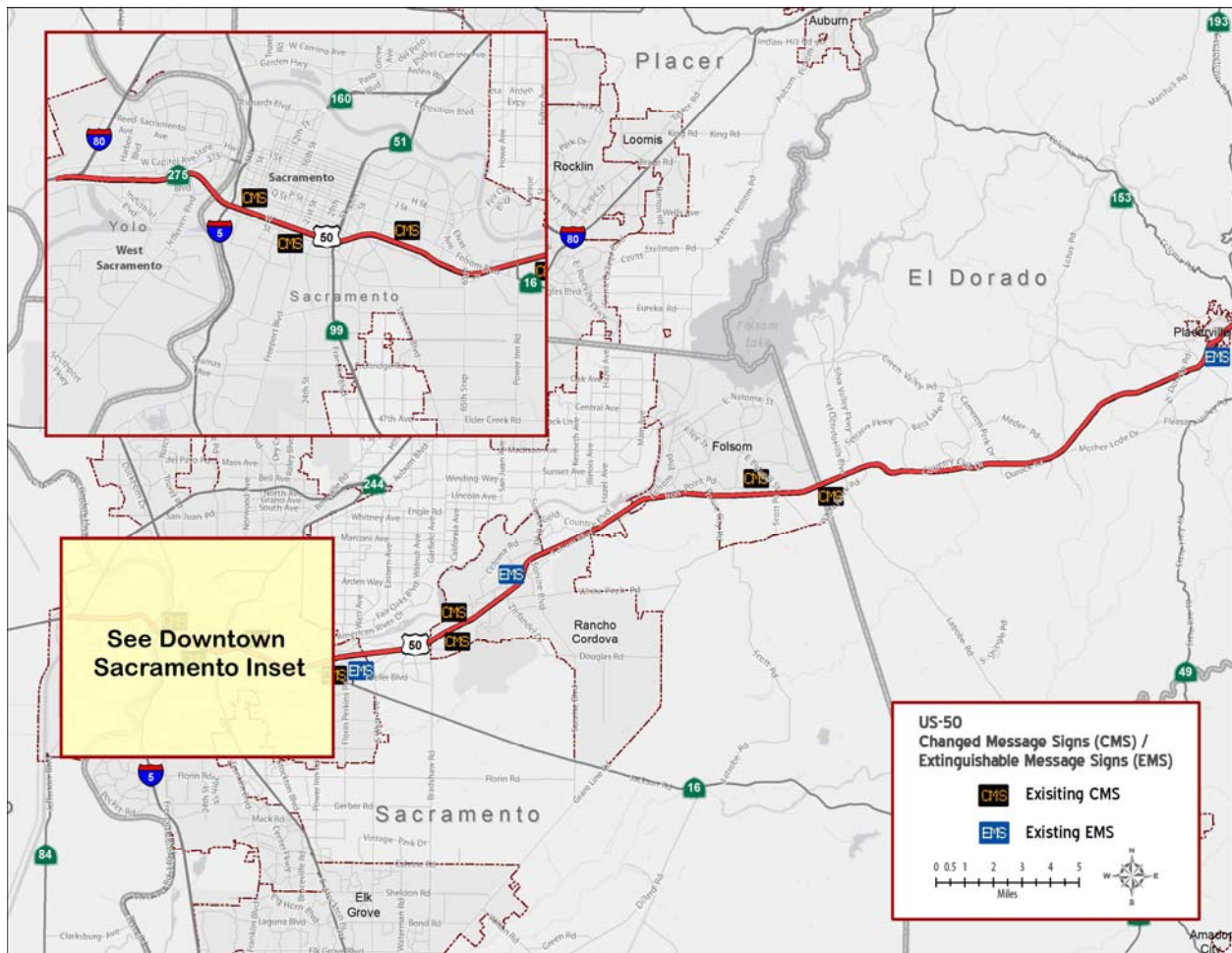


Figure 37 – Caltrans Changeable Message Signs

As shown in **Figure 38**, CMS's are full matrix display signs capable of displaying a variety of character heights and up to three lines of text. CMS's display text messages in all capital letters, while the number of characters per line varies from 9 to 16, depending on need. Some situations require messages that are longer than a sign is capable of displaying at one time. These situations require sequenced messages (also known as extended mode messages), which means the message is spilt into two or more parts that are sequenced on the CMS. However, this option is not always favored as it increases the time required to read the displayed message.



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Figure 38 – Typical Freeway Changeable Message Sign (Xenon)

Within District 3, individual CMS's are controlled through the ATMS application installed at the SACRTMC. This application allows the operator to use a map-based display to view which signs have been activated and what messages are currently being displayed. Additionally, automated CMS systems are utilized on various routes to provide estimated travel times to commuters.

In addition to CMS, District 3 has two Extinguishable Message Signs (EMS) in operation on US 50 – one eastbound approaching Watt Ave., one westbound approaching Zinfandel Ave. EMS are designed to have one or more messages that can be displayed or deleted as required. Such a sign can be changed manually, by remote control, or by automatic controls that can “sense” the conditions that require special sign messages. These are typically used in conjunction with HAR transmitters and can display a fixed message such as “TUNE RADIO TO 1610 AM”.

On the arterial street network, Sacramento County TOC operates four CMS at three locations –

- Northbound Sunrise Blvd. just south of Folsom Blvd.
- Madison Ave. just west of Auburn Blvd. - two sided and located in the median. **(Figure 39)**
- Westbound Madison Ave. just east of Sunrise Blvd.



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Figure 39 – Changeable Message Sign (2-sided) Operated by Sacramento County

5.7.2. HIGHWAY ADVISORY RADIO (HAR)

One HAR transmitter is in operation by Caltrans along the US 50 corridor located near Bradshaw Rd., and one is planned for the future near Bass Lake Rd. in El Dorado County. These are low-powered AM radio stations capable of broadcasting pre-recorded traffic information bulletins in a range of four to six miles.

While HAR stations are frequently used in rural areas to inform motorists of traffic-related situations, they are rarely used within the metropolitan Sacramento area. This is due to the many commercial radios within the area broadcasting traffic bulletins every few minutes, particularly during the morning and afternoon peak periods. Since traffic information is already being propagated on mediums accessible by a large proportion of travelers, Caltrans has found little value in using the existing HAR stations to broadcast messages that would not enable travelers to gain more information than what is currently available. In addition, there were some difficulties in determining whether recorded messages were being broadcast as planned, and whether the flashing lights installed on the roadside signs to inform travelers of a message being broadcast were operating correctly. Another detriment to using the HAR stations was the fact that the solar panels used to power the flashing lights were on occasion vandalized or stolen.

5.7.3. STARNET / 511 TRAVELER INFORMATION SYSTEM

The Sacramento Transportation Area Network, or STARNET, is an information exchange network and operations coordination framework that is used by the operators of transportation facilities and emergency responders in the Sacramento region. STARNET enables the real-time sharing of data and live video. It also provides more information for travelers through data extension to a more robust 511 website and interactive telephone service.



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511, shown in **Figure 40**, provides access to information about all modes of travel - traffic conditions for commuters, bus and light-rail information, paratransit services for the elderly and disabled, ridesharing information, and information on commuting by bike in both English and Spanish. The web-based service is available at www.sacregion511.org. In conjunction with the phone service, the website helps users plan their daily commute, access transit providers, find a carpool partner, and learn about bicycling as a commute option.

The main emphasis into the future will be fine-tuning Apps, smart phone services, and continuous improvements of web services, including integration of Caltrans Chain Control XML feeds. There is interest in the Sacramento region to review and consider integration of current traveler information, for example CMS, into a Connected Vehicles (V2I) application. STARNET and 511 are well positioned to integrate into future ICM developments.

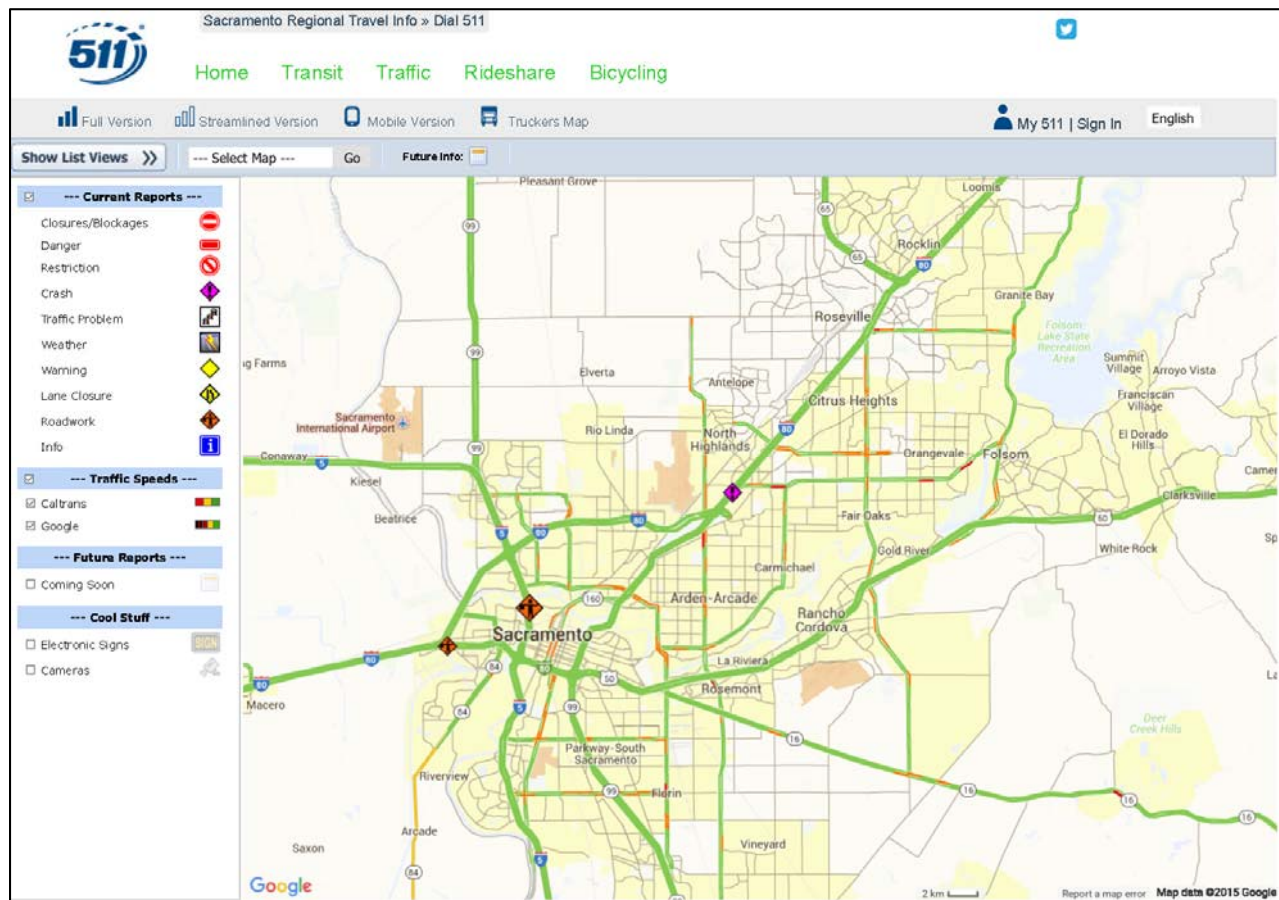


Figure 40 – Sacramento Area 511



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Corridor Description and Existing and Planned Corridor Analysis

APPENDIX A - ACRONYMS

The following acronyms and abbreviations are used in this document.

APC	Automated Passenger Counter
ATMS	Advanced Traffic Management System
AVL	Automated Vehicle Location
CAD	Computer-Aided Dispatch
Caltrans	California Department of Transportation
CCTV	Closed-Circuit Television
CHP	California Highway Patrol
CMS	Changeable Message Sign
CNG	Compressed Natural Gas
CSMP	Corridor System Management Plan
CSUS	California State University Sacramento
EMS	Extinguishable Message Sign
FSP	Freeway Service Patrol
GPS	Global Positional System
HAR	Highway Advisory Radio
HOV	High-Occupancy Vehicle
ICM	Integrated Corridor Management
ITS	Intelligent Transportation System
LCS	Lane Closure System
LRT	Light-Rail Transit
LRV	Light-Rail Vehicle
MHR	Sacramento Mather Airport
MPO	Metropolitan Planning Organization
PeMS	Performance Measurement System (Caltrans)
RT	Sacramento Regional Transit District
RTMC	Regional Transportation Management Center
RTPA	Regional Transportation Planning Authority
RWIS	Road Weather Information System
SACDOT	Sacramento County Transportation Department
SACOG	Sacramento Area Council of Governments
SACRTMC	Sacramento Regional Transportation Management Center
STARNET	Sacramento Transportation Area Network
STEM	Science, Technology, Engineering and Mathematics
TASAS	Traffic Accident Surveillance and Analysis System
TMC	Traffic Management Center
TMT	Traffic Management Team
TOC	Traffic Operations Center
TOD	Time of Day
TSP	Transit Signal Priority



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V21	Connected Vehicles Application
VMS	Variable Message Sign or Vehicle Management System
YCTD	Yolo County Transportation District



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APPENDIX B - CALTRANS INFRASTRUCTURE INVENTORY

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County	Route	Prefix	PM	DIR	Locations	Element	Elem-SUB	COMM	Phase	EA	Data-ID	IMMS#	Project Year
ED	50		19	na	Schnell School Rd	AVC		Cellular	Future		2337		AVC
Sac	50		20.8	na	Scott Rd	AVC		Cellular	Future		2336		AVC
ED	50	R	30.5	EB	Sly Park Rd	BTR		Cellular	Existing	1C112	2240		10/11
ED	50		58.8	EB	Twin Bridges	BTR		DSL	Existing	1C112	2242		10/11
ED	50		47.2	EB	Sand Flats Chain-on Area	BTR		Cellular	Existing	1C112	2245		10/11
ED	50				Prairie City	BTR			Existing		2477		
ED	50				Al Tahoe	BTR			Existing		2478		
ED	50		0.9	na	El Dorado Hills Blvd	BTR		Cellular	Future		2285		ED ITS
ED	50	R	3.2	na	Bass Lake Road	BTR		Cellular	Future		2286		ED ITS
ED	50		6.6	na	Cameron Park	BTR		Cellular	Future		2287		ED ITS
ED	50	R	8.7	na	Ponderosa	BTR		Cellular	Future		2288		ED ITS
ED	50		10.3	na	Shingle Springs	BTR		Cellular	Future		2289		ED ITS
ED	50		12.1	na	Greenstone Rd	BTR		Cellular	Future		2290		ED ITS
ED	50	R	15	na	Missouri Flat	BTR		Cellular	Future		2291		ED ITS
ED	50		18	na	Bedford	BTR		Cellular	Future		2292		ED ITS
ED	50		20.7	na	Newton Rd	BTR		Cellular	Future		2293		ED ITS
ED	50		24	na	Carson Road (Apple Hill)	BTR		Cellular	Future		2294		ED ITS
ED	50	R	25.9	na	East Camino UC (Apple Hill)	BTR		Cellular	Future		2295		ED ITS
ED	50	R	28.8	na	Sawmill	BTR		Cellular	Future		2296		SIERRA ITS
ED	50		31.3		Sly Park	BTR		Cellular	Future		2297		SIERRA ITS
ED	50		34.4		Fresh Pond	BTR		Cellular	Future		2298		SIERRA ITS
ED	50		35.6		Peavine Ridge / Hazel Valley	BTR		Cellular	Future		2299		SIERRA ITS
ED	50		39.7		Ice House Road	BTR		Cellular	Future		2300		SIERRA ITS
ED	50		48.8		Kyburz	BTR		Cellular	Future		2301		SIERRA ITS
ED	50		54.3		Wright's Lake Road	BTR		Cellular	Future		2302		SIERRA ITS
ED	50		59.5		Twin Bridges	BTR		Cellular	Future		2303		SIERRA ITS
Sac	50	L	0.43		5th St.	BTR		DSL	Future		2388		TT
Sac	50	L	0.839		8th St	BTR		DSL	Future		2389		TT
Sac	50	L	1.575		18th St	BTR		DSL	Future		2390		TT
Sac	50	L	2.385		28th St.	BTR		DSL	Future		2391		TT
Sac	50	R	0.595		Stockton Blvd.	BTR		DSL	Future		2392		TT
Sac	50	R	1.42		48th St	BTR		DSL	Future		2393		TT
Sac	50	R	2.426		65th St. (SB)	BTR		Cellular	Future		2394		TT
Sac	50	R	3.226		Hornet Dr.	BTR		Cellular	Future		2395		TT
Sac	50	R	4.262		Howe Ave	BTR		DSL	Future		2396		TT
Sac	50	R	5.3		Watt Ave.	BTR		Non-Leased Wireless	Future		2397		TT
Sac	50	R	7.745		Bradshaw Rd	BTR		DSL	Future		2398		TT

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Sac	50	R	9.36		Mather Field	BTR		DSL	Future		2399		TT
Sac	50	R	10.9		Zinfandel Dr.	BTR		Cellular	Future		2400		TT
Sac	50		12.8		Sunrise Blvd.	BTR		Fiber	Future		2401		TT
Sac	50		15.8		Hazel Ave	BTR		DSL	Future		2402		TT
Sac	50		16.8		Folsom Blvd.	BTR		DSL	Future		2403		TT
Sac	50		19.15		Prairie City Rd.	BTR		DSL	Future		2404		TT
Sac	50		20.82		Scott Rd	BTR		Cellular	Future		2405		TT
Yol	50		1.2		Harbor Blvd.	BTR		DSL	Future		2406		TT
Yol	50		2.4		Jefferson Blvd	BTR		Cellular	Future		2407		TT
Sac	50	L	0.3	na	EB 50 to I-5 Connector (Pioneer Bridge) 2	CCTV	PTZ	DSL	Decom	37680	1043	TV001	Op. 9/96
ED	50		17.641	na	Spring Street (Rte 49/50 Junction) 2	CCTV	PTZ	DSL	Existing		2229		
ED	50		59.5	na	Twin Bridges	CCTV	PTZ	DSL	Existing	1C112	2243		10/11
ED	50		63.7	EB	Sierra at Tahoe Rd.	CCTV	PTZ	Non-Leased Wireless	Existing	1C112	1115		10/11
ED	50		63.7	WB	Sierra at Tahoe Rd.	CCTV	PTZ	Non-Leased Wireless	Existing	1C112	2462		10/11
ED	50		66.7	na	Echo Summit	CCTV	PTZ	Non-Leased Wireless	Existing	1C111	1006		07/08
ED	50		70.6	na	Meyers/ Rte 89 So Jct 2	CCTV	PTZ	DSL	Existing		1007	TV055	04/05
ED	50		75.454	na	Mays Jct @ 89 /50 2	CCTV	PTZ	DSL	Existing	1C111	1008		07/08
ED	50		79.28	na	Ski Run Blvd	CCTV	PTZ	DSL	Existing		1009	TV054	04/05
Sac	50	L	0.52	na	4th Street (4th_50)	CCTV	PTZ	DSL	Existing	37680	1044	TV021	Op. 9/96
Sac	50	L	0.886	na	9th St. UC	CCTV	PTZ	DSL	Existing	37680	1045	TV022	Op. 9/96
Sac	50	L	1.76	na	20th St.	CCTV	PTZ	DSL	Existing	37680	1047	TV023	Op. 9/96
Sac	50	L	2.385	na	28th St.	CCTV	PTZ	DSL	Existing	37680	1049	TV024	Op. 9/96
Sac	50	R	0.9	na	39th St.	CCTV	PTZ	DSL	Existing	43010	1046	TV041	Op. 9/02
Sac	50	R	1.8	na	51st St.	CCTV	PTZ	DSL	Existing		1048	TV032	
Sac	50	R	3	na	65th Street	CCTV	PTZ	DSL	Existing	43010	1050	TV033	Op. 9/02
Sac	50	R	5.3	na	Watt Ave.	CCTV	PTZ	Fiber	Existing	43010	1052	TV035	Op. 9/02
Sac	50	R	6.371	na	E. of Mayhew OH	CCTV	PTZ	Fiber	Existing	43010	1053	TV052	Op. 9/02
Sac	50	R	7.745	na	Bradshaw Rd	CCTV	PTZ	Fiber	Existing	43010	1054	TV031	Op. 9/02
Sac	50	R	9.36	na	Mather Field	CCTV	PTZ	DSL	Existing	43010	1055	TV038	Op. 9/02
Sac	50	R	10.92	na	Zinfandel	CCTV	PTZ	Fiber	Existing	43010	1056	TV039	Op. 9/02
Sac	50		12.8	na	Sunrise Blvd.	CCTV	PTZ	Fiber	Existing	43010	1057	TV040	
Sac	50		15.8	na	Hazel Ave	CCTV	PTZ	DSL	Existing	43010	1058		Op. 9/02
Sac	50		22.3	na	Carpenter Peak (Scott Rd/E Bidwell) 1	CCTV	PTZ	Non-Leased Wireless	Existing		2253		
Sac	50		22.3	na	Carpenter Peak (Scott Rd/E Bidwell) 2	CCTV	PTZ	Non-Leased Wireless	Existing		2443		
Sac	50	R	3.7	na	Howe Ave.	CCTV	PTZ	Non-Leased Wireless	Existing	43010	1051	TV034	Op. 9/02
Yol	50		1.203	na	Harbor Blvd.	CCTV	PTZ	DSL	Existing	43010	1087	TV043	Op. 9/02
Yol	50		2.5	na	Jefferson Blvd.	CCTV	PTZ	DSL	Existing	43010	1088	TV036	Op. 9/02
ED	50		0.9	na	El Dorado Hills Blvd.	CCTV	PTZ	DSL	Future		1109		ED ITS

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ED	50	R	1.7	na	Silva Valley Parkway	CCTV	PTZ	DSL	Future		1110		ED ITS
ED	50	R	3.2	na	Bass Lake Rd.	CCTV	PTZ	DSL	Future		1111		ED ITS
ED	50		5	na	Cambridge Rd.	CCTV	PTZ	DSL	Future		1112		ED ITS
ED	50		51.6	na	Fred's Place	CCTV	PTZ	Cellular	Future		1113		SIERRA ITS
ED	50		54.5	na	Wright's Lake Rd.	CCTV	PTZ	Cellular	Future		1114		SIERRA ITS
ED	50		71.4	na	Pioneer Trail	CCTV	PTZ	Cellular	Future		1108		SIERRA ITS
ED	50		6.604	na	Cameron Park Dr.	CCTV	LP	DSL	Future		2222		ED ITS
ED	50	R	10.3	na	Shingle Springs	CCTV	PTZ	DSL	Future		2305		ED ITS
ED	50	R	15	na	Missouri Flat	CCTV	PTZ	DSL	Future		2306		ED ITS
ED	50		18	na	Bedford	CCTV	PTZ	DSL	Future		2307		ED ITS
ED	50		23.3	na	Camino Heights (Apple Hill)	CCTV	PTZ	DSL	Future		2308		ED ITS
ED	50		24	na	Carson Road (Apple Hill)	CCTV	PTZ	DSL	Future		2309		ED ITS
ED	50	R	25.9	na	East Camino UC (Apple Hill)	CCTV	PTZ	DSL	Future		2310		ED ITS
ED	50	R	31.3	na	Sly Park	CCTV	PTZ	DSL	Future		2311		SIERRA ITS
Sac	50		16.8	na	Folsom Blvd.	CCTV	PTZ	DSL	Future		1139		FOLSOM RM
Sac	50		19.15	na	Prairie City Rd.	CCTV	PTZ	DSL	Future		1140		CCTV OA
Sac	50		21.4	na	Scott Rd.	CCTV	PTZ	DSL	Future		1141		CCTV OA
Sac	50		22.3	na	Empire Ranch Road	CCTV	PTZ	DSL	Future		1142		CCTV OA
Yol	50		2.4	EB	Jefferson Blvd	CMS	LED	Cellular	Decom		1164		
ED	50		0.442	EB	El Dorado Hills	CMS	Xenon	POTS	Existing		1228	CM002	07/72
ED	50		19.849	EB	Pt View Dr/Pla	CMS	Xenon	Cellular	Existing		1229	CM001	1/91
ED	50	R	30.429	EB	Sly Park	CMS	Xenon	Cellular	Existing	2A800	1230	CM018	01/99
ED	50		58.882	EB	Twin Bridges	CMS	Xenon	Cellular	Existing	40170	1231	CM007	7/96
ED	50		70.585	WB	Meyers	CMS	Xenon	DSL	Existing	16052	1232	CM010	03/73
ED	50		75.593	WB	50/89 Jct	CMS	LED	DSL	Existing		1233	CM030	11/91
ED	50		79.897	WB	Midway Rd	CMS	LED	Cellular	Existing	1C111	1234	CM088	07/08
Sac	50	L	0.839	WB	8th St	CMS	Xenon	DSL	Existing	43010	1255	CM021	5/02
Sac	50	L	1.575	EB	18th St	CMS	Xenon	POTS	Existing	43010	1257	CM022	5/02
Sac	50	R	1.42	WB	48th St	CMS	Xenon	POTS	Existing	37680	1256	CM008	9/96
Sac	50	R	4.262	EB	Howe Ave	CMS	Xenon	DSL	Existing	43010	1258	CM023	5/02
Sac	50	R	8.677	WB	Bradshaw	CMS	LED	Fiber	Existing	44161	1215	CM108	08/09
Sac	50	R	8.809	EB	Mather Field Rd	CMS	LED	Fiber	Existing	44161	1216	CM109	08/09
Sac	50		20.82	WB	Scott Rd	CMS	Xenon	Cellular	Existing	43010	1259	CM024	00/01
ED	50		40	EB	Ice House Rd.	CMS	LED	POTS	Future		1187		SIERRA ITS
ED	50		47	EB	Sand Flat	CMS	LED	POTS	Future		1188		SIERRA ITS
ED	50		51.5	EB	Fred's Place	CMS	LED	Cellular	Future		1189		SIERRA ITS
ED	50		54.25	EB	Wright's Lake Rd.	CMS	LED	Cellular	Future		1190		SIERRA ITS
ED	50		12	EB	Greenstone Rd, W/O	CMS	LED	Cellular	Future		2281		ED ITS

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Appendix E

ED	50		7.2	WB	0.5 miles E/O Cameron Park	CMS	LED	DSL	Future	0C282	2440		
ED	50		24.5	WB	0.5 miles E/O Carson Road	CMS	LED	DSL	Future	0C282	2441		
Yol	50		1.8	EB	2.2 miles W. of 50/5 IC	CMS	LED	Cellular	Future	0C282	1225		
ED	50		79.88	na	W/Pioneer Trail No- SLT Lake Tahoe Bl	EMS	4Har	POTS	Decom		1279	EX012	
ED	50		80.1	WB	State Line	EMS	4Har	POTS	Decom		1280		
ED	50		15.9	EB	Forni Rd	EMS	4Har	POTS	Existing		1290	EX020	
ED	50		21	WB	Newton Rd	EMS	4Har	POTS	Existing		1291	EX021	
ED	50		27.6	WB	Camino Scales	EMS	LED		Existing	0F580	2230		10/11
ED	50	R	27.934	EB	Camino (Sandhouse)	EMS	4Har	Cellular	Existing	2A800	1274	EX001	99/00
ED	50		47.2	EB	Sand Flat	EMS	4Har	Cellular	Existing	1C112	2463	EX064	10/11
ED	50		50.5	WB	Private road	EMS	4Har	Cellular	Existing	1C112	2246	EX065	10/11
ED	50		59.6	WB	Twin Bridges	EMS	4Har	DSL	Existing		1276	EX066	
ED	50		71.4	WB	Pioneer Trail	EMS	4Har	POTS	Existing		1277		
ED	50		71.4	EB	Pioneer Trail	EMS	4Har	POTS	Existing		1278		
Sac	50	R	5.8	EB	Watt	EMS	4Har	Fiber	Existing	43010	1321	EX033	
Sac	50	r	11.1	WB	Zinfandel	EMS	4Har	Fiber	Existing		1323		
ED	50		51.6	na	Fred's Place	EMS	4Har	POTS	Future		1332		SIERRA ITS
ED	50		66.7	WB	Echo Summit	ETR		Cellular	Decom	1C111	1345		07/08
ED	50		79.2	EB	Ski Run Blvd	ETR		Cellular	Decom	1C111	1349		07/08
ED	50		74.75	EB	F St @ 50	ETR		Cellular	Decom	1C111	1348		07/08
ED	50		71.48	EB	Pioneer Trail	ETR		Cellular	Decom	1C111	1347		07/08
ED	50		79.82	WB	Midway Rd (CMS #44)	ETR		Cellular	Decom	1C111	1350		07/08
ED	50		70.5	WB	Meyers	ETR		Cellular	Decom	1C111	1346		07/08
Sac	50	R	5.347		Hwy 50 at Sunrise	Fiber		Fiber	Existing		2471		
ED	50		18	na	Placerville	HAR		POTS	Existing		1377	HR001	
ED	50	R	28.9	na	Camino	HAR		POTS	Existing	2A800	1378	HR002	6/02
ED	50		49	na	Kyburz	HAR		Non-Leased Wireless	Existing	1C112	1406		10/11
ED	50		59.6	na	Twin Bridges	HAR		DSL	Existing	40170	1379	HR003	Op. 7/96
ED	50		70.6	WB	Meyers	HAR		POTS	Existing	1C111	1380	HR004	07/08
ED	50		77.5	na	Rufus Allen	HAR		POTS	Existing		1381	HR005	Op. 7/96
Sac	50	R	7.8	na	Bradshaw Rd	HAR		POTS	Existing	43010	1396	HR019	8/02
ED	50		39.7	na	Riverton	HAR		POTS	Future		1405		SIERRA ITS
ED	50		63.8	na	Sierra at Tahoe Rd.	HAR		POTS	Future		1407		SIERRA ITS
ED	50	R	3.3	na	Bass Lake Road	HAR		POTS	Future		2226		ED ITS
ED	50		11.16	WB	Red Hawk	RMS	LP	Cellular	Existing		2233		
ED	50		11.35	EB	Red Hawk	RMS	LP	Cellular	Existing		2234		
Sac	50	R	0.595	WB	Stockton Blvd.	RMS	LP	DSL	Existing	22600	1462		Op. 3/83
Sac	50	R	0.616	EB	Stockton Blvd.	RMS	LP	DSL	Existing	1C12U	1652		10/11

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Appendix E

Sac	50	L	1.193	WB	15th St.	RMS	LP	Cellular	Existing	37680	1463		Op. 9/96
Sac	50	L	1.427	EB	11th St.	RMS	LP	DSL	Existing	37680	1464		Op. 9/96
Sac	50	L	1.636	EB	16th St.	RMS	LP	DSL	Existing	37680	1465		Op. 9/96
Sac	50	R	1.934	WB	59th St.	RMS	LP	Cellular	Existing	22600	1466		Op. 5/96
Sac	50	L	2.385	EB	28th St.	RMS	LP	DSL	Existing	37680	1467		Op. 9/96
Sac	50	R	2.426	WB	65th St. (SB)	RMS	LP	Cellular	Existing	22600	1468		Op. 4/83
Sac	50	R	2.61	EB	65th St. (SB)	RMS	LP	DSL	Existing	1C12U	1570		10/11
Sac	50	R	2.68	WB	65th St. (NB)	RMS	LP	Cellular	Existing	22600	1469		Op. 4/83
Sac	50	R	2.81	EB	65th St. (NB)	RMS	LP	DSL	Existing	1C12U	1653		10/11
Sac	50	R	3.226	WB	Hornet Dr.	RMS	LP	Cellular	Existing	22600	1470		Op. 4/83
Sac	50	R	3.426	WB	Howe Ave. (SB)	RMS	LP	DSL	Existing	22600	1471		Op. 5/83
Sac	50	R	3.63	EB	Howe Ave. (SB)	RMS	LP	Non-Leased Wireless	Existing	37080	1472		02/03
Sac	50	R	3.759	WB	Howe Ave. (NB)	RMS	LP	Cellular	Existing	22600	1473		Op. 5/83
Sac	50	R	3.88	EB	Howe Ave. (NB)	RMS	LP	Cellular	Existing	37080	1474		02/03
Sac	50	R	5.055	WB	Watt Ave. (SB)	RMS	LP	Cellular	Existing	22600	1475		Op. 7/83
Sac	50	R	5.249	WB	Watt Ave. (NB)	RMS	LP	Cellular	Existing	22600	1476		Op. 6/83
Sac	50	R	7.62	WB	Bradshaw Road (SB)	RMS	LP	Cellular	Existing	22600	1477		Op. 12/87
Sac	50	R	7.8	EB	Bradshaw Rd (SB)	RMS	LP	DSL	Existing	33160	1478		
Sac	50	R	7.807	WB	Bradshaw Rd (NB)	RMS	LP	Cellular	Existing	22600	1479		Op. 12/87
Sac	50	R	7.855	EB	Bradshaw Rd (NB)	RMS	LP	DSL	Existing	33160	1480		
Sac	50	R	9.348	WB	Mather Field Rd (SB)	RMS	LP	DSL	Existing	22600	1481		Op. 12/87
Sac	50	R	9.47	EB	Mather Field Rd. (SB)	RMS	LP	Fiber	Existing	1C12U	1573		10/11
Sac	50	R	9.553	WB	Mather Field Rd. (NB)	RMS	LP	DSL	Existing	22600	1482		Op. 1/87
Sac	50	R	9.63	EB	Mather Field Rd. (NB)	RMS	LP	Fiber	Existing	1C12U	1574		10/11
Sac	50	R	10.85	EB	Zinfandel Drive (SB)	RMS	LP	Fiber	Existing	1C12U	1575		10/11
Sac	50	R	10.862	WB	Zinfandel Drive (SB)	RMS	LP	Cellular	Existing	30070	1483		Op. 1/88
Sac	50	R	10.98	EB	Zinfandel Drive (NB)	RMS	LP	Fiber	Existing	1C12U	1576		10/11
Sac	50	R	10.989	WB	Zinfandel Drive (NB)	RMS	LP	DSL	Existing	30070	1484		Op. 6/92
Sac	50		12.35	WB	Sunrise Blvd. (SB)	RMS	LP	Fiber	Existing	3727U	1485		
Sac	50		12.45	EB	Sunrise Blvd. (SB)	RMS	LP	Fiber	Existing	3727U	1486		
Sac	50		12.5	WB	Sunrise Blvd. (NB)	RMS	LP	Fiber	Existing	3727U	1487		
Sac	50		12.6	EB	Sunrise Blvd. (NB)	RMS	LP	Fiber	Existing	3727U	1488		
Sac	50		15.668	WB	Hazel Ave. (SB)	RMS	LP	DSL	Existing	38080	1489		Op. 8/94
Sac	50		15.702	WB	Hazel Ave. (NB)	RMS	LP	DSL	Existing	38080	1490		Op. 8/94
Sac	50		15.704	EB	Hazel Ave. (NB)	RMS	LP	DSL	Existing	1C12U	1491		10/11
Sac	50		16.805	WB	Folsom Blvd.	RMS	LP	DSL	Existing	3696U	1492		
Sac	50		18.99	WB	Prairie City Rd. (SB)	RMS	LP	Cellular	Existing	39450	1493		
Sac	50		19.26	WB	Prairie City Rd. (NB)	RMS	LP	Cellular	Existing	39450	1494		

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Appendix E

Sac	50		19.58	EB	Prairie City Rd. (SB)	RMS	LP	Cellular	Existing	39450	1495		
Sac	50		19.59	EB	Prairie City Rd. (NB)	RMS	LP	Cellular	Existing	39450	1496		
Sac	50		21.2	WB	East Bidwell St. (SB)	RMS	LP	Cellular	Existing	42880	1497		
Sac	50		21.25	WB	Scott Rd. (NB)	RMS	LP	Cellular	Existing	42880	1498		
Sac	50		21.3	EB	East Bidwell St. (SB)	RMS	LP	Cellular	Existing	42880	1499		
Sac	50		21.4	EB	Scott Rd. (NB)	RMS	LP	Cellular	Existing	42880	1500		
Yol	50		1.35	WB	Harbor Blvd. (SB)	RMS	LP	DSL	Existing	38800	1577		
Yol	50		1.363	EB	Harbor Blvd.	RMS	LP	DSL	Existing	38800	1578		
Yol	50		1.4	WB	Harbor Blvd. (NB)	RMS	LP	DSL	Existing	38800	1579		
ED	50		0.902	WB	El Dorado Hills Blvd (SB)	RMS	LP	Cellular	Funded	43410	1588	ERC02	
ED	50		0.904	EB	El Dorado Hills Blvd (SB)	RMS	LP	Cellular	Funded	43410	1589		
ED	50		1.702	WB	Silva Valley Parkway	RMS	LP	DSL	Funded	33390	1592		
ED	50		1.704	EB	Silva Valley Parkway	RMS	LP	DSL	Funded	33390	1593		
Sac	50	R	5.29	EB	Watt Ave. (SB)	RMS	LP	Fiber	Funded	1C12U	1571		10/11
Sac	50	R	5.52	EB	Watt Ave. (NB)	RMS	LP	Fiber	Funded	1C12U	1572		10/11
ED	50	R	3.202	WB	Bass Lake Rd.	RMS	LP	DSL	Future		1594		ED ITS
ED	50	R	3.204	EB	Bass Lake Rd.	RMS	LP	Cellular	Future		1595		RM FUTURE
ED	50		5.002	WB	Cambridge Rd.	RMS	LP	DSL	Future		1596		ED ITS
ED	50		5.004	EB	Cambridge Rd.	RMS	LP	Cellular	Future		1597		RM FUTURE
ED	50		6.602	WB	Cameron Park Dr. (SB)	RMS	LP	DSL	Future		1598		ED ITS
ED	50		6.61	WB	Cameron Park Dr. (NB)	RMS	LP	DSL	Future		1600		ED ITS
ED	50		6.604	EB	Cameron Park Dr.	RMS	LP	DSL	Future		1599		RM FUTURE
ED	50	R	8.4	WB	Ponderosa Rd. (SB)	RMS	LP	DSL	Future	2E550	1601		LOCAL FUNDED
ED	50	R	8.6	WB	Ponderosa Rd. (NB)	RMS	LP	DSL	Future	2E550	1602		LOCAL FUNDED
Sac	50	L	0.43	WB	5th St.	RMS	LP	DSL	Future		1651		RM80
Sac	50		16.91	EB	Folsom Blvd.	RMS	LP	DSL	Future		1654		FOLSOM RM
Sac	50		20.2	WB	Oak Avenue Parkway	RMS	LP	Cellular	Future		1655		LOCAL FUNDED
Sac	50		20.21	WB	Oak Avenue Parkway	RMS	LP	Cellular	Future		1656		LOCAL FUNDED
Sac	50		22.302	WB	Empire Ranch Road (NB)	RMS	LP	Cellular	Future		1657		LOCAL FUNDED
Sac	50		22.31	WB	Empire Ranch Road (SB)	RMS	LP	Cellular	Future	1C950	1659		LOCAL FUNDED
Sac	50		22.304	EB	Empire Ranch Road (SB)	RMS	LP	Cellular	Future	1C950	1658		LOCAL FUNDED
Yol	50		2.49	EB	Jefferson Blvd	RMS	LP	DSL	Future	2E600	1718		RM80
ED	50		0.93	WB	Latrobe RD IC (El Dorado Hills Blvd.)	RWIS	VS	Cellular	Decom	0C830	1754		01/02
ED	50		3.45	EB	Bass Lake Rd/Marble Valley Rd., E/O	RWIS	VS	Cellular	Decom	0C830	1755		01/02
Sac	50		20.67	WB	Between Scott Rd and Prairie City Rd.	RWIS	VS	Cellular	Decom	0C830	1764		01/02
Yol	50		2.4	EB	Jefferson Blvd @ Pioneer Bridge	RWIS		Cellular	Decom	38570	1744	RW015	
ED	50		66.8	na	Echo Summit	RWIS		Non-Leased Wireless	Existing		1728	RW004	
ED	50		38.7	na	Riverton Bridge	RWIS		POTS	Future		1747		SIERRA ITS

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Appendix E

ED	50		0.9	na	El Dorado Hills Blvd.	TMS	LP	Cellular	Decom	4C030	1924		
ED	50		0.5	na	El Dorado Hills	TMS	WVD	Cellular	Existing	4E110	1969	V0001	07/08
ED	50		1.5	EB	Latrobe Rd UC	TMS	WVD	Cellular	Existing	4E110	2070	V0002	07/08
ED	50		2.2	EB	Bass Lake Rd	TMS	WVD	Cellular	Existing	4E110	2072	V0003	07/08
ED	50		5.5	EB	E.O Bass Lake Rd	TMS	WVD	Cellular	Existing	4E110	2073	V0004	07/08
ED	50		6	EB	Cambridge Rd, E/O	TMS	WVD	Cellular	Existing	4E110	2074		07/08
ED	50		6.7	EB	Cameron Park Dr, E/O	TMS	WVD	Cellular	Existing	4E110	2075	V0006	07/08
ED	50		7.05	EB	Cameron Park Dr, E/O	TMS	WVD	Cellular	Existing	4E110	2076	V0007	07/08
ED	50		8.2	EB	Shingle Springs, E/O	TMS	WVD	Cellular	Existing	4E110	2077	V0008	07/08
ED	50		9.5	EB	Shingle Springs Rd, E/O	TMS	WVD	Cellular	Existing	4E110	2078	V0009	07/08
ED	50		11.7	EB	Greenstone Rd, W/O	TMS	WVD	Cellular	Existing	4E110	2079	V0010	07/08
ED	50		13	EB	Greenstone Rd, W/O	TMS	WVD	Cellular	Existing	4E110	2080	V0011	07/08
ED	50	R	14.7	WB	Missouri Flat Rd. (WB)	TMS	WVD	Cellular	Existing	4E110	2081	V0012	07/08
ED	50		16.2	EB	Fairgrounds, W/O	TMS	WVD	Cellular	Existing	4E110	2082	V0013	07/08
ED	50		63	na	Sierra at Tahoe Rd.	TMS	WVD	DSL	Existing	1C112	1973		10/11
ED	50		72.7	WB	Sawmill Road	TMS	MVDS	Cellular	Existing	1C111	2013		07/08
ED	50		73.7	na	Tahoe Airport	TMS	MVDS	DSL	Existing	1C111	1926		07/08
ED	50		77.61	WB	Bigler Ave	TMS	MVDS	Cellular	Existing	1C111	2016		07/08
ED	50		76.55	na	Lodi Ave.	TMS	MVDS	Cellular	Existing	1C111	2015		07/08
ED	50		74.75	EB	F St @ 89	TMS	MVDS	Cellular	Existing	1C111	2014		07/08
ED	50		79.82	WB	Midway Rd	TMS	MVDS	Cellular	Existing	1C111	2017		07/08
ED	50		66.7	WB	Echo Summit	TMS	MVDS	Non-Leased Wireless	Existing	1C111	2012		07/08
ED	50		39.7	EB	Ice House	TMS	WVD	Cellular	Existing	1C112	2244		10/11
ED	50		53.1	EB	Wrights Lake Road	TMS	WVD	Cellular	Existing	1C112	2247		10/11
Sac	50	L	0.6	na	EB 50 On-Ramp from I-5 (6th Street)	TMS	LP	Cellular	Existing	37680	1864		Op. 9/96
Sac	50	R	0.6	na	Stockton Blvd.	TMS	MVDS	DSL	Existing	43010	2029		99/00
Sac	50	R	1.4	na	48th St.	TMS	LP	Cellular	Existing	37680	1865	ETA04	Op. 9/96
Sac	50	L	1.6	WB	16th St.	TMS	LP	DSL	Existing	37680	1866		Op. 9/96
Sac	50	R	1.9		59th St.	TMS	MVDS	Cellular	Existing	43010	2030		99/00
Sac	50	L	2.166	na	25th St.	TMS	LP	Cellular	Existing	37680	1867		Op. 9/96
Sac	50	L	2.4	na	SB 51/WB 50 Connector	TMS	LP	Cellular	Existing	37680	1869		Op. 9/96
Sac	50	R	2.7		65th St.	TMS	MVDS	Cellular	Existing	43010	2031		99/00
Sac	50	R	3.3	na	Hornet Dr.	TMS	MVDS	Cellular	Existing	43010	2032		99/00
Sac	50	R	3.7	na	Howe Ave.	TMS	MVDS	Cellular	Existing	43010	2033		99/00
Sac	50	R	4.5	na	Occidental Dr. OC	TMS	MVDS	Cellular	Existing	43010	2034	ETA05	99/00
Sac	50	R	5.3	na	Watt Ave.	TMS	MVDS	Cellular	Existing	43010	2035		99/00
Sac	50	R	5.7	WB	Manlove POC	TMS	LP	Cellular	Existing	43010	2036	ETA31	00/01
Sac	50	R	6.4	na	W. of Mayhew OH	TMS	LP	Fiber	Existing	43010	2037		00/01

ATTACHMENT 2

Appendix E

Sac	50	R	7	na	Mayhew Rd. OC	TMS	MVDS	Non-Leased Wireless	Existing	43010	2038		00/01
Sac	50	R	8.3	na	Bradshaw Rd, E/O	TMS	MVDS	Fiber	Existing	43010	2039		00/01
Sac	50	R	9.3	na	Mather Field Rd	TMS	MVDS	Cellular	Existing	43010	2041		00/01
Sac	50	R	10.1	na	White Rock POC	TMS	MVDS	Cellular	Existing	43010	2042		00/01
Sac	50	R	10.9	na	Zinfandel Dr.	TMS	MVDS	Cellular	Existing	43010	2043	ETA07	00/01
Sac	50	R	11.674	na	E. of Zinfandel Dr	TMS	WVD	Fiber	Existing	44161	2044		00/12
Sac	50		13.5	na	Pyrites	TMS	MVDS	Cellular	Existing	43010	2045		00/01
Sac	50		14.2	na	Gold Canal	TMS	MVDS	Cellular	Existing	43010	2046		00/01
Sac	50		15	na	West of Hazel	TMS	MVDS	Cellular	Existing	43010	2047		00/01
Sac	50		16.3	na	Aerojet Rd.	TMS	LP	Cellular	Existing	4416U	1870	ETA72	00/01
Sac	50		18.3	na	Iron Point	TMS	MVDS	Cellular	Existing	43010	2048		00/01
Sac	50		20.204	EB	Prairie City Rd, E/O	TMS	WVD	Cellular	Existing	4E110	2102		07/08
Sac	50		20.7	na	na	TMS	LP	Cellular	Existing	4C030	1941		09/10
Sac	50		22.504	EB	Scott Rd, E/O	TMS	WVD	Cellular	Existing	4E110	2103		07/08
Sac	50		23.1	na	Sac/ED County Line	TMS	WVD	Cellular	Existing	4E110	1999		07/08
Sac	50		23.2	EB	Scott Rd, E/O	TMS	WVD	Cellular	Existing	4E110	2104		07/08
Yol	50		1.2	na	Harbor Blvd.	TMS	MVDS	DSL	Existing	43010	2060		99/00
Yol	50		1.9	na	Harbor Blvd, E/O	TMS	MVDS	Cellular	Existing	43010	2061		99/00
Yol	50		2.5	na	Jefferson Blvd.	TMS	MVDS	Cellular	Existing	43010	2062		99/00
ED	50		24	na	Apple Hill	TMS	LP	Cellular	Future		1971		ED ITS
ED	50		70.9	na	Ag Station	TMS	LP	Cellular	Future		1974		SIERRA ITS
ED	50		35.6	na	Peavine Ridge / Hazel Valley	TMS	WVD	Cellular	Future		2312		SIERRA ITS
ED	50		34.4	na	Fresh Pond	TMS	WVD	Cellular	Future		2313		SIERRA ITS
ED	50	R	31.3	na	Sly Park	TMS	WVD	Cellular	Future		2314		SIERRA ITS
ED	50	R	28.8	na	Sawmill	TMS	WVD	Cellular	Future		2315		SIERRA ITS
ED	50	R	27.8	na	Camino Salt House	TMS	WVD	Cellular	Future		2316		ED ITS
ED	50	R	25.9	na	East Camino UC (Apple Hill)	TMS	WVD	Cellular	Future		2317		ED ITS
ED	50		25.2	na	Snows Rd UC	TMS	WVD	Cellular	Future		2318		ED ITS
ED	50		24	na	Carson Road (Apple Hill)	TMS	WVD	Cellular	Future		2319		ED ITS
ED	50		23.3	na	Camino Heights (Apple Hill)	TMS	WVD	Cellular	Future		2320		ED ITS
ED	50		20.7	na	Newton Rd	TMS	WVD	Cellular	Future		2321		ED ITS
Sac	50		20.202	na	Prairie City Rd	TMS	LP		Future		1940		
Sac	50		22.502	na	Scott Rd,	TMS	LP		Future		1942		
ED	50		6.6	EB	Cameron Park	TT		Cellular	Future		2282		ED ITS
ED	50	R	31.3	EB	Sly Park	TT		Cellular	Future		2283		SIERRA ITS
ED	50		23.3	WB	Camino Heights (Apple Hill)	TT		Cellular	Future		2284		ED ITS



APPENDIX C – TRAFFIC SIGNAL INVENTORY

Jurisdictional Boundary	Location		Ownership		Signal Controller						Communication		Traffic Signal Control Characteristics		Detection Type	CCTV Camera
	Main Street	Cross Street	Ownership	Maintenance	Cabinet Type	Controller	Firmware	Manufacturer	Traffic Control System	Controller / System upgrade funded for install in next 12 months	TMC Connection	TMC Communication Type	Type of Operation	Transit Signal Priority		
West Sac	Reed Av	I-80 NB	Caltrans	Caltrans										N	Loops	
West Sac	Reed Av	Ikea Ct	West Sac	West Sac	332	170					N			N	Loops	
West Sac	Reed Av	Harbor Bl	West Sac	West Sac	332	170					Y	TWP		N	Loops	Y
West Sac	Sacramento Av	Bryte Av	West Sac	West Sac	332	170					N			N	Loops	
West Sac	Sacramento Av	TodHunter Av	West Sac	West Sac	332	170					N			N	Loops	
West Sac	Sacramento Av	Kegle Dr	West Sac	West Sac	332	170					N			N	Loops	
West Sac	C St	5th St	West Sac	West Sac	332	170					N			N	Loops	
West Sac	C St	3rd St	West Sac	West Sac	332	2070		Naztec			Y	Radio		N	Loops	Y
West Sac	Enterprise Bl	US50 EB	Caltrans	Caltrans										N	Loops	
West Sac	Enterprise Bl	Lake Rd	West Sac	West Sac	332	170					N			N	Loops	
West Sac	Enterprise Bl	Industrial Bl	West Sac	West Sac	332	170					N			N	Loops	
West Sac	Industrial Bl	Harbor Bl	West Sac	West Sac	332	2070		Naztec			Y	TWP		N	Loops	Y
West Sac	Harbor Bl	Del Monte St	West Sac	West Sac	332	170					Y	TWP		N	Loops	
West Sac	Harbor Bl	Beacon Bl	West Sac	West Sac	332	170					Y	TWP		N	Loops	
West Sac	Harbor Bl	US50 EB	Caltrans		332									N	Loops	
West Sac	Harbor Bl	US50 WB	Caltrans		332									N	Loops	
West Sac	Harbor Bl	Evergreen Av	West Sac	West Sac	332	170					Y	TWP		N	Loops	
West Sac	W Capitol Av	US50 WB	Caltrans		332									N	Loops	
West Sac	W Capitol Av	Granada Inn	West Sac	West Sac									Ped Act	N	Loops	
West Sac	W Capitol Av	Harbor Bl	West Sac	West Sac	332	2070		Naztec			Y	Radio		N	Loops	Y
West Sac	W Capitol Av	Poplar Av	West Sac	West Sac	332	170								N	Loops	
West Sac	W Capitol Av	Westacre Rd	West Sac	West Sac	332	170								N	Loops	
West Sac	W Capitol Av	Jefferson Bl	West Sac	West Sac	332	2070		Naztec			Y	Fiber		N	Loops	Y
West Sac	W Capitol Av	Merkley Av	West Sac	West Sac	332	2070		Naztec			Y	Fiber		N	Video/Loops	
West Sac	W Capitol Av	Grand St	West Sac	West Sac	332	2070		Naztec			Y	Fiber		N	Loops	
West Sac	Grand St	Tower Br Gateway	West Sac	West Sac	332	2070		Naztec			Y	Fiber		N	Loops	Y
West Sac	Tower Br Gateway	5th Av	West Sac	West Sac	332	2070		Naztec			Y	Fiber		N	Loops	Y
West Sac	Tower Br Gateway	Riverfront St	West Sac	West Sac	332	2070		Naztec			Y	Fiber		N	Loops	Y
West Sac	Jefferson Bl	Merkley Av	West Sac	West Sac	332	2070		Naztec			N			N	Loops	
West Sac	Jefferson Bl	Tower Br Gtwy WB O	West Sac	West Sac									Lt Turn Stop	N	Loops	
West Sac	Jefferson Bl	US50 EB	Caltrans		332									N	Loops	
West Sac	Jefferson Bl	Park Bl/US50 WB	Caltrans		332									N	Loops	
Sac City	Capitol Av	30th St	Sac City	Sac City	G	390	MOD	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	Capitol Av	29th St	Sac City	Sac City	G	ASC3	2.58	Econolite	Transsuite		Yes	copper	Local TOD	No	None	analog/digital
Sac City	29th St	N St	Caltrans	Sac City	332	170	222P	Bi Trans	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	30th St	P St	Sac City	Sac City	332	170	222P	Bi Trans	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	29th St	P St	Caltrans	Sac City	332	170	222P	Bi Trans	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	29th St	Q St	Sac City	Sac City	G	390	MOD	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	29th St	R St / RR Line	Sac City	Sac City	-	-	-	-	Transsuite		Yes	copper	RR Act	No		
Sac City	29th St	S St	Sac City	Sac City	G	390	MOD	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	29th St	T St / SR99 SB	Caltrans	Sac City	332	170	222P	Bi Trans	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	30th St	T St / SR51 NB	Caltrans	Sac City	332	170	222P	Bi Trans	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	30th St	S St	Sac City	Sac City	G	390	MOC	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	30th St	R St / RR Line	Sac City	Sac City	-	-	-	-	Transsuite		Yes	copper	RR Act	No		
Sac City	30th St	Q St	Sac City	Sac City	G	390	MOC	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	30th St	N St / SR51 NB	Caltrans	Sac City	332	170	222P	Bi Trans	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	30th St	N St / SR51 NB	Caltrans	Sac City	332	170	222P	Bi Trans	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	P St	24th St	Sac City	Sac City	-	-	-	-	-	-	-	-	Stop Sign			
Sac City	P St	21st St	Sac City	Sac City	G	390	MOD	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	P St	RR Line	Sac City	Sac City	-	-	-	-	Transsuite		Yes	copper	RR Act	No		
Sac City	P St	19th St	Sac City	Sac City	G	390	MOD	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	P St	16th St	Sac City	Sac City	332	2070	D4	McCain	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	P St	15th St	Sac City	Sac City	332	2070	D4	McCain	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	P St	12th St/RR Line	Sac City	Sac City	G			McCain	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	P St	10th St	Sac City	Sac City	G	ASC2		Econolite	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	P St	9th St	Sac City	Sac City	G	ASC2		Econolite	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	P St	8th St	Sac City	Sac City	G	ASC2		Econolite	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	P St	7th St	Sac City	Sac City	G	ASC2		Econolite	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	P St	5th St	Sac City	Sac City	G	390		Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	P St	4th St	Sac City	Sac City	G	390		Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	P St	3rd St	Sac City	Sac City	G	390		Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	Q St	3rd St	Sac City	Sac City	G	390	MOD	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	Q St	4th St	Sac City	Sac City	G	390		Traconex	Transsuite		Yes	copper	Ped Act	No	None	
Sac City	Q St	5th St	Sac City	Sac City	G	390	MOD	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	Q St	7th St	Sac City	Sac City	G	390	MOD	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	Q St	8th St	Sac City	Sac City	G	ASC2		Econolite	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	Q St	9th St	Sac City	Sac City	G	ASC2		Econolite	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	Q St	10th St	Sac City	Sac City	G	ASC2		Econolite	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	Q St	12th St/RR Line	Sac City	Sac City	332	2070	D4	McCain	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	Q St	15th St	Sac City	Sac City	332	2070	D4	McCain	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	Q St	16th St	Sac City	Sac City	332	2070	D4	McCain	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	Q St	19th St	Sac City	Sac City	G	390	MOD	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	Q St	RR Line	Sac City	Sac City	-	-	-	-	Transsuite		Yes	copper	RR Act	No		
Sac City	Q St	21st St	Sac City	Sac City	G	390	MOD	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	Q St	24th St	Sac City	Sac City	-	-	-	-	-	-	-	-	Stop Sign			
Sac City	Q St	28th St	Sac City	Sac City	G	390	MOC	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	W St	26th St	Sac City	Sac City	G	390	MOC	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	W St	24th St	Sac City	Sac City	G	390	MOD	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	W St	21st St	Sac City	Sac City	G	390	MOD	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	W St	RR Line	Sac City	Sac City	-	-	-	-	Transsuite		Yes	copper	RR Act	No		
Sac City	W St	19th St	Sac City	Sac City	G	390	MOD	Traconex	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	W St	16th St/US50 WB	Caltrans	Sac City	332	2070	D4	McCain	Transsuite		Yes	copper	Local TOD	No	None	
Sac City	W St	15th St/US50 WB	Caltrans	Sac City	332	170	222P	Bi Trans	Transsuite		Yes	copper	Local TOD	No	None	

Jurisdictional Boundary	Location		Ownership		Signal Controller						Communication		Traffic Signal Control Characteristics		Detection Type	CCTV Camera
	Main Street	Cross Street	Ownership	Maintenance	Cabinet Type	Controller	Firmware	Manufacturer	Traffic Control System	Controller / System upgrade funded for install in next 12 months	TMC Connection	TMC Communication Type	Type of Operation	Transit Signal Priority		
Sac City	W St	11th St/Riverside Bl	Sac City	Sac City	G	390	MOD	Traconex	Transsuíte		Yes	copper	Local TOD	No	None	
Sac City	W St	10th St	Sac City	Sac City	G	390	MOD	Traconex	Transsuíte		Yes	copper	Local TOD	No	None	
Sac City	W St	9th St	Sac City	Sac City	G	390	MOD	Traconex	Transsuíte		Yes	copper	Local TOD	No	None	
Sac City	W St	6th St	Sac City	Sac City	332	2070	D4	McCain	Transsuíte		Yes	fiber	Local TOD	No	None	analog/digital
Sac City	W St	5th St/I-5 NB	Caltrans	Sac City	332	2070	D4	McCain	Transsuíte		Yes	fiber	Local TOD	No	None	
Sac City	I-5 SB / X St	3rd St	Sac City	Sac City	-	-	-	-	-	-	-	-	Stop Sign			
Sac City	X St	5th St	Caltrans	Sac City	332	2070	D4	McCain	Transsuíte		Yes	fiber	Local TOD	No	None	digital
Sac City	X St	9th St	Sac City	Sac City	332	2070	D4	McCain	Transsuíte		Yes	copper	Local TOD	No	None	
Sac City	X St	10th St	Sac City	Sac City	G	390	MOD	Traconex	Transsuíte		Yes	copper	Local TOD	No	None	
Sac City	X St	Riverside Bl	Sac City	Sac City	G	390	MOD	Traconex	Transsuíte		Yes	copper	Local TOD	No	None	
Sac City	X St	15th St/US50 EB	Caltrans	Sac City	332	170	222P	Bi Trans	Transsuíte		Yes	copper	Local TOD	No	None	
Sac City	X St	16th St/US50 EB	Caltrans	Sac City	332	170	222P	Bi Trans	Transsuíte		Yes	copper	Local TOD	No	None	
Sac City	X St	19th St	Sac City	Sac City	G	390	MOD	Traconex	Transsuíte		Yes	copper	Local TOD	No	None	
Sac City	X St	RR Line	Sac City	Sac City	-	-	-	-	Transsuíte		Yes	copper	RR Act			
Sac City	X St	21st St	Sac City	Sac City	G	390	MOD	Traconex	Transsuíte		Yes	copper	Local TOD	No	None	
Sac City	X St	24th St	Sac City	Sac City	G	390	MOD	Traconex	Transsuíte		Yes	copper	Local TOD	No	None	
Sac City	X St	26th St	Sac City	Sac City	G	390	MOC	Traconex	Transsuíte		Yes	copper	Local TOD	No	None	
Sac City	X St	Alhambra Bl	Sac City	Sac City	-	-	-	-	-	-	-	-	Stop Sign			
Sac City	Broadway	5th St	Sac City	Sac City	G	390	MOD	Traconex	Transsuíte		Yes	trunk fiber a	Local TOD	No	None	
Sac City	Broadway	Muir Wy	Sac City	Sac City	R	390	MOD	Traconex	Transsuíte		Yes	trunk fiber a	Local TOD	No	None	
Sac City	Broadway	9th St	Sac City	Sac City	R	390	MOD	Traconex	Transsuíte		Yes	trunk fiber a	Local TOD	No	None	
Sac City	Broadway	Riverside Bl	Sac City	Sac City	R	390	MOD	Traconex	Transsuíte		Yes	trunk fiber a	Local TOD	No	None	
Sac City	Broadway	15th St	Sac City	Sac City	332	170	222P	Bi Trans	Transsuíte		Yes	trunk fiber a	Local TOD	No	None	
Sac City	Broadway	16th St	Sac City	Sac City	332	170	222P	Bi Trans	Transsuíte		Yes	trunk fiber a	Local TOD	No	None	offline/analog
Sac City	Broadway	19th St	Sac City	Sac City	332	170	222P	Bi Trans	Transsuíte		Yes	trunk fiber a	Local TOD	No	None	
Sac City	Broadway	RR Line	Sac City	Sac City	-	-	-	-	-	-	-	-	RR Act			
Sac City	Broadway	21st St	Sac City	Sac City	332	170	222P	Bi Trans	Transsuíte		Yes	trunk fiber a	Local TOD	No	None	offline/analog
Sac City	Broadway	24th St	Sac City	Sac City	M	390	MOD	Traconex	Transsuíte		Yes	trunk fiber a	Local TOD	No	None	
Sac City	Broadway	26th St	Sac City	Sac City	G	390	MOD	Traconex	Transsuíte		Yes	trunk fiber a	Local TOD	No	None	
Sac City	Broadway	Franklin Bl	Sac City	Sac City	G	390	MOD	Traconex	Transsuíte		Yes	trunk fiber a	Local TOD	No	None	
Sac City	Broadway	Alhambra Bl	Sac City	Sac City	R	390	MOD	Traconex	Transsuíte		Yes	trunk fiber a	Local TOD	No	None	
Sac City	Broadway	34th St	Sac City	Sac City	R	390	RvJ	Traconex			No	copper	Local TOD	No	None	
Sac City	Broadway	35th St	Sac City	Sac City	R	390	CJ	Traconex			No	copper	Local TOD	No	None	
Sac City	Broadway	Martin Luther King Jr	Sac City	Sac City	332	2070	D4	McCain	Transsuíte		Yes	fiber	Fully Act	No	Video/Loop	analog/digital
Sac City	Broadway	42nd St	Sac City	Sac City	R	ASC3		Econolite	Transsuíte		Yes	fiber	Fully Act	No	Video/Loop	
Sac City	Broadway	49th St	Sac City	Sac City	R	390	MOD	Traconex			No	trunk fiber a	Fully Act	No	Loop	
Sac City	Broadway	50th St	Sac City	Sac City	R	390	MOD	Traconex			No	trunk fiber a	Fully Act	No	Loop	
Sac City	Broadway	Fairgrounds Dr	Sac City	Sac City	R	390	MOD	Traconex			No	trunk fiber a	Semi Act	No	Loop	
Sac City	Broadway	59th St	Sac City	Sac City	R	390	MOD	Traconex			No	trunk fiber a	Fully Act	No	Loop	
Sac City	Broadway	65th St	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuíte		Yes	fiber	Fully Act	No	Loop	
Sac City	Alhambra Bl	T St	Sac City	Sac City	R	390	MOD	Traconex	Transsuíte		Yes	copper	Local TOD	No	None	
Sac City	Alhambra Bl	S St	Sac City	Sac City	G	390	MOC	Traconex	Transsuíte		Yes	copper	Local TOD	No	None	
Sac City	Alhambra Bl	RR Line	Sac City	Sac City	-	-	-	-	Transsuíte		Yes	copper	RR Act			
Sac City	Alhambra Bl	Q St	Sac City	Sac City	G	ATCeX	D4	McCain	Transsuíte		Yes	fiber	Semi Act	No	Loop	
Sac City	Alhambra Bl	Stockton Bl / P St	Sac City	Sac City	332	2070	D4	McCain	Transsuíte		Yes	fiber	Fully Act	No	Video/Loop	digital
Sac City	Alhambra Bl	O St	Sac City	Sac City	-	-	-	-	-	-	-	-	Stop Sign			
Sac City	Alhambra Bl	N St	Sac City	Sac City	G	390	MOD	Traconex	Transsuíte		Yes	copper	Local TOD	No	None	offline/analog
Sac City	Alhambra Bl	Folsom Bl	Sac City	Sac City	332	2070	D4	McCain	Transsuíte		Yes	fiber	Fully Act	No	Video	digital
Sac City	Stockton Bl	34th St	Sac City	Sac City	R	390	CJ	Traconex			No	k fiber avail	Semi Act		Loop	
Sac City	Stockton Bl	US50 WB/35th St	Caltrans	Sac City	R	390	CJ	Traconex			No	k fiber avail	Fully Act		Loop	
Sac City	Stockton Bl	US50 EB	-	-	-	-	-	-	-	-	No	k fiber avail	No Controls			offline/analog
Sac City	Stockton Bl	T St	Sac City	Sac City	R	ASC3		Econolite			No	k fiber avail	Semi Act		Loop	
Sac City	Stockton Bl	Miller Wy	Sac City	Sac City	G	ATCeX	D4	McCain			No	k fiber avail	Semi Act		Loop	
Sac City	Stockton Bl	Colonial Wy	Sac City	Sac City	G	390	CJ	Traconex			No	k fiber avail	Semi Act		Loop	
Sac City	Stockton Bl	Sherman Wy	Sac City	Sac City			SIMA	Spot Devices			No	k fiber avail	PHB	No		
Sac City	Stockton Bl	X St	Sac City	Sac City	R	ASC3		Econolite			No	k fiber avail	Fully Act		Video/Loop	offline/analog
Sac City	Stockton Bl	2nd Av	Sac City	Sac City	R	ASC3		Econolite			No	k fiber avail	Fully Act		Video/Loop	
Sac City	Stockton Bl	Broadway	Sac City	Sac City	R	ASC2		Econolite			No	k fiber avail	Fully Act		Video/Loop	offline/analog
Sac City	Stockton Bl	10th Av Ped Xing	Sac City	Sac City	G	390	MOD	Traconex			No	k fiber avail	Ped Act			
Sac City	Stockton Bl	14th Av	Sac City	Sac City	R	ASC2		Econolite			No	k fiber avail	Fully Act		Loop	
Sac City	Stockton Bl	17th Av Ped Xing	Sac City	Sac City	G	390	MOD	Traconex			No	k fiber avail	Ped Act			
Sac City	Stockton Bl	21st Av	Sac City	Sac City	R	ASC2		Econolite			No	k fiber avail	Fully Act		Loop	
Sac City	Stockton Bl	Lawrence Dr	Sac City	Sac City	R	ASC2		Econolite			No	k fiber avail	Fully Act		Loop	
Sac City	Stockton Bl	Ped Xing	Sac City	Sac City	G	390	MOD	Traconex			No	k fiber avail	Ped Act			
Sac City	Stockton Bl	Fruitridge Rd	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuíte		Yes	fiber	Fully Act		Video/Loop	offline/analog
Sac City	65th St	RR Line / Q St	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuíte		Yes	fiber	Fully Act	No	Loop	
Sac City	65th St	US50 WB	Caltrans	Sac City	R	ATCeX	D4	McCain	Transsuíte		Yes	fiber	Fully Act	No	Loop	
Sac City	65th St	US50 EB	Caltrans	Sac City	332	2070	D4	McCain	Transsuíte		Yes	fiber	Fully Act	No	Video/Loop	analog/digital
Sac City	65th St	4th Av	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuíte		Yes	fiber	Fully Act	No	Loop	
Sac City	65th St	14th Av	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuíte		Yes	fiber	Fully Act	No	Video/Loop	
Sac City	65th St	21st Av	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuíte		Yes	fiber	Fully Act	No	Video/Loop	
Sac City	65th St	Fruitridge Rd	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuíte		Yes	copper	Fully Act	No	Loop	
Sac City	Howe Ave	Fair Oaks Bl	Sac City	Sac City	R	ASC3	2.54	Econolite	Transsuíte		Yes	copper	Fully Act	No	Video	digital
Sac City	Howe Ave	University Av	Sac City	Sac City	R-TS2	ASC3	2.58	Econolite	Transsuíte		Yes	copper	Fully Act	No	Loops	
Sac City	Howe Ave	American River Dr	Sac City	Sac City	R-TS2	ASC3	2.62	Econolite	Transsuíte		Yes	copper	Fully Act	No	Loops	
Sac City	Howe Ave	Swathmore Dr	Sac City	Sac City	R	ASC2		Econolite	Transsuíte		Yes	copper	Fully Act	No	Loops	digital
Sac City	Howe Ave	US50 WB/College Tw	Caltrans	Sac City	R	ASC2		Econolite	Transsuíte		Yes	copper	Fully Act	No	Loops	
Sac City	Howe Ave	US 50 EB	Caltrans	Sac City	R	ASC2		Econolite	Transsuíte		Yes	copper	Fully Act	No	Loops	
Sac City	Power Inn Rd	RT Driveway	Sac City	Sac City	R	ASC2		Econolite	Transsuíte		Yes		Fully Act	No	Loops	
Sac City	Power Inn Rd	Cucamonga Av	Sac City	Sac City	R	ASC2		Econolite	Transsuíte		Yes		Fully Act	No	Loops	
Sac City	Power Inn Rd	Ramona Av	Sac City	Sac City	R	ASC2		Econolite	Transsuíte		Yes		Fully Act	No	Video/Loop	
Sac City	Power Inn Rd	14th Av	Sac City	Sac City	R	ASC2		Econolite	Transsuíte		Yes		Fully Act	No	Video/Loop	
Sac City	Power Inn Rd	RR Line	Sac City	Sac City	-	-	-	-	Transsuíte		Yes		RR Act			

Jurisdictional Boundary	Location		Ownership		Signal Controller						Communication		Traffic Signal Control Characteristics		Detection Type	CCTV Camera
	Main Street	Cross Street	Ownership	Maintenance	Cabinet Type	Controller	Firmware	Manufacturer	Traffic Control System	Controller / System upgrade funded for install in next 12 months	TMC Connection	TMC Communication Type	Type of Operation	Transit Signal Priority		
Sac City	Power Inn Rd	Fruitridge Rd	Sac City	Sac City	R-TS2	ATCeX	D4	McCain	Transsuite		Yes		Fully Act	No	Video/Loop	analog/digital
Sac City	Florin Perkins Rd	Kiefer Bl	Sac City	Sac City	R	390	CJ	Traconex			No	copper	Fully Act	No		
Sac City	Florin Perkins Rd	Jackson Rd	Sac City	Sac City	R	390	RvJ	Traconex			No	copper	Fully Act	No	Loop	
Sac City	Florin Perkins Rd	Belvedere Av	Sac City	Sac City	R-TS2	ATCeX	D4	McCain			No	copper	Fully Act	No	Loop	
Sac City	Florin Perkins Rd	23rd Av	Sac City	Sac City	R	ASC2		Econolite			No	copper	Fully Act	No	Loop	
Sac City	Florin Perkins Rd	RR Line	Sac City	Sac City	-	-	-	-	-	-	No	copper	RR Act			
Sac City	Florin Perkins Rd	Fruitridge Rd	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuite		Yes	fiber	Fully Act	No	Video/Loop	analog/digital
Sac City	Seamas Av	I-5 SB	Caltrans	Sac City	M	390	CJ	Traconex			No		Fully Act	No	Loop	
Sac City	Seamas Av	I-5 NB	Caltrans	Sac City	M	ASC2		Econolite			No		Fully Act	No	Loop	
Sac City	Seamas Av	Lonsdale Dr	Sac City	Sac City	M	390	MOD	Traconex			No		Semi Act	No	Loop	
Sac City	Seamas/Fruitridge	S.Land Park Dr	Sac City	Sac City	R	ASC3		Econolite			No		Fully Act	No	Video/Loop	
Sac City	Fruitridge Rd	Monterey Wy	Sac City	Sac City	R	390	CJ	Traconex			No		Semi Act	No	Loop	
Sac City	Fruitridge Rd	Freeport Bl	Sac City	Sac City	332	2070	D4	McCain			No	fiber	Fully Act	No	Loop	
Sac City	Fruitridge Rd	Helen Wy	Sac City	Sac City	332	2070	D4	McCain			No		Semi Act	No	Loop	
Sac City	Fruitridge Rd	24th St	Sac City	Sac City	R	390	MOD	Traconex			No	k fiber avail	Fully Act	No	Loop	
Sac City	Fruitridge Rd	RR Line	Sac City	Sac City	R-TS2	ASC3		Econolite			No	k fiber avail	Fully Act	No	Loop	
Sac City	Fruitridge Rd	28th St	Sac City	Sac City	R	ASC2		Econolite			No	k fiber avail	Semi Act	No	Loop	
Sac City	Fruitridge Rd	Franklin Bl	Sac City	Sac City	R	390	MOD	Traconex			No	k fiber avail	Fully Act	No	pp/Microwave	
Sac City	Fruitridge Rd	MLK Jr Bl	Sac County	Sac City	R	ATCeX	D4	McCain	Transsuite		Yes	copper	Fully Act	No	Loop	digital/offline
Sac City	Fruitridge Rd	Enrico Ped Xing	Sac County	Sac City	G	ASC2		Econolite					Ped Act	No	Ped	
Sac City	Fruitridge Rd	Del Norte Bl	Sac County	Sac City	M	ATCeX	D4	McCain	Transsuite		Yes	copper	Fully Act	No	Loop	
Sac City	Fruitridge Rd	44th St	Sac County	Sac City	M	ATCeX	D4	McCain	Transsuite		Yes	copper	Fully Act	No	Loop	
Sac City	Fruitridge Rd	Lawrence Dr	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuite		Yes	fiber	Fully Act	No	Loop	
Sac City	Fruitridge Rd	58th St	Sac City	Sac City	R	ASC3	2.58	Econolite	Transsuite		Yes	fiber	Fully Act	No	Video/Loop	
Sac City	Fruitridge Rd	62nd St	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuite		Yes	fiber	Semi Act	No	Loop	
Sac City	Fruitridge Rd	65th St Expy	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuite		Yes	fiber	Fully Act	No	Loop	
Sac City	Fruitridge Rd	71st St	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuite		Yes	fiber	Fully Act	No	Loop	
Sac City	Fruitridge Rd	Wallace Av	Sac City	Sac City	R	070 NEM	D4	McCain	Transsuite		Yes	fiber	Fully Act	No	Loop	
Sac City	Fruitridge Rd	Bradford Dr	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuite		Yes	fiber	Fully Act	No	Video	
Sac City	Fruitridge Rd	79th St	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuite		Yes	fiber	Fully Act	No	Loop	
Sac City	Fruitridge Rd	RR Line	Sac City	Sac City	-	-	-	-	Transsuite		Yes	fiber	RR Act			
Sac City	Fruitridge Rd	Foodlink St	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuite		Yes	fiber	Fully Act	No	Video/Loop	
Sac City	Fruitridge Rd	84th St	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuite		Yes	fiber	Fully Act	No	Video/Loop	
Sac City	Folsom Bl	34th St	Sac City	Sac City	332	2070	D4	McCain	Transsuite		Yes	fiber	Semi Act	No	Loop	
Sac City	Folsom Bl	36th St	Sac City	Sac City	332	2070	D4	McCain	Transsuite		Yes	fiber	Semi Act	No	Loop	
Sac City	Folsom Bl	39th St SB	Sac City	Sac City	332	2070	D4	McCain	Transsuite		Yes	fiber	Semi Act	No	Loop	
Sac City	Folsom Bl	43rd St/Cemetery Rd	Sac City	Sac City	332	2070	D4	McCain	Transsuite		Yes	fiber	Semi Act	No	Loop	
Sac City	Folsom Bl	47th St	Sac City	Sac City	332	2070	D4	McCain	Transsuite		Yes	fiber	Semi Act	No	Loop	
Sac City	Folsom Bl	51st St	Sac City	Sac City	332	2070	D4	McCain	Transsuite		Yes	fiber	Semi Act	No	Loop	analog/digital
Sac City	Folsom Bl	55th St	Sac City	Sac City	332	2070	D4	McCain	Transsuite		Yes	fiber	Semi Act	No	Loop	
Sac City	Folsom Bl	56th St	Sac City	Sac City	R	070 NEM	D4	McCain	Transsuite		Yes	fiber	Fully Act	No	Loop	analog/digital
Sac City	Folsom Bl	59th St	Sac City	Sac City	332	2070	D4	McCain	Transsuite		Yes	fiber	Fully Act	No	Loop	
Sac City	Folsom Bl	65th St	Sac City	Sac City	R	ATCeX	D4	McCain	Transsuite		Yes	fiber	Fully Act	No	Loop	analog/digital
Sac City	Folsom Bl	State University Dr	Sac City	Sac City	R	ASC2		Econolite				fiber	Fully Act	No	Loop	
Sac City	Folsom Bl	Hornet Dr	Sac City	Sac City	R	390	RvJ	Traconex				copper	Fully Act	No	Video/Loop	
Sac City	Folsom Bl	Power Inn Rd	Sac City	Sac City	R	ASC2		Econolite	Transsuite		Yes	copper	Fully Act	No	Loop	offline/analog
Sac City	Folsom Bl	Bicenntenial Cir	Sac City	Sac City	332	2070	D4	McCain				copper	Fully Act	No	Loop	
Sac City	Folsom Bl	Jackson Hwy	Sac City	Sac City	R	ATCeX	D4	McCain				copper	Fully Act	No	Loop	
Sac City	Folsom Bl	Florin Perkins Rd	Sac City	Sac City	R	390	CJ	Traconex				copper	Fully Act	No	Loop	
Sac City	Folsom Bl	Wissemann Dr	Sac City	Sac City	R	390	CJ	Traconex					Fully Act	No	Loop	
Sac City	Folsom Bl	Comm. Ctr w/o Watt	Sac City	Sac City	R	391	CJ	Traconex					Fully Act	No	Loop	
Sac County	Fair Oaks Bl	Munroe St	Sac County	Sac County	M	2070	22.58.10	Econolite	Centrac		Y	TWP	Fully Act	No	Loops	Y
Sac County	Fair Oaks Bl	Morse Ave	Sac County	Sac County	M	2070	22.58.10	Econolite	Centrac		Y	TWP	Fully Act	No	Loops	N
Sac County	Fair Oaks Bl	Watt Av	Sac County	Sac County	M	2070	22.58.10	Econolite	Centrac		Y	Fiber	Fully Act	No	Video	Y
Sac County	Watt Av	US50 WB	Caltrans	Sac County	M	2071	22.58.11	Econolite	Centrac		Y	Fiber	Traf Responsive	No	Video	N
Sac County	Watt Av	US50 EB	Caltrans	Sac County	M	2072	22.58.12	Econolite	Centrac		Y	Fiber	Traf Responsive	No	Video	N
Sac County	Folsom Bl	Watt Av	Sac County	Sac County	P	2070	22.58.10	Econolite	Centrac		Y	Fiber	Fully Act	No	Video	Y
Sac County	Folsom Bl	Manlove Rd	Sac County	Sac County	M	820A	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Sac County	Folsom Bl	Norcade/Starfire	Sac County	Sac County	M	820	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Sac County	Folsom Bl	La Riviera Dr	Sac County	Sac County	M	820A	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Sac County	Folsom Bl	Tiber Dr	Sac County	Sac County	M	820	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Sac County	Folsom Bl	Mayhew Rd	Sac County	Sac County	M	820A	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Sac County	Folsom Bl	Butterfield Wy	Sac County	Sac County	M	2070	22.58.10	Econolite	Centrac		N	-	Fully Act	No	Loops	N
Sac County	Folsom Bl	Bradshaw Rd	Sac County	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Fully Act	No	Loops	N
Rancho Cordova	Folsom Bl	Paseo Rio/Horn	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Rancho Cordova	Folsom Bl	Rod Beaudry Dr	Rancho Cordova	Sac County	M	2070	65.0T	Naztec	-		N	-	Fully Act	No	Loops	Y
Rancho Cordova	Folsom Bl	Routier Rd	Rancho Cordova	Sac County	M	2070	65.0T	Naztec	-		Y	TWP	Fully Act	No	Loops	Y
Rancho Cordova	Folsom Bl	Bravado Dr	Rancho Cordova	Sac County	P	2070	65.0T	Naztec	-		Y	TWP	Fully Act	No	Loops	N
Rancho Cordova	Folsom Bl	La Loma Dr	Rancho Cordova	Sac County	M	2070	65.0T	Naztec	-		Y	TWP	Fully Act	No	Loops	Y
Rancho Cordova	Folsom Bl	Mather/Mills Station (P	Rancho Cordova	Sac County	M	2070	65.0T	Naztec	-		Y	TWP	Ped Act	No	Loops	N
Rancho Cordova	Folsom Bl	Mather Field Rd	Rancho Cordova	Sac County	M	2070	65.0T	Naztec	-		Y	TWP	Fully Act	No	Loops	Y
Rancho Cordova	Folsom Bl	Dawes St	Rancho Cordova	Sac County	M	2070	65.0T	Naztec	-		Y	TWP	Fully Act	No	Loops	N
Rancho Cordova	Folsom Bl	Coloma Rd	Rancho Cordova	Sac County	P	2070	22.58.10	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	Y
Rancho Cordova	Folsom Bl	Mills Park Dr	Rancho Cordova	Sac County	M	2070	65.0T	Naztec	-		Y	TWP	Fully Act	No	Loops	Y
Rancho Cordova	Folsom Bl	Metro Fire Sta 51	Rancho Cordova	Sac County	FSCAB	EMD	-	-	-		N	-	Fire Act	No	None	N
Rancho Cordova	Folsom Bl	Aramon Dr	Rancho Cordova	Sac County	P	2070	65.0T	Naztec	-		Y	TWP	Fully Act	No	Loops	Y
Rancho Cordova	Folsom Bl	Village Ln	Rancho Cordova	Sac County	M	2070	65.0T	Naztec	-		Y	TWP	Fully Act	No	Loops	N
Rancho Cordova	Folsom Bl	Zinfandel Dr	Rancho Cordova	Sac County	M	2070	65.0T	Naztec	-		Y	TWP	Fully Act	No	Loops	Y
Rancho Cordova	Folsom Bl	Don Juan Dr	Rancho Cordova	Sac County	P	2070	65.0T	Naztec	-		Y	TWP	Fully Act	No	Loops	Y
Rancho Cordova	Folsom Bl	Cordova Twn Ctr Sta	Rancho Cordova	Sac County	P	2070	65.0T	Naztec	-		Y	TWP	Ped Act	No	Loops	N
Rancho Cordova	Folsom Bl	Cordova Ln	Rancho Cordova	Sac County	P	2070	65.0T	Naztec	-		Y	TWP	Fully Act	No	Loops	Y
Rancho Cordova	Folsom Bl	McGregor Dr	Rancho Cordova	Sac County	M	2070	65.0T	Naztec	-		Y	TWP	Fully Act	No	Loops	Y
Rancho Cordova	Folsom Bl	Kilgore Rd	Rancho Cordova	Sac County	M	2070	65.0T	Naztec	-		Y	TWP	Fully Act	No	Loops	Y

Jurisdictional Boundary	Location		Ownership		Signal Controller						Communication		Traffic Signal Control Characteristics		Detection Type	CCTV Camera
	Main Street	Cross Street	Ownership	Maintenance	Cabinet Type	Controller	Firmware	Manufacturer	Traffic Control System	Controller / System upgrade funded for install in next 12 months	TMC Connection	TMC Communication Type	Type of Operation	Transit Signal Priority		
Rancho Cordova	Folsom Bl	Sunrise Bl	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Fully Act	No	Loops	Y
Rancho Cordova	Coloma Rd	Malaga Wy	Rancho Cordova	Sac County	R	2070	22.58.10	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	Y
Rancho Cordova	Coloma Rd	Chase Dr	Rancho Cordova	Sac County	R	2070	22.58.10	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	Y
Rancho Cordova	Coloma Rd	Mills Jr High School (F	Rancho Cordova	Sac County	P	2070	22.58.10	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	Y
Rancho Cordova	Coloma Rd	Chardonay Dr	Rancho Cordova	Sac County	R	2070	22.58.10	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	Y
Rancho Cordova	Coloma Rd	Aramon Dr / Studarus	Rancho Cordova	Sac County	P	2070	22.58.10	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	Y
Rancho Cordova	Coloma Rd	Cordova Ln	Rancho Cordova	Sac County	P	2070	22.58.10	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	Y
Rancho Cordova	Coloma Rd	McGregor Dr	Rancho Cordova	Sac County	R	2070	22.58.10	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	Y
Rancho Cordova	Coloma Rd	Benita Dr	Rancho Cordova	Sac County	P	2070	22.58.10	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	Y
Rancho Cordova	Coloma Rd	Elmanto Dr	Rancho Cordova	Sac County	R	2070	22.58.10	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	Y
Rancho Cordova	Coloma Rd	Elmanto Dr	Rancho Cordova	Sac County	M	2070	22.58.10	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	Y
Rancho Cordova	Coloma Rd	Vehicle Dr	Rancho Cordova	Sac County	P	2070	22.58.10	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	Y
Rancho Cordova	Coloma Rd	Trinity River Dr	Rancho Cordova	Sac County	M	2070	22.58.10	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	Y
Rancho Cordova	Coloma Rd	Sunrise Blvd	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Fully Act	No	Loops	Y
Rancho Cordova	Bradshaw Rd	Oats Dr / Gore	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Bradshaw Rd	US50 EB	Caltrans	Sac County	332	870	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Bradshaw Rd	US50 WB	Caltrans	Sac County	332	870	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Bradshaw Rd SB	Micron Av	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Bradshaw Rd	Lincoln Village Dr	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Bradshaw Rd	Old Placerville Rd	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Old Placerville Rd	Granby Dr	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Rancho Cordova	Old Placerville Rd	Routier Rd	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Rancho Cordova	Old Placerville Rd	Systems Pkwy	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Rancho Cordova	Old Placerville Rd	Rockingham Dr	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Rancho Cordova	Rockingham Dr	Mather Field Rd	Rancho Cordova	Sac County	M	2070	22.58.10	Econolite	Centrac		N	-	Fully Act	No	Loops	N
Rancho Cordova	Mather Field Rd	US50 WB	Caltrans	Sac County	332	870	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Rancho Cordova	Mather Field Rd	US50 EB	Caltrans	Sac County	332	870	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Rancho Cordova	Mather Field Rd	Mills Station Rd	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Fully Act	No	Loops	N
Rancho Cordova	International Dr	Mather Field Rd	Rancho Cordova	Sac County	M	820	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Rancho Cordova	International Dr	Data Dr	Rancho Cordova	Sac County	P	820A	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Rancho Cordova	International Dr	Zinfandel Dr	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Fully Act	No	Loops	N
Rancho Cordova	Zinfandel Dr	Capital Village Ln	Rancho Cordova	Sac County	P	820A	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Zinfandel Dr	Data Dr	Rancho Cordova	Sac County	P	820A	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Zinfandel Dr	White Rock Rd	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Zinfandel Dr	US50 EB/Gold Ctr Dr	Caltrans	Sac County	332	870	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Zinfandel Dr	US50 WB	Caltrans	Sac County	332	870	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Zinfandel Dr	Olson Dr	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	White Rock Rd	Prospect Park Dr (east	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Fully Act	No	Loops	N
Rancho Cordova	White Rock Rd	Prospect Park Dr / Da	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Fully Act	No	Loops	N
Rancho Cordova	White Rock Rd	Kilgore Rd	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Fully Act	No	Loops	N
Rancho Cordova	White Rock Rd	Sunrise Bl	Rancho Cordova	Sac County	M	820	Rev. X	Multisonics	VMS		Y	TWP	Fully Act	No	Loops	N
Rancho Cordova	Sunrise Bl	Sunrise Park Dr	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Sunrise Bl	Folsom So Canal	Rancho Cordova	Sac County	P	820A	Rev. X	Multisonics	VMS		N	-	Ped Act	No	Loops	N
Rancho Cordova	Sunrise Bl	Sunrise Gold Cir / Sur	Rancho Cordova	Sac County	M	820	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Sunrise Bl	Trade Center Dr	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Sunrise Bl	US50 EB	Caltrans	Sac County	332	870	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Sunrise Bl	US50 WB	Caltrans	Sac County	332	870	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Sunrise Bl	Zinfandel Dr	Rancho Cordova	Sac County	332	870	Rev. X	Multisonics	VMS		Y	TWP	Traf Responsive	No	Loops	N
Rancho Cordova	Sunrise Bl	Trinity River Dr	Rancho Cordova	Sac County	332	870	Rev. X	Multisonics	VMS							
Rancho Cordova	Sunrise Bl	Gold Country Bl	Rancho Cordova	Sac County	332	870	Rev. X	Multisonics	VMS							
Sac County	Sunrise Bl	Fair Oaks Bl	Sac County	Sac County	332	870	Rev. X	Multisonics	VMS							
Sac County	Sunrise Bl	Winding Way	Sac County	Sac County	332	870	Rev. X	Multisonics	VMS							
Sac County	Sunrise Bl	Sunset Av	Sac County	Sac County	332	870	Rev. X	Multisonics	VMS							
Sac County	White Rock Rd	Sunrise Park Dr	Sac County	Sac County	-	-	-	-	-		-	-	Stop Sign	-	None	N
Sac County	White Rock Rd	Grant Line Rd	Sac County	Sac County	P	2070	22.58.10	Econolite	Centrac		N	-	Fully Act	No	Loops	N
Sac County	White Rock Rd	Prairie City Rd	Sac County	Sac County	P	2070	22.58.10	Econolite	Centrac		N	-	Fully Act	No	Loops	N
Sac County	White Rock Rd	Scott Rd	Sac County	Sac County	-	-	-	-	-		-	-	Stop Sign	-		
Rancho Cordova	Folsom Bl	Sunrise Station (PED)	Rancho Cordova	Sac County	PED	820	Rev. X	Multisonics	VMS		N	-	Ped Act	No	None	N
Rancho Cordova	Folsom Bl	Mercantile Dr	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Rancho Cordova	Folsom Bl	Nimbus Lake Vlge	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Rancho Cordova	Folsom Bl	Marketplace Ln	Rancho Cordova	Sac County	M	820A	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Sac County	Hazel Av	US 50 EB	Caltrans	Sac County	332	870	Rev. X	Multisonics	VMS							
Sac County	Hazel Av	US 50 WB	Caltrans	Sac County	332	870	Rev. X	Multisonics	VMS							
Sac County	Hazel Av	Gold Country Bl	Sac County	Sac County	M	820A	Rev. X	Multisonics	VMS							
Sac County	Hazel Av	Curragh Downs Dr	Sac County	Sac County	M	820A	Rev. X	Multisonics	VMS							
Sac County	Hazel Av	Winding Way	Sac County	Sac County	M	820A	Rev. X	Multisonics	VMS							
Sac County	Hazel Av	La Serana Dr	Sac County	Sac County	M	820A	Rev. X	Multisonics	VMS							
Sac County	Hazel Av	Sunset Av	Sac County	Sac County	M	820A	Rev. X	Multisonics	VMS							
Sac County	Folsom Bl	Hazel Av	Sac County	Sac County	M	820A	Rev. X	Multisonics	VMS		Y	TWP	Fully Act	No	Loops	N
Sac County	Folsom Bl	Hazel Station (PED)	Sac County	Sac County	M	820A	Rev. X	Multisonics	VMS		N	-	Ped Act	No	Loops	N
Sac County	Folsom Bl	Aerogjet Dr	Sac County	Sac County	M	820A	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Sac County	Folsom Bl	Birkmont/Auto Mall	Sac County	Sac County	M	820A	Rev. X	Multisonics	VMS		N	-	Fully Act	No	Loops	N
Folsom	Folsom Bl	US50 EB	Caltrans	Caltrans												
Folsom	Folsom Bl	US50 WB	Caltrans	Caltrans												
Folsom	Folsom Bl	Iron Point Rd	Folsom	Folsom	M	820A	K	Multisonics	OSAM	Yes	Y	Fiber	Fully Act	No	Loops	IP
Folsom	Iron Point Rd	Folsom Outlets	Folsom	Folsom	M	820A	K	Multisonics	OSAM	Yes	Y	Fiber	Fully Act	No	Loops	No
Folsom	Iron Point Rd	Ingersoll Wy	Folsom	Folsom	M	820A	K	Multisonics	OSAM		Y	Fiber	Fully Act	No	Loops	No
Folsom	Iron Point Rd	Intel West	Folsom	Folsom	M	Cobalt	32.64	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	No
Folsom	Iron Point Rd	Willard Dr	Folsom	Folsom	M	Cobalt	32.64	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	No
Folsom	Iron Point Rd	Prairie City Rd	Folsom	Folsom	M	Cobalt	32.64	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	IP
Folsom	Iron Point Rd	Grover Rd	Folsom	Folsom	M	820A	K	Multisonics	OSAM		Y	Fiber	Fully Act	No	Loops	No
Folsom	Iron Point Rd	McAdoo Dr	Folsom	Folsom	M	820A	K	Multisonics	OSAM		Y	Fiber	Fully Act	No	Loops	No
Folsom	Iron Point Rd	Outcropping Wy	Folsom	Folsom	M	820A	K	Multisonics	OSAM		Y	Fiber	Fully Act	No	Loops	No

Jurisdictional Boundary	Location		Ownership		Signal Controller						Communication		Traffic Signal Control Characteristics		Detection Type	CCTV Camera
	Main Street	Cross Street	Ownership	Maintenance	Cabinet Type	Controller	Firmware	Manufacturer	Traffic Control System	Controller / System upgrade funded for install in next 12 months	TMC Connection	TMC Communication Type	Type of Operation	Transit Signal Priority		
Folsom	Iron Point Rd	Oak Ave Pkwy	Folsom	Folsom	M	820A	K	Multisonics	OSAM		Y	Fiber	Fully Act	No	Loops	No
Folsom	Iron Point Rd	Rowberry Dr	Folsom	Folsom	M	820A	K	Multisonics	OSAM		Y	Fiber	Fully Act	No	Loops	No
Folsom	Iron Point Rd	Broadstone Pkwy	Folsom	Folsom	M	820A	K	Multisonics	OSAM		Y	Fiber	Fully Act	No	Loops	No
Folsom	Iron Point Rd	Folsom Gateway	Folsom	Folsom	M	820A	K	Multisonics	OSAM		Y	Fiber	Fully Act	No	Loops	No
Folsom	Iron Point Rd	Palladio Pkwy	Folsom	Folsom	M	820A	K	Multisonics	OSAM		Y	Fiber	Fully Act	No	Loops	No
Folsom	Iron Point Rd	E Bidwell/Scott Rd	Folsom	Folsom	M	820A	K	Multisonics	OSAM		Y	Fiber	Fully Act	No	Loops	IP
Folsom	Iron Point Rd	Cavitt Dr	Folsom	Folsom	M	820A	K	Multisonics	OSAM		Y	Fiber	Fully Act	No	Loops	No
Folsom	Iron Point Rd	Serpa Wy	Folsom	Folsom	M	820A	K	Multisonics	OSAM		Y	Fiber	Fully Act	No	Loops	No
Folsom	Iron Point Rd	Empire Ranch Rd	Folsom	Folsom	-	-	-	-	-	-	-	-	Stop Sign			
Folsom	E Bidwell/Scott Rd NE	Placerville Rd	Folsom	Folsom	M	820A	K	Multisonics	OSAM		Y	Fiber	Fully Act	No	Loops	No
Folsom	E Bidwell/Scott Rd NE	US50 WB	Caltrans	Caltrans												
Folsom	E Bidwell/Scott Rd NE	US50 EB	Caltrans	Caltrans												
Folsom	Prairie City Rd	Am Aggregate Rd	Folsom	Folsom	M	Cobalt	32.64	Econolite	Centrac		Y	Fiber	Fully Act	No	Loops	No
Folsom	Prairie City Rd	US50 WB	Caltrans	Caltrans												
Folsom	Prairie City Rd	US50 EB	Caltrans	Caltrans												
El Dorado Co	Green Valley Rd	Sophia Pkwy	El Dorado Co	El Dorado Co	332	170	C8V4	McCain	ATMS.now	No	No	None	Fully Act	No	Loops	No
El Dorado Co	Green Valley Rd	Mormon Island Dr	El Dorado Co	El Dorado Co	332	170	C8V4	McCain	ATMS.now	No	No	None	Fully Act	No	Loops	No
El Dorado Co	Green Valley Rd	Miller Rd	El Dorado Co	El Dorado Co	332	2070	ztec v76	Trafficware	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	Green Valley Rd	Francisco Dr	El Dorado Co	El Dorado Co	332	2070	ztec v76	Trafficware	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	Green Valley Rd	El Dorado Hills Bl	El Dorado Co	El Dorado Co	332	2070	ztec v76	Trafficware	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	Green Valley Rd	Silva Valley Rd	El Dorado Co	El Dorado Co	332	2070	ztec v76	Trafficware	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	Green Valley Rd	Pleasant Grove Mid S	El Dorado Co	El Dorado Co	332	970	CIP v61	Trafficware	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	Green Valley Rd	Silver Springs Rd	El Dorado Co	El Dorado Co	P	980	CIP v61	Trafficware	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	Green Valley Rd	Bass Lake Rd	El Dorado Co	El Dorado Co	332	970	CIP v61	Trafficware	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	Green Valley Rd	Peridot Dr	El Dorado Co	El Dorado Co	332	170	C8V4	McCain	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	Green Valley Rd	Cameron Park Dr	El Dorado Co	El Dorado Co	P	980	CIP v61	Trafficware	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	White Rock Rd	4 Seasons Dr	El Dorado Co	El Dorado Co	332	170	C8V4	McCain	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	White Rock Rd	Winfield Way	El Dorado Co	El Dorado Co	332	980	CIP v61	Trafficware	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	White Rock Rd	Latrobe Rd	El Dorado Co	El Dorado Co	332	980	CIP v61	Trafficware	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	White Rock Rd	Post St	El Dorado Co	El Dorado Co	332	980	CIP v61	Trafficware	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	White Rock Rd	Vine St	El Dorado Co	El Dorado Co	332	2070	ztec v76	Trafficware	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	Silva Valley Pkwy	US50 EB	Caltrans	Caltrans												
El Dorado Co	Silva Valley Pkwy	US50 WB	Caltrans	Caltrans												
El Dorado Co	Silva Valley Pkwy	Serrano Pkwy	El Dorado Co	El Dorado Co	332	2070	ztec v76	Trafficware	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	Silva Valley Pkwy	Golden Eagle Lane	El Dorado Co	El Dorado Co		-	-			No			Stop Sign			
El Dorado Co	Silva Valley Pkwy	Harvard Way	El Dorado Co	El Dorado Co	332	2070	ztec v76	Trafficware	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	Silva Valley Pkwy	Appian Way	El Dorado Co	El Dorado Co		-	-			No			Stop Sign			
El Dorado Co	Latrobe Rd	Town Center Bl	El Dorado Co	El Dorado Co	332	170	C8V4	McCain	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	Latrobe Rd	US50 EB	Caltrans	Caltrans												
El Dorado Co	El Dorado Hill Bl	US50 WB	Caltrans	Caltrans												
El Dorado Co	El Dorado Hill Bl	Park Dr/Saratoga Wy	El Dorado Co	El Dorado Co	332	170	C8V4	DTS	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	El Dorado Hill Bl	Serrano Pkwy	El Dorado Co	El Dorado Co	332	170	C8V4	DTS	ATMS.now	No	No	None	Fully Act	No	Loops	
El Dorado Co	Serrano Pkwy	Terracina Dr	El Dorado Co	El Dorado Co	-	-	-	-	-	-	-	-	Stop Sign			
El Dorado Co	Serrano Pkwy	Villagio Dr	El Dorado Co	El Dorado Co	-	-	-	-	-	-	-	-	Stop Sign			
El Dorado Co	Serrano Pkwy	Collingtree Dr	El Dorado Co	El Dorado Co	-	-	-	-	-	-	-	-	Stop Sign			
El Dorado Co	Serrano Pkwy	Greenview Dr	El Dorado Co	El Dorado Co	-	-	-	-	-	-	-	-	Stop Sign			
El Dorado Co	Serrano Pkwy	Bass Lake Rd	El Dorado Co	El Dorado Co	P	980	CIP v61	Trafficware	ATMS.now	No	No	None	Fully Act	No	Loops	
Caltrans			Caltrans	Sac County	332	2070	SCP 2.1	Caltrans	TransSuite	Type	No	Fiber	Local TOD	Yes	Loop	No
West sac			West sac	West sac	337	170	C8V3	McCain	Series 2000	Yes	Yes	Microwave	Adaptive	No	Video	Digital
Sac City			Sac City	Sac City		170C	LACO-4	BiTran	QuickNet Pro	No		TWP	Free	Plan	Video/Loop	HD
Sac County			Sac County	Sac County		820VMS	Omni ex	Multisonics	SCATS			Telephone	Fully Act		Single-Camera	Analog
Rancho Cordova			Rancho Cordova	Rancho Cordova		170ATC	D4	Econolite	Centrac				Semi Act		Magnetometer	
Folsom			Folsom	Folsom	P	390		Traconex	i2tms				Traf Responsive		None	
El Dorado County					M	980		Naztec	KITS				Ped Act		Loop/Microwave	
						3000e		Peek					Stop Sign			

US 50 ICM
Deployment Alternatives and Potential Strategies



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1. Introduction

The *District 3 US 50 Integrated Corridor Management Implementation Plan* (Plan) is a partnership-based development for a portion of US 50 transportation corridor through Yolo, Sacramento, and El Dorado counties, that include the jurisdictions or cities of West Sacramento, Sacramento, Rancho Cordova, and Folsom, and the unincorporated areas of Rosemont, El Dorado Hills, and Cameron Park. Series of project development team (PDT) workshops were conducted with these partner agencies and consensus decision was reached to select the 37-mile corridor from Enterprise Blvd. in eastern Yolo County, thru Sacramento County, to Cameron Park Blvd. in western El Dorado County for the Plan, see Figure 1.

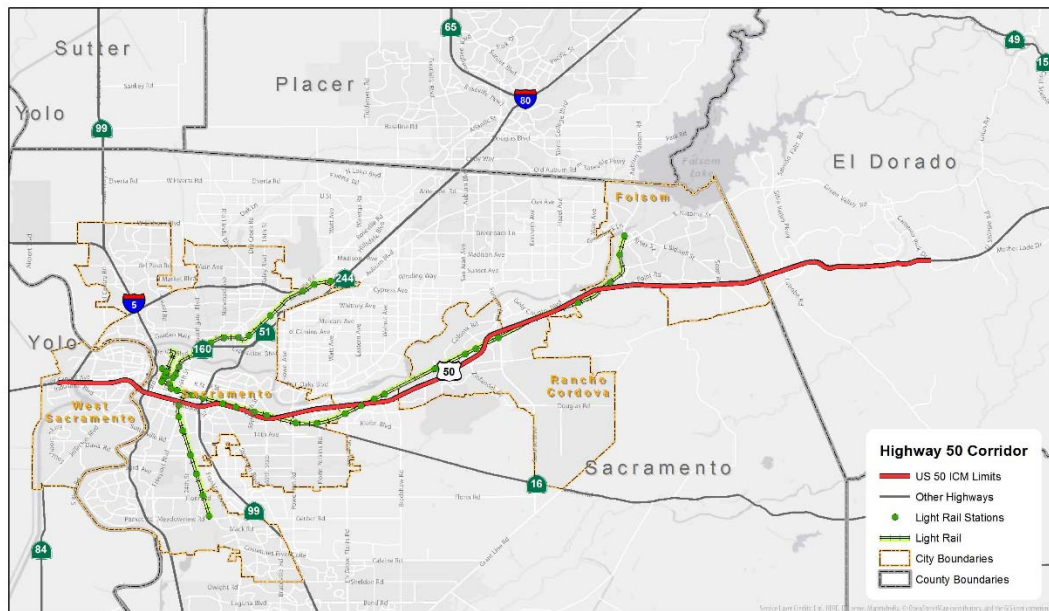


Figure 1: US 50 ICM Corridor

The PDT also decided that the ICM approach should seek a solution and implementation that address the following in the order of priority:

- non-recurrent congestion (incident and event management)
- corridor-specific traveler information
- multi-modal operations
- goods movement and truck traffic
- recurrent congestion (everyday commuter traffic congestion)

It was generally accepted that all of the approaches mentioned were meaningful for the US 50 corridor and should be considered for eventual implementation. To accomplish this, a phased implementation of targeted operations would be considered, addressing non-recurrent congestion initially along with corridor-specific traveler information. From experiences and lessons learned from the maturity of ICM projects around the country, the remaining three targeted operations of multi-modal operations, goods movement and truck traffic, and recurrent congestion would be addressed in added phases.

2. US 50 ICM Vision, Goals and Objectives

The PDT spent considerable effort in developing a vision statement for the ICM project that encompasses the desires of the participants, agreeing to the following:

“US 50 Integrated Corridor Management (ICM) is the proactive multiagency integration and management of the US 50 multimodal transportation corridor to move people and goods more effectively and ensure the greatest gains in operational performance across the entire corridor network.”

This vision statement may require slight modifications over time; however, the PDT felt this statement summarized many of the goals and objectives for the ICM project concept. The ICM partners also identified key objectives for the project to consider as the development of the ICM concept moved forward. These objectives were to:

- **Improve system performance**
 - Improve VMT, VHT, Delay, Collisions (fatalities), travel time reliability, flow, average speeds
- **Provide transportation choices**
 - Increase non-auto modes usage
 - Multimodal options provided
- **Increase accessibility**
 - Improve travel times, traveler information, multimodal connections made
- **Enhance sustainability**
 - Increase non-auto modes usage (transit, bicycles, pedestrians, and HOV)
- **Improve environment**
 - Reduce GHG emissions, green infrastructure added
- **Improve collaborative partnerships**

The US 50 ICM project, as proposed, would support the goals and objectives identified in District 3 Regional Concept of Transportation Operations (RCTO), presented in Table 1. The RCTO goals and objectives align with the Sacramento Area Council of Governments (SACOG's) 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) guiding principles, which include:

- o **Smart Land Use** - Design a transportation system to support good growth patterns, including increased housing and transportation options, focusing more growth inward and improving the economic viability of rural areas.
- o **Environmental Quality and Sustainability** - Minimize direct and indirect transportation impacts on the environment for cleaner air and natural resource protection.
- o **Financial Stewardship** - Manage resources for a transportation system that delivers cost-effective results and is feasible to construct and maintain.
- o **Economic Vitality** - Efficiently connect people to jobs and get goods to market.
- o **Access and Mobility** - Improve opportunities for businesses and citizens to easily access goods, jobs, services and housing.
- o **Equity and Choice** - Provide real, viable travel choices for all people throughout our diverse region.



The concepts and principles associated with ICM implementations across the nation have demonstrated that these goals and objectives are reasonable and obtainable.

Table 1: District 3 RCTO Goals and Objectives

District 3 RCTO Goals & Objectives	District 3 Performance Targets
Goal 1 (Caltrans SMP Goal #1) - Safety and Health	
1. Reduce user fatalities and injuries	♦ Result in 0.5 or less fatalities per 100 million VMT on SHS every year ♦ 10% reduction in number of fatalities in calendar year in each mode type
Goal 2 (Caltrans SMP Goal #2) - Stewardship and Efficiency	
1. Effectively manage transportation assets with asset management plan (fix-it-first)	♦ By 2020, maintain 90% or better ITS elements health
Goal 3 (Caltrans SMP Goal #3) - Sustainability, Livability, and Economy	
1. Provide mobility choice, increase accessibility to all transportation modes and create transportation corridors	♦ By 2020, increase non-auto modes (triple bicycles, double pedestrians, and double transit ridership)
2. Support statewide reduction of GHG emissions	♦ By 2020, 15% reduction of GHG (from 2010 levels) ♦ By 2020, 20% increase incorporating green infrastructure into projects
Goal 4 (Caltrans SMP Goal #4) - System Performance	
1. Improve travel time reliability for all modes	♦ By 2020, improve buffer time index reliability ranking by one level or 15%
2. Reduce peak period travel times and delays for all modes	♦ By 2020, reduce to 8% rate of growth in daily vehicle hours' delay (DVHD) under 35 mph on urban SHS
3. Improve integration and operations	♦ By 2020, provide real-time multimodal system information to public along integrated corridors
4. Increase number of Complete Streets features on SHS	♦ By 2020, increase annual number of Complete Streets features by 5%
5. Develop integrated corridor management (ICM) strategies	♦ By 2020, complete one ICM implementation plan in District 3 ♦ By 2025, implement one ICM corridor in District 3, reduce to 6% rate of DVHD growth on corridor
Goal 5 (Caltrans Goal #5) - Organizational Excellence	
1. Improve internal and external communication to demonstrate professionalism and service levels to the public and stakeholders	♦ By 2020, increase approval rating by stakeholders by at least 5% annually
2. Improve collaborative partnerships	♦ By 2020, have at least 75% approval rating by collaborative partners



3. Deployment Alternatives and Potential Strategies

The US 50 transportation corridor is ideal for an ICM deployment because it has multimodal characteristics and good alternative roadway routes. The corridor has light rail and bus transit, bicycle and pedestrian facilities, parallel arterial routes, and park and ride lots. It also has High-Occupancy Vehicle (HOV) lanes, ramp metering system, advanced signal operations, and Intelligent Transportation System (ITS) infrastructure for incident management and traveler information. These assets and their operations have been effectively used but are not integrated for integrated operations.

As the Project Development Team (PDT) has gained a deeper understanding of the potential benefits that implementation of the ICM concept can provide on US 50 with integrated operations, they have moved from building a consensus around the “concept generation” and have begun to explore alternatives for implementation and operation of the US 50 ICM corridor. This document provides a review of the implementation, operations, and management alternatives and potential strategies for deployment.

Implementation alternatives under consideration include “segmenting the corridor” into logical sub-segments based on the participating jurisdictions. This “segmenting” should not deter various jurisdictions from pursuing improvements that will support the ICM concept, rather help them make cost-effective investments while the “proof of concept” testing is taking place along the other sub-segments. Another alternative is staggering implementation with the agencies and technologies that are deployed along each segment. A discussion of staggering deployment technologies is also presented for consideration along with the potential strategies for deployment.

The operations alternatives section discusses the various “degrees and methods” under which an ICM deployment may be implemented. The number of partners involved and a large number of modes desired as part of the implementation may require the staggering of phases depending on individual agencies’ ability to participate both fiscally and with personnel required to fine tune the ICM system. Constraints imposed by limitations on operational staffing and infrastructure can delay the most willing of participants from implementing ICM on an aggressive schedule. Some initial element deployments and intersection upgrades may be required for the initial phase ICM implementation.

The operational management alternative section provides a discussion on how the implementation of the ICM deployment can be “soft launched” by taking advantage of previous investments through the coordination of manual operational changes when events occur outside a formally implemented ICM segment. Performance data should be collected where possible to document the benefits of inclusion when requesting funding for an expanded ICM project. The lessons learned will strengthen the implementation of the ICM when the segment length for implementation on the formal system encompasses these areas.

How the partners secure funding for the implementation of the ICM will most likely require taking advantage of multiple funding sources. To aid in this process a review of potential sources of funding is also presented. This presentation includes the “source of funding” and the applicability of “matching fund” use or requirements. Examples of ICM funding obtained in other regions are provided. All sources of funding are highly competitive and are oversubscribed, making the application process

critical. Including data to show the application and the leveraging of previous investments will be of high importance as funding applications are prepared.

4. Implementation Considerations

4.1. Corridor Segmentation Alternatives

The complete US 50 multimodal transportation corridor under consideration for ICM deployment is a section of the US 50 through Yolo, Sacramento, and El Dorado counties, including the cities of West Sacramento, Sacramento, Rancho Cordova, and Folsom, and the unincorporated areas of Rosemont, El Dorado Hills, and Cameron Park. The multimodal transportation corridor includes the freeway facility, arterials running parallel and connecting to the freeway facility, public transit systems, park and ride lots, transit parking structures and surface lots, and bicycle and pedestrian facilities.

The phased implementation of an initial deployment can also be dependent on the limits of corridor segments. Starting the ICM deployment project with as many as 12 agencies for 37 miles could be daunting in reaching consensus on all aspect of the ICM implementation, not to mention the high cost and resource needs.

The US 50 ICM corridor was divided into three segments for initial data collection and implementation considerations. The geographic boundaries are:

- Segment 1 (12 miles) – Enterprise Blvd. in West Sacramento thru the City of Sacramento to Watt Ave. in Sacramento County
- Segment 2 (18 miles) – Watt Ave. thru the cities of Rancho Cordova and Folsom to the Sacramento/El Dorado County Line.
- Segment 3 (7 miles) – Sacramento/El Dorado County Line to Cameron Park Dr. in El Dorado County

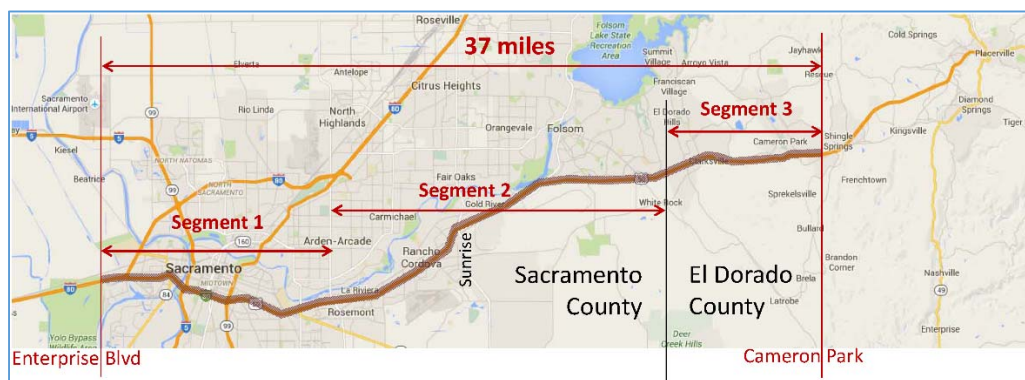


Figure 2: US 50 ICM Corridor Analysis Segments

Although there is significant interest by the stakeholders to undertake the entire 37 miles, funding limitations may affect the breadth of initial deployment. The PDT and stakeholders have reached consensus on forwarding a single segment for implementation of proof of concept. All segments were considered for initial deployment, but Segment 2 was favored by the PDT for several reasons. Many of the arterials which run parallel to US 50 have received considerable funding commitments for traffic signal improvements or have recently completed modernization improvements. Some additional

improvements will be required for the implementation along these arterials; however, it appears as if the total cost for a proof of concept segment would be significantly less along segment 2. In addition, this segment includes fewer jurisdictions and less complex interfaces which the PDT consider advantageous as part of an initial implementation.

The implementation of the ICM corridor focusing on a single segment for initial deployment is favored in order to show the benefits the ICM approach will deliver. If the investments are spread over a larger geographic area the benefits may not prove as apparent as they would if funding was focused on segment 2.

As funding becomes available and additional improvements are implemented in the adjoining segments by the respective jurisdictions, it will be important to consider the future needs of ICM when designing those improvements. Further as being a good steward of public funds by considering the future investments necessary for the implementation of the ICM system and incorporating those into designs as time and funding allow.

4.1.1. Potential Strategy (*Initial deployment starting with Segment 2*)

The US 50 ICM initial deployment effort should focus on Segment 2. The jurisdictions that are adjoining the remaining two segments should continue their signal system upgrades, ITS and communication improvements projects as planned. Consideration should be given for the future needs of ICM deployment along these corridors and investments should consider the future deployment of ICM as they complete the project development process.

4.2. Staggered Deployment of ICM Elements Alternatives

The staggered deployment of technologies presents another method by which the implementation may be divided to reduce the cash flow demand for the ICM implementation. Various technologies should proceed other investments and the costs associated with the proposed very complex integration can be minimized while the proof of concept is being demonstrated by the initial technologies deployed. Deployment of technology for US 50 ICM elements include:

- o ICM System (multiagency system)
- o Freeway Management System (Caltrans)
- o Arterial Management Systems (Caltrans and local agencies)
- o Traveler Information (multiagency, Caltrans, or regional system)
- o Transit Systems (transit agencies)
- o Park and Ride Lots and Parking Management Systems (Caltrans, regional and local agencies, transit agencies)
- o Active Transportation (Caltrans, regional and local agencies)
- o Trucks and Goods Movement (multiagency)

The staggering of the implementation of these features will not occur in the order provided, as many functions will be desired for other purposes along the corridor in advance of the ICM system implementation. The Partnership should continue to work together to assure themselves that investments made by other projects contain the necessary data collection and distribution features necessary for sharing with the ICM system. The best method to allow for this future data sharing to require a “standards-based data output flow” as part of the initial purchase. The inclusion of a



requirement for an Institute of Transportation Engineers (ITE) based Traffic Management Data Dictionary (TMDD) Center to Center (C2C) data output is likely the best insurance of this future capability. If the vendor is required to provide a “key” to the data flow format, any reformatting of data required for integration into the ICM will be greatly simplified. By having this information for the new systems, risks will be reduced and will aid in controlling the future costs for the integration of these systems.

4.2.1. Potential Strategy (*Initial deployment starting with ICM system, FMS, AMS, and TI*)

The initial integration and deployment should include as a minimum the development of the ICM system and include the necessary components to provide coordination between the freeway management system and the arterial management system, as well as provisions for the dissemination of traveler information directly through existing avenues and by third party providers.

If a staggered implementation of ICM system is required, the following could be considered in phases:

- Initial Integration and Deployment
 - ICM System
 - Freeway Management System (FMS)
 - Arterial Management Systems (AMS)
 - Traveler Information (TI)
- Future Add-on Phase 2
 - Transit Systems
 - Parking Management Systems
 - Active Transportation
- Future Add-on Phase 3
 - Trucks and Goods Movement
 - Other

5. Operations Alternatives

5.1. Operational Mode Alternatives

The active management of the roadway network required by ICM can present new challenges to agencies not accustomed to actively manning their systems. While the ultimate outcome from an effective ICM program is likely to increase mobility, reduce the occurrence of secondary or parallel arterial incidents, and reduce motorists' frustrations, the initial effort may require staff training and increased workload. With that in mind, the deployment of the ICM can be accomplished through different implementation modes. Depending on the level of involvement preferred by corridor stakeholders, the ICM system could operate in one of the following three modes:

- **Automatic mode** – This mode would allow for ICM operations with minimal interventions required from transportation system operators. All control devices would be directly managed by the ICM system based on information received from surveillance systems, external information systems, and predefined operational schedules. Predetermined response plan(s) would be selected depending on the corridor conditions and implemented without a required user intervention. System users would have the ability to review the selected response plan(s) to be activated and can make any adjustments, if needed. This is the most difficult operational mode to design and configure, as the absence of user intervention requires good decision-making by the system. This mode thus places the greatest responsibility for successful operations on the individuals tasked with designing, developing, and configuring the decision-support system.
- **Semi-automatic mode** – This mode differs from the automated mode in that it would require an operator's approval of all proposed response plan for activation prior to their implementation by the system. An operator approval requirement would add a level of user oversight on system operations. However, this mode of operation also introduces a risk for stalled operation if the user approval cannot be obtained in a timely basis, either due to the unavailability of the responsible individuals or the continuous rejection of recommended actions by specific operators or stakeholders. This mode may be the best mode initially for staff to gain confidence in the decision-making before they feel confident in transitioning to an automatic mode.
- **Manual mode** – This mode would require the system operator(s) to make the appropriate decision to apply a recommended response plan by the system or take an appropriate course of action to address a corridor condition. In essence, this operational mode requires direct and continuous intervention by the system operator(s).

Among the three modes described above, the automated mode is viewed as being the preferred default mode of operation. However, this is also the most difficult mode to design, develop, and configure as it implies that the ICM system would be able to make the best system management decisions on its own. This means developing a system capable of making rational decisions considering not only the results of quantitative operational analyses but also the knowledge built with each decision implemented and results ensued. To gain confidence with an automatic system staff may need to routinely analyze and validate the systems decision-making. To reach that goal may require additional up-front effort.

With manual mode, direct and continuous intervention by the system operator(s) would be required. Past performances of such mode of operations tell us that slower reaction times and delayed response

times could be expected. In some cases, responses could be missed altogether. This mode would require the system operators to have a high level of expertise and experience.

5.1.1. Potential Strategy (*Initial deployment starting with semi-automated system*)

For the initial system deployment, the participating partner agencies in Segment 2 may be best served by deploying a semi-automated system. This is in part dictated by the new deployment and system management operations of the project within the Sacramento region. While the potential for operating in a fully automated mode for some times of the day may ultimately be desirable, a semi-automated operation would add a level of user oversight by the system operator(s) to ensure effective decision-making. A semi-automated operation might also be favored to help manage special events or unusual situations for which there may not be a clear response strategy or a need to consider factors not adequately modeled within by the ICM system.

5.2. Alternatives of Alternate Route Infrastructure Improvements

To implement an effective ICM there may be additional infrastructure needs including alternative route navigational signing and potentially some intersection control improvements. Alternative routing signage may be accomplished by fixed or electronic signing, Variable Message Signs (VMS), depending on the complexity and number of optional routes that would be recommended for use. Electronic signs would have additional communication requirements and would be a greater cost than fixed signs. Electronic messaging would also provide greater flexibility and allow for the more complex intersections to be signed with information specifically related to an alternate route, reducing driver confusion. Some locations have used fixed guide signs with specific alternate route letter and numbers combined with arrows to indicate proper movements. When this “fixed sign” wayfinding system is combined with highway advisory radios (HARs) they can be effective at providing alternate route guidance. A hybrid approach to the electronic (at the more complex movement intersections) and fixed signs (at the more simple movement intersections) could be the best solution to reducing costs and providing the necessary wayfinding guidance. Another alternative is to allow third party wayfinding applications and route navigation systems to provide the alternate route information the portion of the public that uses/has the technology available. While this may not be a fully feasible alternative today, technology trends are moving in this direction and this should remain an information methodology worth revisiting as the deployment nears implementation.



The intersections requiring control improvements depend on location and operating agency. Most locations have been found to have signal controllers and communication systems capable of supporting ICM systems. Those that do not have advanced controllers or the necessary communication systems would require upgrades if they were to be controlled remotely as part of the ICM system. The other aspect of intersection upgrade only exists at a few intersections. That is at locations where intersections are either uncontrolled or controlled by 2/4-way stop signs. At these locations the throughput capacity for the intersections is limited. If the demand is very large drivers may be tempted to ignore the posted



controls which could result in an increase in incidents. Police manual traffic control may be needed in these cases to move traffic through these locations as conditions require.

A mapping of the locations requiring infrastructure improvements is represented in Figures 3 to 6. In the figures, alternate routes identified in the District 3 2014 Corridor System Management Plan (CSMP) are depicted (in black lines if viable for ICM or in red lines if not viable for ICM). Additional alternative routes, potentially viable for ICM, are also proposed for consideration. Viable alternate routes include those that provide most logical arterial facilities that are likely to be used as alternative routes by motorists during incidents. Among the arterial facilities along the freeway corridor, the viable alternate routes are those that the local agencies prefer to keep the diverting motorists kept to, instead of using other local arterials. Residential arterials are generally not viable for ICM.

5.2.1. Potential Strategy (*Initial deployment starting with alternate route wayfinding signs*)

Alternate route wayfinding signage or Variable Message Signs (VMS) will need to be implemented for guiding the public along alternate routing. As the deployment of ICM nears implementation a review of the available technologies will need to be completed to find the most cost-effective method to deliver the service. It is likely that some hybrid of the proposed approaches would be ultimately selected; however, depending on the location of “alternate route” application of fixed or electronic signage may be required. As implementation of the ICM package draws closer to implementation, consideration should be given to utilizing third party information/navigation providers to deliver the routing information.

Signal system controllers and intersection controls would also need to be reviewed to determine if the capacity to handle alternate demand exists. If intersection upgrades are required, they should be installed or consideration given to the non-utilization of that specific roadway as an alternate route.

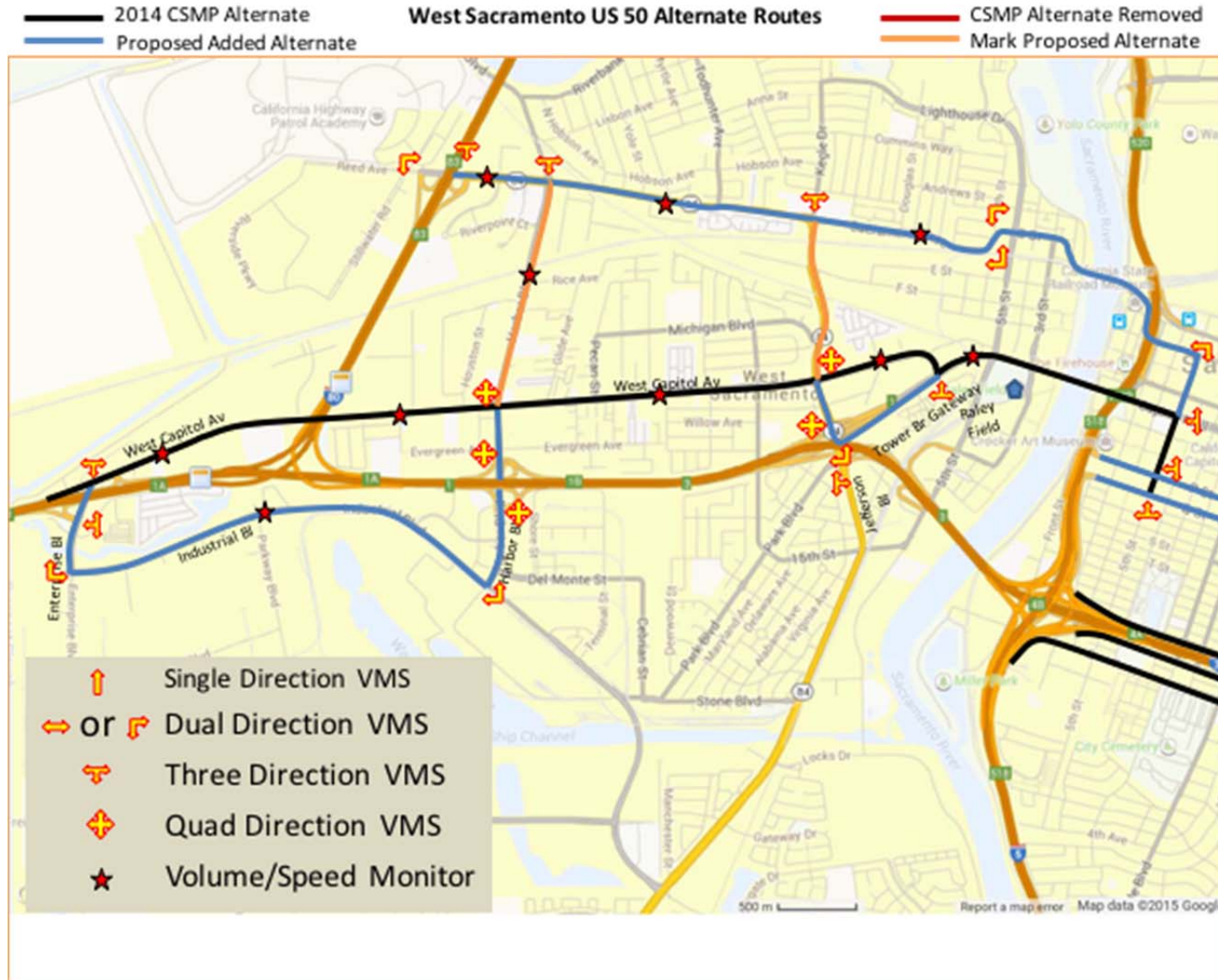


Figure 3: West Sacramento US 50 Alternate Route Infrastructure Improvements

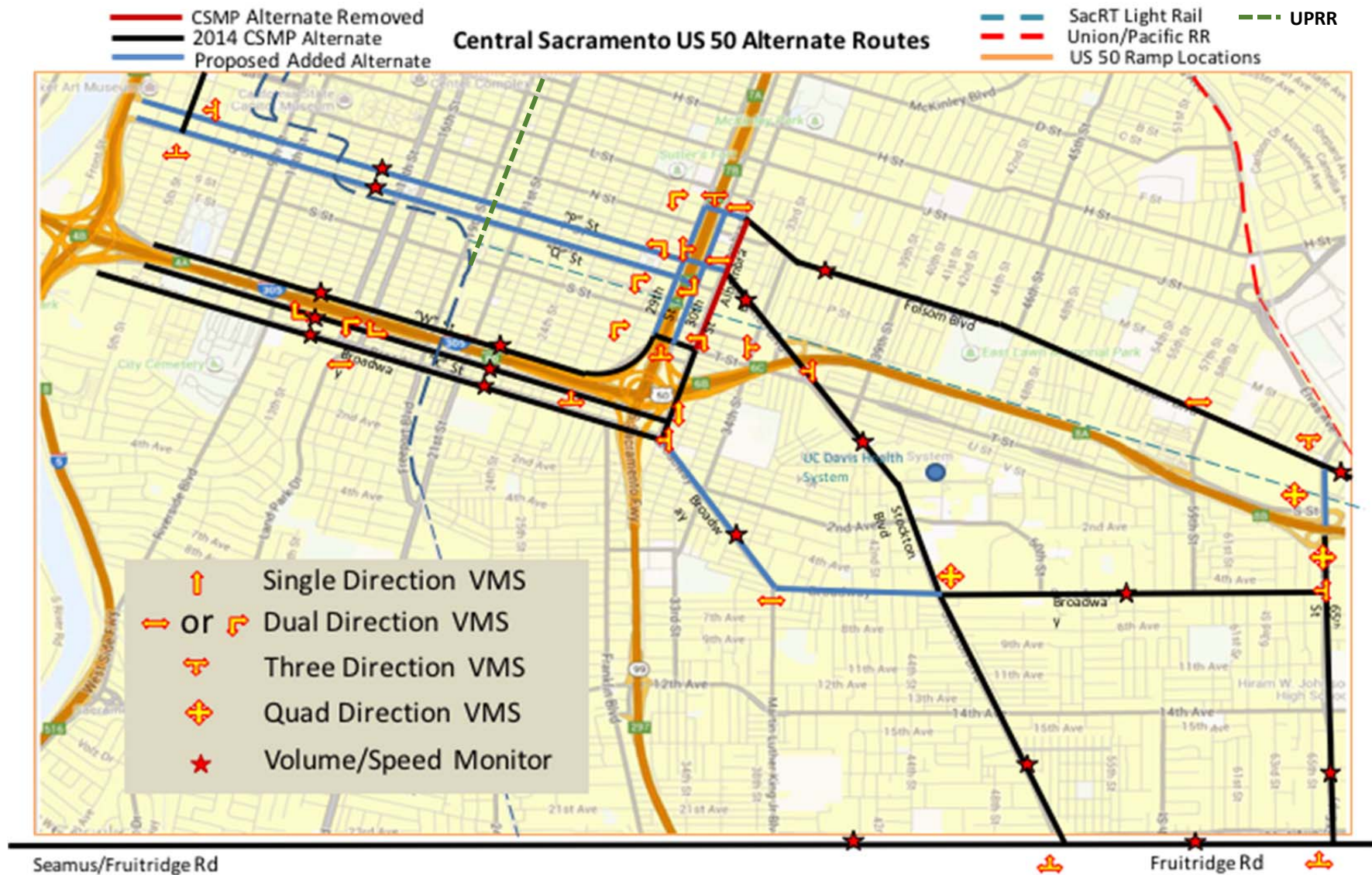


Figure 4: Central Sacramento US 50 Alternate Route Infrastructure Improvements

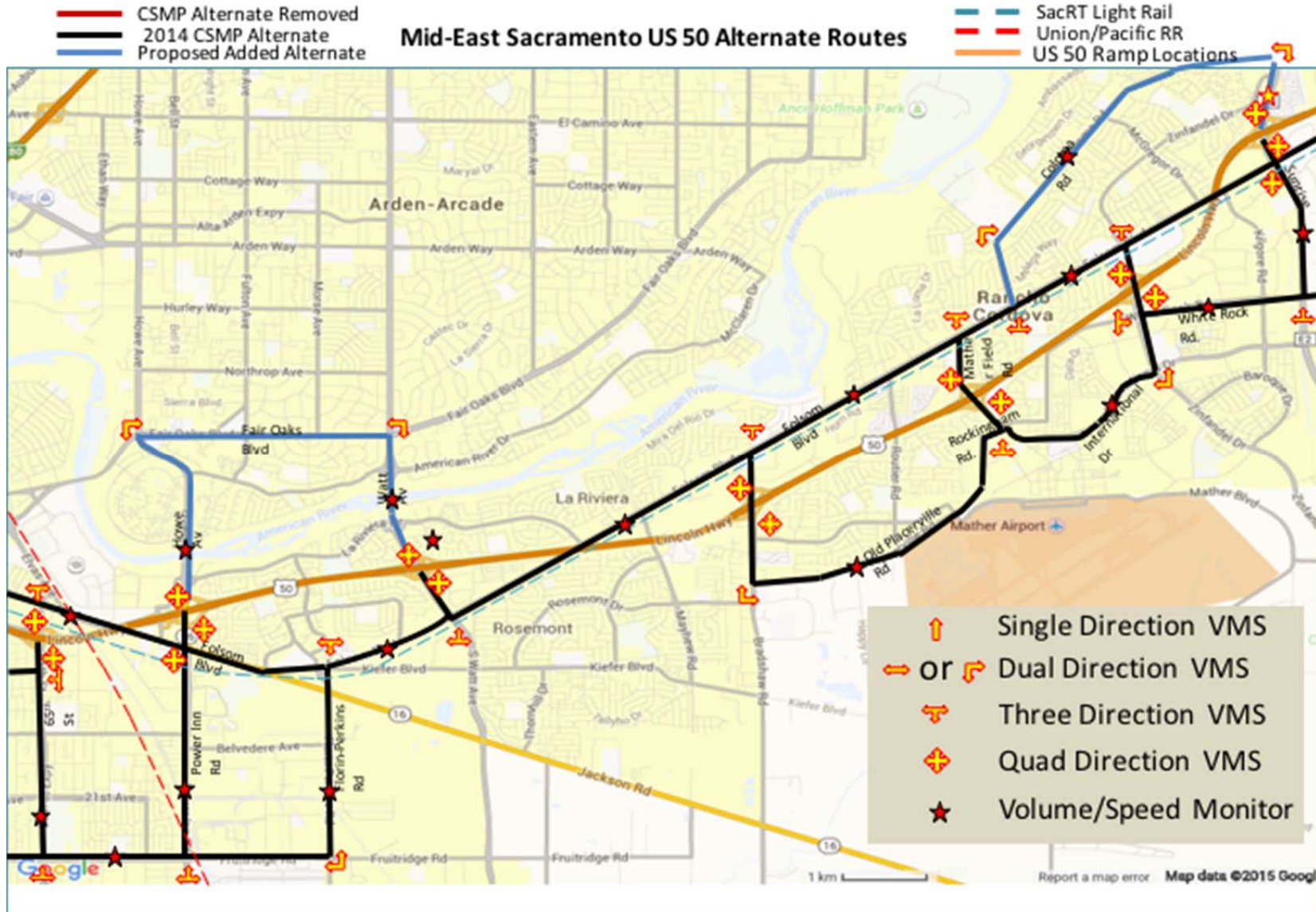


Figure 5: Mid-East Sacramento US 50 Alternate Route Infrastructure Improvements

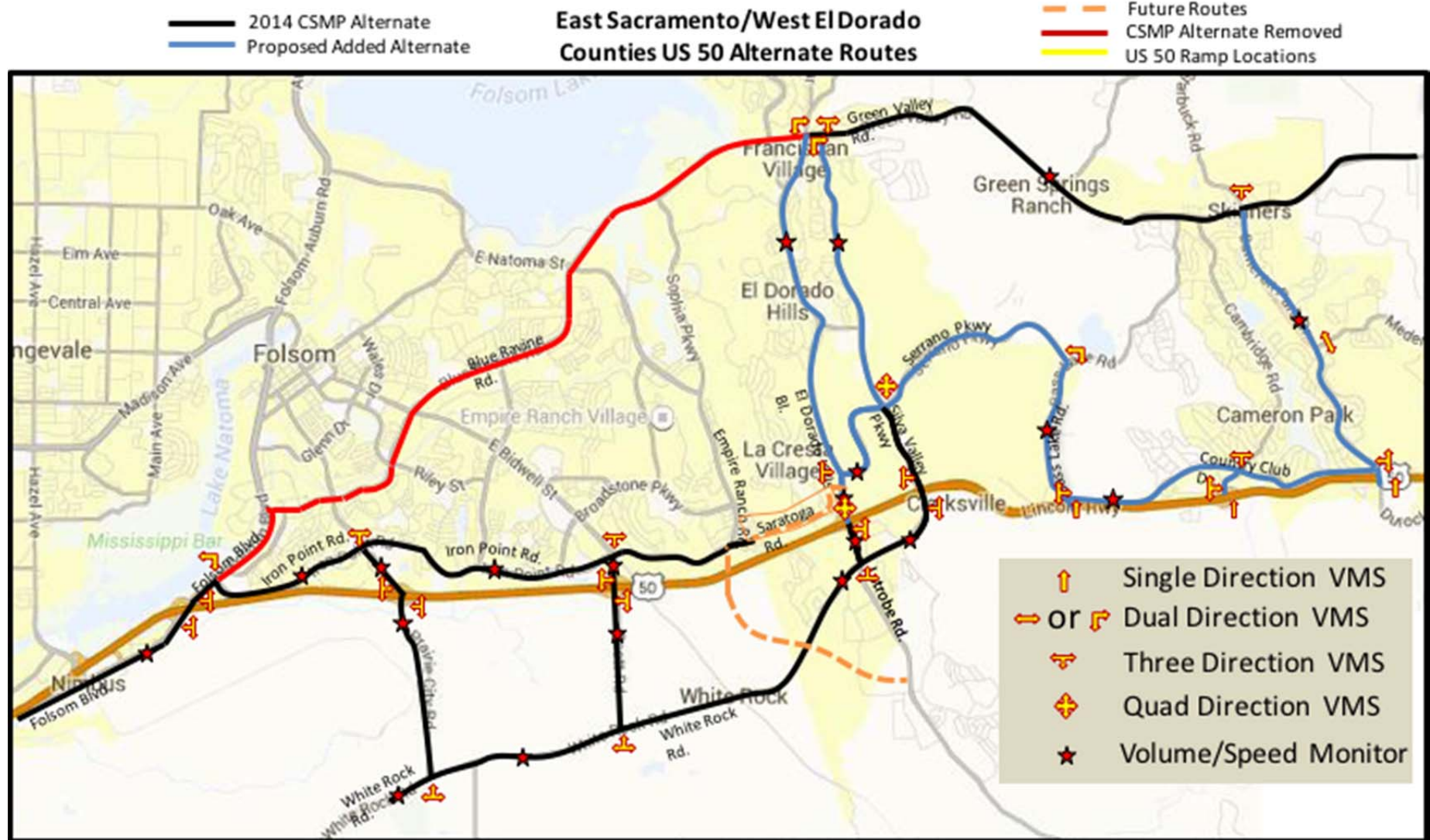


Figure 6: East Sacramento / West El Dorado US 50 Alternate Route Infrastructure Improvements

6. Operational Management Alternatives

The proposed US 50 ICM system is to be operated at various levels of functionalities from the following Operational control center types:

- Caltrans' Sacramento Regional Transportation Management Center (RTMC)
- Arterial Traffic Operation Centers (ATOC's)
- Transit Operations Centers (TOC's)

The ICM components to be controlled from each of these center types is largely dependent on the systems they manage, operational hours as well as staff and infrastructure capabilities. As the ICM system moves towards an automated design the level of staff time and effort dedicated to the operation of the ICM corridor will likely decrease. The level of effort required for the first adopters or implementers of the ICM concept will likely see an initially increased workload as the Decision Support System (DSS) and the acceptable scenario concepts are created and tuned to meet the regional parameters.

6.1. RTMC

ICM system components operated from the RTMC are to support the following operations:

- Collection, processing and archiving of traffic data from traffic and equipment monitoring systems operated by Caltrans on US 50 and at State-controlled signalized intersections
- Monitoring the operation of freeway ramp and connector meters, traffic signals, changeable message signs, and control devices directly operated by Caltrans
- Processing and archiving of relevant traffic and control data sent to the ICM server by local traffic management centers
- Implementing control actions recommended by the ICM system on field devices operated by Caltrans
- Performing various other freeway and intersection control management activities

Because of the new nature of system management with the project, it is possible that all control actions affecting Caltrans-operated devices could initially be manually entered into each management system by Caltrans operators, with possible automation after the system's initial phase.

6.1.1. Freeway Management System (FMS) – Advanced Ramp Metering System (RMS)

The heart of the ICM is effective and safe movement onto and off the US 50 freeway mainline as well as a non-congested movement of traffic through the corridor on the freeway. All ramps need ramp metering equipped with 2070 controllers, centrally controlled as a part of the freeway management system. Ramp meter bypass for transit and emergency vehicles should also be considered where appropriate. Preferred operations would be an advanced (adaptive) corridor-wide ramp metering system. Decision support for addressing instances of non-recurring congestion requires thorough corridor-wide performance monitoring, which means adequate and dependable sensors deployed along the US 50 corridor to monitor traffic demand and roadway conditions. This consists of mainline and on/off ramp detector stations, monitoring stations (using Bluetooth for example), and CCTV for surveillance. It also includes CMS and HAR for informed traveler decisions. Incident and event management practices must be proactive – managing in route traffic with documented response plans,

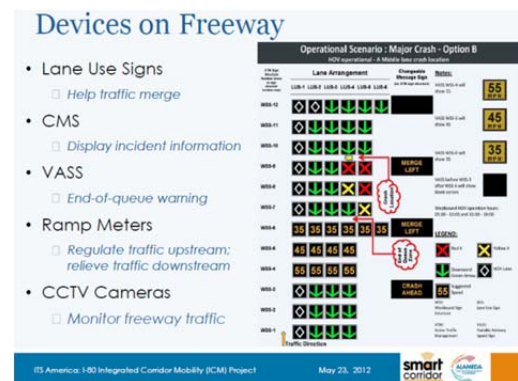
real-time active traffic modeling, freeway service patrol, and necessary field elements (i.e., trailblazer signs). This involves close coordination with public safety, collaboration with local partner agencies, and staff training to support the traffic incident management program.

6.1.2. Freeway Management System (FMS) – Other Systems

Although it is not essential for initial ICM deployment, other advanced systems could be considered as part of the Caltrans FMS. This includes the following but not limited to:

- ◆ Variable Speed Limit/Speed Harmonization or Variable Advisory Speeds (with Electronic Signage)
- ◆ Dynamic Lane Management or Lane Use Signs (with Overhead Gantries)
- ◆ Hard Shoulder Running (with Electronic Signage or Overhead Gantries)
- ◆ Junction Control (at Freeway to Freeway Interchanges)
- ◆ Interchange Modification (e.g., Center Lane HOV Drop Ramps)
- ◆ HOV Lane Conversion to HOT Lane
- ◆ Reversible Lane Control

Most of these require a high capital cost to implement and longer lead times to design and construct. Some of these systems also have high visibility and can be controversial. As such, consideration of their implementation for initial deployment can add significant risk to public acceptance and approval and overall success of the deployment. Studies of additional benefits gained by these systems have proved mixed results.

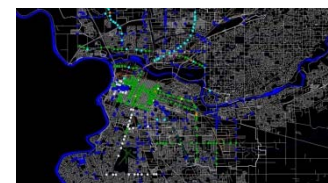


6.1.3. Potential Strategy (Initial deployment starting with advanced RMS)

For an effective ICM operations on the US 50 corridor, advanced ramp metering system (RMS) is critically needed. Along with the ICM system implementation, the advanced ramp metering system should be implemented either before or at the same time. There are many different types of advanced RMS. Appendix A provides reference documents for advanced RMS options developed for the Caltrans District 7 I-110 Dynamic Corridor Congestion Management (DCCM) – Dynamic Corridor Ramp Metering System (DCRMS) project. The DCCM is a version of an ICM deployment. The I-80 ICM in the San Francisco Bay Area recently deployed utilizes the fuzzy logic algorithm adaptive RMS. The District 3 staff should determine which system could be the most appropriate for the District depending on the staff preference of algorithm, the existing system hardware, maintenance requirements, and other such factors. Specifically for the ICM, any of the advanced RMS type could be integrated.

6.2. Arterial Traffic Operation Centers

Outside the SACRTMC, access to key ICM functionalities is to be provided to each of the local jurisdictions operating traffic management devices along arterials within the corridor. At each location, the implementation of desired functionalities translates into a need to connect various data collection and control systems to the ICM servers. Local agency staff is further to be provided with a computer terminal, or web-based interface, enabling them to access the ICM system online and to perform specific functions from their location. System components to be



installed at local traffic management centers are to support more specifically the following system operations:

- Collection and processing of data generated by the traffic monitoring systems operated by the agency
- Monitoring of the operation of traffic sensing, traffic signals, and informational devices operated by the agency
- Implementing control actions by the ICM system on field devices operated by the agency
- Operating field devices from other jurisdictions for which they have the authorization to do so
- Performing various other traffic management functions
- Collection of parking availability at City owned/operated facilities



Depending on final system design decisions, these control actions may be either manually entered into the respective management systems by local operators or automatically implemented by the ICM system. In particular, automated implementation may be considered to help with the management of incidents occurring during off-peak travel periods when local traffic management centers are not normally staffed.

The parallel and connector roadway components were selected for inclusion in the US 50 ICM corridor through consultation with the respective local agencies. Many intersections along the alternative routes have been upgraded to 2070 control. Remaining key intersections need to be upgraded to 2070 or ATC controllers. Central operational control is in place in all jurisdictions along US 50 (Rancho Cordova's system is in design). Intersection approaches need to have advance detectors for actuated or traffic responsive signal control. In addition, mid-block detectors may also be needed at select locations along all key arterial corridors for performance analysis and monitoring of signal systems. CCTV coverage at select locations may also be needed for visual verification of conditions and effect of operational changes. CMS at select locations for routing and guidance (e.g. near transit hubs) could be essential for active mode travel time information.

Heightened operations and maintenance of the jurisdictional systems will be necessary as ICM operations unfolds. Adaptive arterial signal operations should be considered along certain arterials. Select connector and parallel routes will need to have trail blazer signs (fixed and/or electronic message signs) to move traffic to and from US 50 freeway mainline in accordance with documented response plans. To ultimately advance to ICM operations, the Caltrans District should begin to evaluate for and implement integration of ramp signals with ramp metering at select locations, in addition to coordination with adjacent intersections owned by partner agencies.

Collaboration with partner agencies is essential for corridor-wide arterial management and should begin early to identify standardized method of data/information collection, analysis, and sharing in real-time, including signal operations, arterial performance measures, and video surveillance. A key to success in this development is breaking down the jurisdictional silos and beginning to collaborate on improvements along arterials across boundaries. Targeted ITS and operational roadway improvements at select locations will be necessary. This can include for example:

- Arterial capacity enhancements (e.g., widening, gap closures, driveways eliminated)
- Intersection capacity improvements (e.g., additional turn/thru lane, extend turn lanes, bus turnouts, bike lanes)

6.2.1. Potential Strategy (*Initial deployment starting with advanced AMS*)

For an effective ICM operations on the US 50 corridor, advanced arterial management system (AMS) with centrally controlled traffic signal operations, preferably adaptive, is critically needed. Along with the ICM system implementation, the advanced AMS should be implemented either before or at the same time. Caltrans District 3 is implementing the Traffic Signal Management and Surveillance System (TSMSS), and adaptive signal coordination system. Many of the local agencies along the US-50 corridor, including Rancho Cordova and Sacramento County are using the Econolite's CENTRACS ATMS, a flexible and scalable Advanced Traffic Management System (ATMS). Adaptive module for CENTRACS is available should the local agencies decide to implement it, but it is not necessarily required for an effective ICM deployment. However, it is critically important that every traffic signal along the ICM corridor is centrally controlled to remotely send instructions to change the signal timing plans when needed.

6.3. Transit Operation Centers

In addition to the local traffic management centers, ICM system connections could be provided to the following locations from which various transit services operating within the US 50 transportation corridor

In addition to the local traffic management centers, ICM system connections could be provided to the following locations from which various transit services operating within the US 50 transportation corridor are managed:

- Sacramento Regional Transit (RT) Bus Network
- Sacramento RT Light-Rail System
- Yolo County Transportation District
- El Dorado Transit

These ICM system connections will:

- Enable the ICM system to collect relevant transit operational data from the performance systems operated by the various agencies
- Enable transit dispatchers to obtain from the ICM system information about travel conditions within the corridor
- Enable transit dispatchers to enter manually into the ICM system, when relevant, information about enacted transit service changes that may affect the operation of the ICM system
- Provide a link to the Traveler Information network for distributing transit deviation notices.

All transit vehicles (buses and trains) need to be equipped with AVL/GPS (locators), and have a central control/monitoring system (communications with vehicles) to provide sufficient real-time transit operations data for ICM. SAC RT is currently working to implement AVL/GPS system on some of their buses. However, additional investments may be needed to upgrade all buses along the US 50 corridor instrumented.



6.3.1. Potential Strategy (*Initial deployment preferable to have transit*)

The selection of the operational management participants will be driven by the available funding for integration, data gathering and sharing capacities of the collection systems and staff availability. While the initial effort will target the freeway and arterial systems the ability and desire for inclusion of transit providers and other alternatives modes of travel is very high amongst the partners. The operational management participants should remain as wide as possible and include all modes and avenues of support.

6.4. Parking

There are a number of parking facilities both transit parking and park and ride lots along the US 50 corridor that could be integrated into the ICM. It is very likely that parking availability at the light rail stations (LRT) along the ICM will be some of the first available parking capacity data. Data from Regional Transit's LRT stations will be integral in the future integration of the corridor and every effort should be made to assure that the raw parking capacity data can be provided in an open format for the future integration. If other transit agencies consider parking capacity data collection, they too should consider providing this capability for possible integration.

6.4.1. Potential Strategy

Implementing parking management system will provide parking availability for the motorist in real-time. This is important as part of the multimodal strategy to encourage non-vehicle mode usage. Depending on the funding availability, priority should be given starting with the most critical parking facilities at multimodal hubs.

7. ICM System Components

7.1. ICM Data Flow

By definition, ICM involves coordinating various component parts of a corridor so they work together harmoniously. These parts (freeways, arterials, transit, etc.) are identified and managed by sending and receiving data about them.

Traffic sensors and data feeds provide data to the corridor management systems and the people who operate them. With the help of a Decision Support System (DSS), a decision about how to manage a traffic situation on the corridor is made and implemented. However, when we add the stakeholders who contribute to the input and receive the output, it becomes evident that the process is more complex. Stakeholders in multiple jurisdictions and data from multiple traffic management systems must communicate with each other, pointing to the need for standardized interfaces and data communication protocols across the entire system. Adding the types of stakeholder data entering the system and the controllers and communication channels needed to carry out any changes reveals the range of information that must flow through the system. The strands of data intersect in the central subsystems of Corridor Management and Decision Support and ultimately could look like the following depiction on Figure 7.

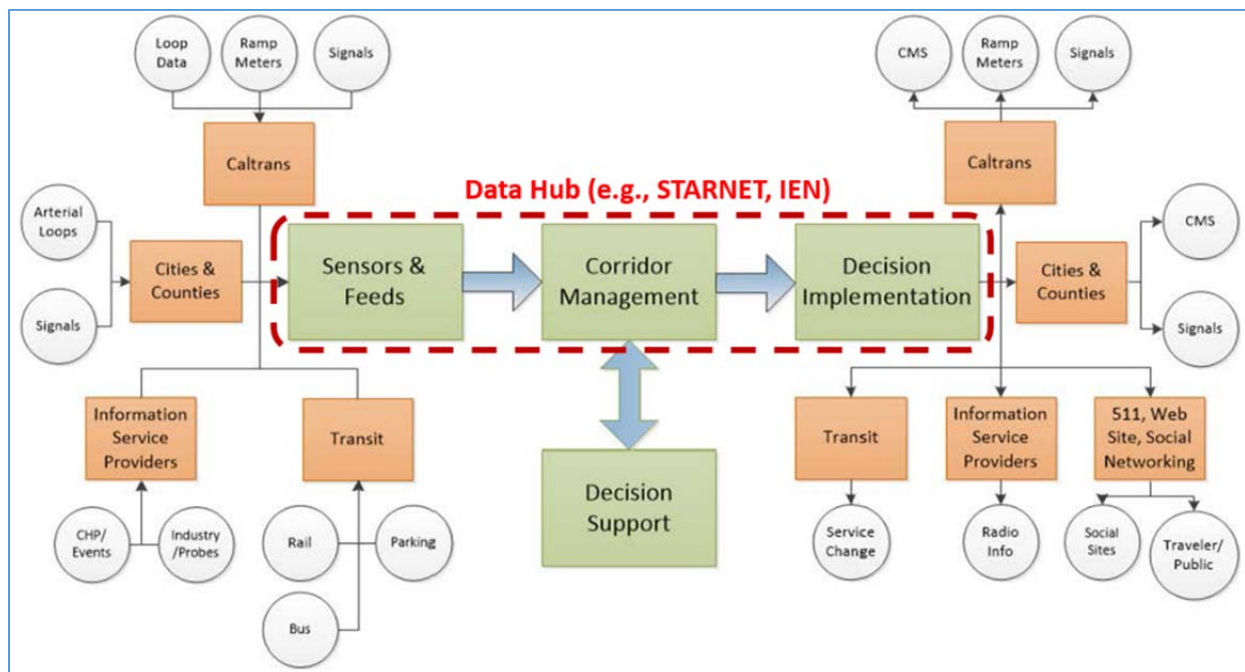


Figure 7: ICM Data Flow

7.2. Data Hub (e.g., STARNET, IEN)

The Data Hub includes the sensor and feeds interfaces into the Corridor Management subsystem and the interfaces out to the Decision Implementation flow of data. It focuses on detection and management of corridor incidents and performance. That means linking data from Caltrans' Advanced Traffic Management System (ATMS)—including freeway ramp metering control, freeway changeable

message signs (CMS), and arterial signal control at ramp intersections—with city/county arterial signal control and CMS, along with metrics to gauge system performance.

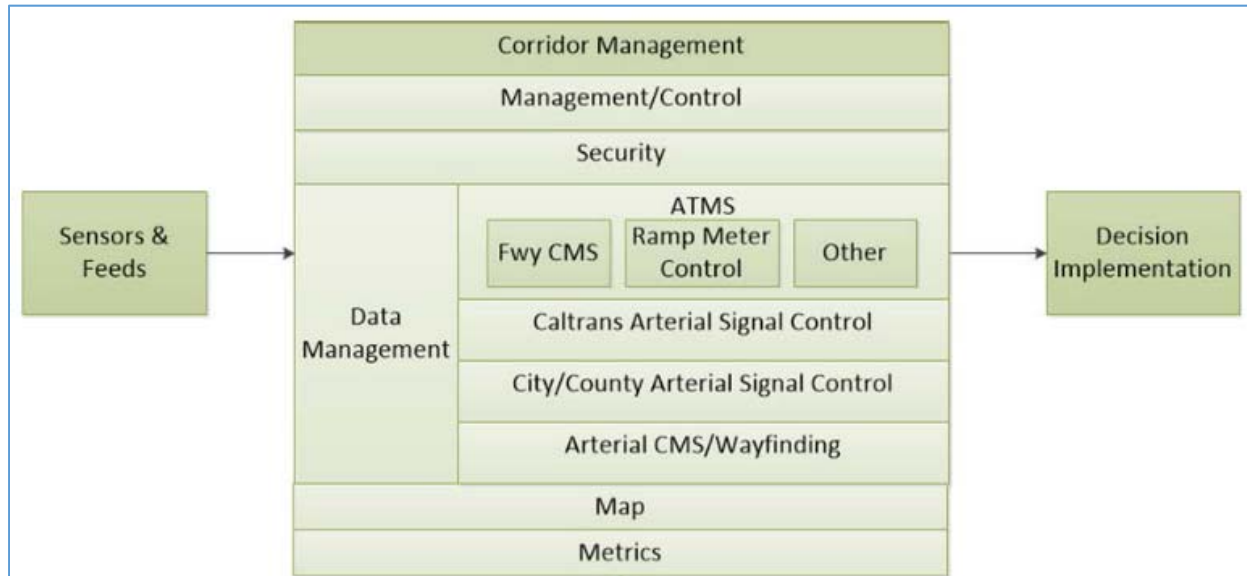


Figure 8: Data Management Hub

Options available for the DATA hub to the US 50 corridor are:

- STARNET
- Information Exchange Network
- I-210 Data Hub configuration

7.2.1. STARNET

Many of the features required to be contained in the Data Hub are presently implemented within the existing STARNET/CARS 5.0 System. SACOG and the Region have invested significant resources in the development of STARNET, that have helped to prepared the Region for implementation of an ICM corridor. Management and control functions are built into the STARNET interface and allowing for separation of control and access by agency or individual operator, while providing a communication/data exchange mechanism between all partner agencies. The information contained in the STARNET system could provide an opportunity to quickly implement many of the features required for the Manual Mode ICM operation and become the gateway to jump start the Semi-Automatic Mode of ICM.

Standardized data flows are presently being “imported” to the system from many of the involved stakeholder agencies. These imports occur through the use of custom “STARGATES” which convert legacy data flows to the TMDD 3.0 format for use by the STARNET system. Presently data hub imports include CHP incident data, CMS data, PeMS speed data, Transit scheduling, as well as CCTV snapshot and streaming video feeds. Currently no signal or ramp specific data is being imported and additional “STARGATE” development work would be required before Automatic or full Semi-Automatic ICM implementation would be possible.

Caltrans and the City of Sacramento are both members of the “Connected Citizens Program” with WAZE allowing for a new and varied source of incident, travel-time and speed data. Partners within the CARS group have implemented WAZE incident and public reports which could further enhance the data flowing into the ICM system. Implementation of the WAZE interface as part of the STARNET system may provide a unique source of information to the ICM partners.

Existing features of STARNET include some of the interfaces that are required for agency management, public and third party coordination with in the ICM deployment are presently available and active. Those interfaces include RESTful and XML Application Programming Interfaces (API’s), which provide all data for third party developers to further distribute ICM data, interfaces to messaging systems (email, text messaging, etc.) and direct public website and mobile device interfaces.

7.3. Decision Support System (DSS)

At the heart of the proposed ICM system is a Decision Support System (DSS) that will use information gathered from monitoring systems, in the Data Hub, to estimate the current operational performance of systems being managed, simulation and analytical tools to forecast near-future operational conditions under alternative scenarios, and imbedded decision algorithms to recommend courses of action to address specific problems being observed.

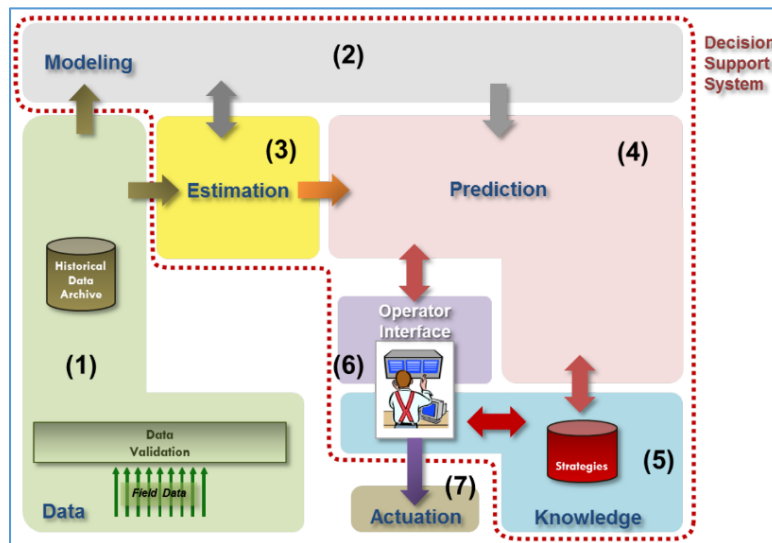


Figure 9: ICM Decision Support System (DSS) Example

The DSS:

- Takes the information gathered from monitoring systems
- Estimates current traffic conditions
- Identifies events, incidents, bottlenecks, etc.
- Develops strategies to respond to identified problems
- Uses estimation (or modeling and simulation – desirable but not required) to forecast near-future conditions under various scenarios and evaluate potential strategies

7.4. Alternative ICM Systems

Pros and cons are assessed for the following alternative ICM Systems:

- 1) Utilize and customize San Diego I-15 ICM system
- 2) Utilize and customize Dallas I-75 ICM system
- 3) Utilize and customize Caltrans I-110 DCCM system
- 4) Utilize and customize I-80 ICM system
- 5) Utilize and customize I-210 Connected Corridors system
- 6) Build From Scratch
- 7) Investigate use of other ICM systems from other locations

Table 2: Option 1 – Reuse San Diego I-15 ICM System

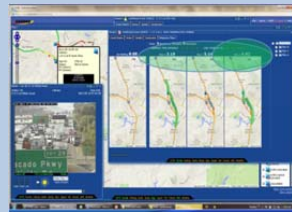
Advantages	- Completed system based upon a product deployed to 25+ agencies - Intelligent DSS - Real-time Network Prediction Subsystem - On-line micro simulation analysis - Real-time response strategy assessment - Congestion Event Finding - Data Hub is build using TMDD standards - Very flexible rules-based response plans - Web-based low-cost ATMS software platform - Works independently of legacy systems - Ready to be used, no learning curve - Well documented 
Disadvantages	Requires regional model to be created and maintained (can be very costly)

Table 3: Option 2 – Reuse Dallas I-75 ICM System

Advantages	- Includes a DSS System, which is more basic - Very flexible rules-based response Plans - Contains response plan assessment methodology - Lower cost ATMS software platform - Data Hub - Works independently of legacy systems - Ready to be used, no learning curve - Documented 
Disadvantages	- Requires regional model to be created and maintained (can be very costly) - Very basic tables-based DSS, difficult to maintain - Simulation is not micro simulation and it is not integrated - No traffic prediction - Not widely used

Table 4: Option 3 – Reuse (District 7) I-110 DCCM System

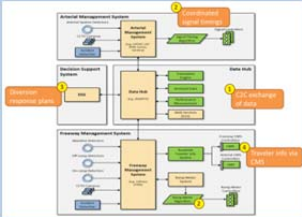
Advantages	• Likely based upon San Diego system with • Congestion Event Finding • Data Hub • Very flexible rules-based response plans • Web-based low-cost ATMS software platform • Works independently of legacy systems • Ready to be used, no learning curve • Well documented • Built piecemeal, as funding became available • Lower cost • No modeling or microsimulation	
Disadvantages	• System is still being designed and deployed	

Table 5: Option 4 – Reuse (District 4) I-80 ICM System

Advantages	• System already developed • Based on existing Caltrans ATMS solution • Flexible rules-based response plans • Ready to be used, no learning curve • Well documented • Caltrans already owns the system and software • Lower cost compared to other options • No modeling or micro simulation	
Disadvantages	• More basic system with less intelligent DSS (compared to San Diego) • Functionality is embedded within ATMS, not external	

Table 6: Option 5 – Reuse (District 7) I-210 Connected Corridors System

Advantages	• Will use model driven DSS • Based upon Caltrans driven statewide initiative • Could be the most cost-effective option with HQ support
Disadvantages	• System is still being designed and deployed • Has not been deployed anywhere else

Table 7: Option 6 – Build from Scratch (or Customized Other Third Party Tool)

Advantages	• Flexibility to build own custom solution any way desired
Disadvantages	• Likely to take a very long time and could be very costly • Does not take advantage by making reuse of other projects



7.5. Potential Strategy (*Utilize and customize California deployed system*)

The potential best fit from the existing options for the US 50 ICM include:

- I-15 ICM system
- I-80 ICM system
 - Both are mature ready systems, require lower cost, and less complicated. Both contain the features needed for US 50 Corridor.
- I-210 Connected Corridors system
 - If pilot is successful and Caltrans HQ supports deployment of the I-210 Connected Corridors statewide, this could be the most cost effective and easiest to implement.
 - It is unproven to date and much is still unknown.
 - Validity will depend on how it develops over the next couple of years.

If the STARNET system were to be used as part of the Data Hub, both of these systems would require modification to utilize the STARNET data hub, but would not require the interface work for data gathering from the agencies as that work has been completed as part of the STARNET implementation, which may result in a significant cost savings to the region. In addition, the STARNET system provides for the easy distribution of traveler Information through a proven system.

8. Performance Measurement

Many different technologies are utilized for collecting detection and surveillance information, including in-roadway and over-roadway sensors for measuring traffic flow parameters, vehicle probes for collecting data on travel times and origin-destination information, closed circuit television (CCTV) systems for viewing real time video images of the freeway, road weather information systems (RWIS) for monitoring pavement and weather conditions, and manual methods such as gathering information from drivers via their cellular telephones (e.g., crowdsourcing data). Companies such as Google, INRIX, and HERE are already collecting and utilizing crowdsourcing data, and offer them for purchase.

Travel time to a destination is a key piece of information that motorists want and need. It is vital for travelers to make good decisions about which route to take and whether to divert from their planned path. Technology now makes it feasible to provide drivers with real-time information about how long it will take to reach a given destination. While travel time information has traditionally been provided by transportation agencies only on major urban freeways, travel time messages are now being communicated on arterial roadways.

While PeMS can be used to assess the effectiveness of freeway operations in near-real time, no similar tool exists for assessing arterial performance. While third-party information tools such as Google Maps are increasingly being used to visualize traffic speeds on main arterials and locate congestion hotspots, these tools do not provide many of the performance metrics of interest to roadway managers, such as incurred delays, volume-to-capacity ratios, etc. Candidate arterial travel time data technology is presented in Table 8.

8.1. Potential Strategy (*Use PeMS for freeway and implement arterial detection*)

Caltrans currently maintains an extensive network of traffic detectors on freeways, using a combination of magnetic loop, microwave, and wireless vehicle detection systems. These report to the Caltrans performance measurement System (PeMS). Within the US 50 corridor Caltrans has plans to install Bluetooth devices to measure travel times and travel patterns between specific points. PeMS should be incorporated into the ICM system. Any expanded system detection and use of Bluetooth devices should also be incorporated.

Local Agencies along the US 50 corridor predominantly use loop detectors at few locations. At some locations the City of Sacramento uses video image processing in combination with loops – video at the stop bar and loops for mid- and advanced- detection. Sacramento County is starting to use Bluetooth devices and other agencies along the US 50 corridor are considering use. Additional system detection may need to be implemented to collect real-time performance data. Implementing additional system detection should be considered as part of the ICM development.

In the near future (crowd sourced) WAZE or third party travel time source will emerge as a technology for consideration for both freeway and arterials. While not specific enough for signal timing calculations it does appear that it will be able to provide an effective estimation of travel time. The number of data sources (sample size) for some third party sources could be significantly higher than a given single technology source. While it may not be mature right now (getting close) it may be by the time ICM reaches design on US 50. Additionally, it can come at a much lower initial and O&M cost when compared to Bluetooth detection devices.

Table 8: Candidate Arterial Travel Time Data Technology

Technology	Spot Speed	Segment Travel Time	Track Real-time	Sensor Location	Coverage Per Sensor	% Vehicles Detected/ Matched†	Implement Cost†	Non-traffic-info Functions‡	Traffic Vols	Veh Class
Bluetooth detection		X		Roadside/ above road	All lanes	Low	Low	Low		
Toll tag reader		X		Roadside/ above road	One or more lanes**	Low	Med	Med		
In-pavement magnetic detectors		X		In pavement	One lane	High	Med	Low	X	X
Automatic license plate reader (ALPR)		X		Roadside/ above road	One or more lanes**	Med	Med	Med	X	X
Video Image Processing	X	X*		Roadside/ above road	One or more lanes**	High	Med	High	X	X
Connected vehicle	X	X*		Roadside/ above road & in vehicle	All lanes	???	Low	High		
Radar, microwave, LIDAR	X			Roadside/ above road	One or more lanes**	High	Med	Med	X	
Inductive loops	X	X*		In pavement	One lane	High	Low	Low	X	X*
Crowdsourcing			X	None	All lanes	???	Low	Low		
Cell phone monitoring		X		None	All lanes	???	Low	Low		
* Possible depending upon capabilities of technology ** Multiple lanes possible depending upon capabilities of technology and sensor placement † Can vary substantially depending on a variety of factors; estimates are approximate based on user experience ‡ Other functions can include tolling, traffic law enforcement, unregistered vehicle detection, cooperative safety, etc. ??? Unknown/no basis for assessment Source: Arterial Data Collection Technology, April 2013, FHWA-HOP-13-028										

Bluetooth Detection - Wireless technology that allows electronic devices to communicate directly with one another; recently emerged as viable ATT collection tech; open standard, allows for off-the-shelf equipment; detection range limited to about 328 feet (100 meters); less expensive than many other options; flexible; some potential privacy concerns; detection technology relies on drivers' use of Bluetooth-enabled devices.

Toll Tag Reader - Detect radio frequency ID of automated toll tags, mature technology, inconspicuous, detection accuracy can decrease with distance, limited to areas with adequate toll tag fleet penetration, some potential privacy concerns, electronic tolling becoming increasingly common.

In-pavement Magnetic Detectors - Arrays of magnetometers installed in pavement, can identify and match vehicles based on each vehicle's unique magnetic signature, quick installation and self-calibrating, wireless sensors require access points and possibly repeaters, high vehicle detection rate, device life span of about 10 years, no privacy concerns. A commercially available magnetic detector capable of real-time data transmission is marketed by Sensys.



Automatic License Plate Readers - Optical cameras capture images of license plates and software “reads” the information; mature technology (over 30 years); installed above the roadway and requires direct line-of-sight; particularly sensitive to factors that reduce visibility; privacy issues are a concern.

Video Image Processing - Use of video cameras to monitor flow; installed above the roadway or on poles on the roadside; data bandwidth is a consideration; highly customizable set of features; privacy can be a concern for high-resolution systems; potential uses are likely to expand with advances in technology, processing power, and data transmission capabilities.

Connected Vehicle - Short range radio communications between vehicles and vehicles to infrastructure, technology is in very early stages of development, radio transceiver installed in host device within a vehicle, privacy protocols are being established, very inexpensive cost on a per unit basis, usefulness for travel time calculations uncertain, depends on implementation factors, potential for widespread use if initiative continues to develop. According to current estimates, some DSRC features are expected to become available to the public in or around 2017.

Radar, Microwave, and LIDAR - A sensor emits radio waves (radar), microwaves, or a laser beam (LIDAR), which reflects off of vehicles; mature and widely used technology, many products available with a variety of different implementation approaches, complete privacy to drivers. Use of these technologies for ATT calculations, however, is relatively uncommon.

Inductive Loops - Magnetic loops in pavement detect vehicle presence, and multiple loops can be used to calculate travel times; mature and widely used technology, though use for ATT data collection is rare; high detection rate; very inexpensive, but invasive installation and maintenance can increase costs; complete privacy to drivers.

Crowdsourcing - Drivers’ vehicles or mobile devices provide information to a public or private entity, and that information is used to generate traffic/travel time, early stage technology, critical mass of users is necessary for success, vehicle/motorist must have device capable of transmitting information, no roadway infrastructure needed, privacy issues are minimal or non-existent when data transmitted to agencies who purchase data, use likely to increase. Crowdsourcing data providers include INRIX, Google, and Waze. STARNET/Google and the “WAZE-Connected Citizen Program” could provide mechanisms for a low/no cost methodology to access large sample sized data. Additional development and partnering opportunities could greatly advance this option.

Cell Phone Signal Monitoring - Cell phone location information is automatically and anonymously downloaded from cellular network switching centers in real-time; relatively mature technology and cell phone use is almost ubiquitous; data provided by vendors, and data are anonymous when provided to agencies; shows adequately precise measurements of travel time.



9. Funding Alternatives

Successful implementation will require funding the ICM system. To accomplish this at a time when all funding programs are “oversubscribed” and “underfunded”, will require focusing on three key objectives, building a unified base for support of the concept, exploring and applying for all potential sources of funding, and leveraging all investments made by individual agencies and permit applicants. As noted earlier documenting the transportation system’s performance gains and air quality improvements generated by these investments will be key in securing the funding for future ICM capabilities.

As operations and planning personnel know the securing of “local matching funds” required for the use of Federal funding can generate cash flow problems internal to agencies, possibly delaying the use of Federal funding. As outlined below in the program funding alternatives (Section 9.2) many of the programs recommended for application, may be used for matching. The Program Manager should be careful in the use of matching funds and not expend the flexible funds too early in the process. Reserving and distributing these funds at the minimal level will allow for “over matching” or rapid use of special “Federal funding” if they were to become necessary or available.

9.1. Support of Concept

The importance of unified support for the project cannot be overstated. Support can come in many forms and will vary depending on the target audience. Support can take on many forms; being as simple as a letter of support, championing of the concept, lobbying for Agency support either fiscally or politically, or working with Community leaders to find new supporters of the ICM concept.

At the Regional level the impact of ICM will provide for congestion mitigation and a reduction in greenhouse gas generation. Gathering data to measure the improvements provided through the operational improvements will aid in insuring that the necessary funding for ICM and other regional projects continue to be available. The Benefit to Cost ration (B/C) for “integration” and “operational” projects are typically much greater than other infrastructure increasing projects. At the regional level the “fix it first” projects will likely be considered a better investment so operational and planning groups will need to be diligent in lobbying for the inclusion of ICM components where applicable in “fix it first” projects.

The planning and operations departments in all agencies will have roles in securing funding for the ICM implementation. All partner agencies will need to remain involved in the ICM implementation to assure that all parallel projects, at a minimum consider inclusion of ICM components where applicable. Maintaining a “champion” for the ICM concept to keep the concept in front of management when appropriate will become a critical role for the engagement of other departments and divisions when necessary. Securing the ability to include ICM related features into encroachment permitted projects and other right of way activities will aid in furthering the ICM concepts.

As a partnership securing management support in the form of Memorandums of Understanding (MOU’s) for the coordinated development of the ICM concept and regional operational coordination will allow for the continuation of this effort. If the partnership can further this concept to include the identification of champions within large employer/tax/revenue generators for political support of ICM concept (major business, auto dealers, event centers, high profile projects, medical centers, government

agencies, colleges and schools) to be included in funding applications, it would set a new level of support not often seen in the funding application process. Gather a letters of support for the ICM concept from as many champions as can be identified for the safe and efficient arrival of workers or products/raw materials for manufacturing or retail sale as part of the ICM concept would be major accomplishments difficult to disregard in the application/award process.

9.2. Program Funding Alternatives

The partnership should explore and apply for all sources of potential funding and not limit themselves to only one or two programs. Through exposure as part of the funding application process, the ICM concept will gain a wider knowledge base. If funds are awarded from multiple applications for the same phase of the ICM project, it might be possible to accelerate a future phase to take advantage of the award.

A review of available funding programs has been completed and a review of each program, award agency and website links are provided for each. The minimal matching fund requirements has been provided for planning purposes or if applicable, the funds ability to be used as a match for Federal funds.

- Local Agency Transportation funds – This program is mostly oversubscribed; however, depending on the specific agency providing the funds some of the fund maybe ‘earmarked for transportation congestion mitigation. These fund sources are very flexible in there use and are eligible for use as matching funds for all other sources of funding.
 - Builder Development Fees / Major Street Construction Fund – call by different names depending on jurisdiction but the funds are secured though valuations of new construct of buildings.
 - Gas Tax Funds – Administered by State Board of Equalization, State Controller distributes funding
 - Measure A funds – These funds begin at City/Regional level and are administered by the Sacramento Transportation Authority (STA). Typical awards can be secured either directly or through the Sacramento Area Council of Governments (SACOG) Regional Funding Round process.
 - http://www.sacta.org/p_measurea.html
- SHOPP (State Highway Operation and Protection Program) – This is a program administered by Caltrans for use on State only routes. The program can provide up to 100% project funding. These funds are eligible for use as matching funds to Federal Aid and could be used as part of a multi-agency project. Additional funding from SB-1 could be added if the bill is passed.
 - <http://www.dot.ca.gov/hq/transprog/shopp.htm>
- SAFE (Service Authority for Freeways and Expressways) – SACOG or the Capitol Valley Service Authority for Freeways and Expressways (CVR-SAFE) administer these funds, but the call for projects is likely to be administered separately from the Regional Funding Round process. Funding should be available to Sacramento and El Dorado County. For use on Freeways for driver aid projects, including congestion reduction, traveler information and re-routing improvements for which the nexus with ICM would be easily identified. The CVR-SAFE funds can

provide up to 100% project funding, but the program is very limited in available funding. These funds would be eligible for use as matching funds for all sources of Grant funding

- o http://www.sacog.org/sites/main/files/file-attachments/5-cvrs-safe_grant_funding_program_6-2016.pdf
- HSIP (Highway Safety Improvement Program) – This is considered a core Federal-Aid program, with specific goals and objective that projects must provide it be eligible for funding. The ICM Project as planned supports the safety goals and objectives of:
 - o Intersection Safety
 - o Roadway Safety Data and Analysis
 - o Pedestrian and Bicycle Safety

Typical funding of 90% of project costs (\$100,000 to \$10 million) apportionment dependent. The calls for projects are on one or two year cycles are typically. This program is administered by Caltrans: Office of Local Assistance

- o <http://dot.ca.gov/hq/LocalPrograms/hsip.html> or <http://safety.fhwa.dot.gov/hsip/>
- NHPP (National Highway Performance Program) – The federal FAST Act authorization was funding source. This program is currently administered by Caltrans, which may transfer up to 50% of NHPP funds, made available each fiscal year, to the National Highway Freight Program, Surface Transportation Block Grant Program, Transportation Alternatives, Highway Safety Improvement Program, and Congestion Mitigation and Air Quality Improvement Program. Caltrans appears to be focusing funds towards “bridges and their repair” per their website.

Typical funding of 80% of project costs, but over matching of ‘Local Funds’ could make a project appear more competitive.

Federal Guidance reads: NHPP funds may be obligated only for a project on an "eligible facility"; that is a project, part of a program of projects, or an eligible activity supporting progress toward the achievement of national performance goals for improving infrastructure condition, safety, congestion reduction, system reliability, or freight movement on the NHS. Projects must be identified in the Statewide Transportation Improvement Program (STIP)/Transportation Improvement Program (TIP) and be consistent with the Long-Range Statewide Transportation Plan and the Metropolitan Transportation Plan(s).

ICM Projects fall under the federal eligible activity of “j. Capital and operating costs for traffic and traveler information monitoring, management, and control facilities and programs. The project or activity must be associated with an NHS facility.” Most routes utilized on the US 50 ICM proposed project are located on the NHS.

- o <http://www.fhwa.dot.gov/specialfunding/nhpp/>
- SACOG Regional Funding Round (Sacramento Area Council of Governments) – Regional Funding Round) Process continues to evolve, but to be competitive it is helpful if project is listed in a

Regional Planning document. Consideration should be for the US-50 ICM inclusion in the pending Regional ITS Master Plan update to satisfy this potential requirement.

The Funding program source is determined by SACOG as part of the award process. This is a very competitive program highly oversubscribed. Potential funding programs include:

- o Congestion Mitigation and Air Quality (CMAQ)
- o Regional Surface Transportation Program (RSTP)
- o State Transportation Improvement Program (STIP)
- o Active Transportation Program (ATP) funds

Typical funding level is a maximum of 80%, requesting less than 80% funding can make a project more competitive (over match). In the past Multi Agency project applications have proven to be very competitive. Letters of support and coordination can be very advantageous and typically have not included support from the larger employers or tax/revenue generators.

Project inclusion or being a component project directly working towards a regional project/goal can be advantageous. The regional goals of greenhouse gas reduction, congestion mitigation and multi-modal transportation coordination encouragement should occupy a leading position in this application.

- o <http://www.sacog.org/regional-funding-programs>

9.3. Potential Strategy (*Start with Letters of Support and Charter*)

Securing letters of support will be critical as the partners begin to seek funding for implementation of the ICM components. The development of a partnership MOU or the collection of letters of support as well as inclusion of the ICM components and communication needs in the upcoming ITS Master Plan should help.

As individual agencies continue to have their budgets reduced it is increasingly important for each agency to demonstrate how it is being a good steward of public funding while meeting the needs of their constituent base. All funding applications should include a statement on how the ICM project or phase is taking direct advantage of all previous investments, in recognition of this need. A direct siting of projects that the specific ICM project is working in coordination with should be included whether the previous project is completed in construction or not. As budgets and the funding of grant programs continue to become increasingly competitive the ability to demonstrate a projects use of past investments will continue to resonate with funding agencies. If a compounding of benefits is anticipated or can be verified through the past performance indicators it should be included as part of the application.

All agencies should take advantage of encroachment permit projects to increase investment in areas of need. All encroachment permit applications should be reviewed for potential inclusion of ICM components along the appropriate corridors. If inclusion of ICM components is not possible through the permit process, consideration should be given to avoid future conflicts due to the improvements and potential conflicts with ICM components.



Appendix

- Caltrans District 7 Dynamic Corridor Congestion Management (DCCM) – Dynamic Corridor Ramp Metering System (DCRMS) Adaptive Ramp Metering Discussion Paper
- Caltrans District 7 Dynamic Corridor Congestion Management (DCCM) – Dynamic Corridor Ramp Metering System (DCRMS) Review of Existing Adaptive Ramp Metering Algorithms

***California Department of Transportation
District 7***



**DYNAMIC CORRIDOR RAMP METERING SYSTEM
(DCRMS)**

P.O. 2660-0712000618-1

Adaptive Ramp Metering Discussion

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1 INTRODUCTION

1.1 DOCUMENT PURPOSE

The purpose of this document is to provide an overview of various state of the practice Ramp Metering algorithms used in North America and around the world. This document reviews deployed worldwide algorithms, provides a comparison and an evaluation of algorithm alternatives in North America, as well as presents Caltrans with recommendations on which algorithm to implement on its regional network. These recommendations will be focused on ways to improve operations within the current infrastructure's capabilities.

1.2 WHY RAMP METERING

Ramp metering is a tool to manage traffic on approaching freeways. The most common objectives of ramp metering are improved mobility (reduced congestion, reduced travel time and improved travel time reliability) and improved safety (reduced collision rates).

Traditionally, ramp metering can be pre-timed or responsive to real-time conditions. Within the responsive approach, rates may be based on system-wide or local conditions. Several ramp meters can be coordinated to smooth flow at:

- A point;
- Along a stretch of freeway; or
- For several freeways within a regional network.

Ramp metering algorithms may take into account other conditions or situations such as HOV demand or queuing on the entrance ramp. Some algorithms adjust the calculated metering rates to account for these conditions and some incorporate consideration of these conditions as part of the basic calculations.

Adaptive ramp metering algorithms are designed to anticipate conditions and take action accordingly. Adaptive ramp metering algorithms typically either look upstream or downstream, or both in order to take action at a ramp before congestion occurs.



2 CATEGORIES OF ALGORITHMS

Typically there are two categories of ramp metering algorithms:

1. **Isolated:** Metering rates are decided solely by local traffic conditions; respond to conditions throughout a corridor including incidents; and requires little ongoing parameter maintenance.
2. **Coordinated:** Metering is done based on system-wide information.

2.1 COORDINATED

There are three types of algorithms: Cooperative, Competitive and Integral

2.1.1 Cooperative

- After computing the rate for each on-ramp, further adjustment is done based on system-wide information to avoid congestion and the spillback at critical ramps
- Examples: ALINEA, ZONE, Local Metering

2.1.2 Competitive

- Two sets of metering rates are computed based both on local and global conditions, and the more restrictive one will be selected and implemented
- Examples: Bottleneck, SWARM

2.1.3 Integral

- Local traffic and system-wide traffic conditions are both used to determine metering rates
- Examples: Fuzzy Logic, METALINE, Sperry Ramp, Dynamic Metering, etc.



3 RAMP METERING ALGORITHMS

Ramp metering algorithms can be categorized as local or system/corridor focused.

3.1 LOCAL ALGORITHMS

Local algorithms are based on conditions in vicinity of the ramp only. A local algorithm may also provide the basic concept that is used in a system algorithm. The most common local algorithm in the U.S. is an occupancy-based threshold approach that associates metering rates and occupancy levels at the detector station immediately upstream of the entrance ramp. The occupancy-metering rate relationship can be defined for each ramp. The rates can be determined from a simple lookup table or may be interpolated between the values defined (see the graph below). The metering rate is often adjusted for ramp queues, generally to keep ramp queues from affecting the surface street network or vehicles that are not destined to the freeway. Local algorithms are vastly deployed throughout Europe.

3.2 SYSTEM OR CORRIDOR ALGORITHMS

System or corridor algorithms use information on conditions throughout the corridor or facility to calculate metering rates. They may depend on the base local algorithm. They may also only kick in when an occupancy threshold is met.



4 RAMP METERING OPERATIONAL MODES

Ramp metering can be operated using several different modes. The three ramp meter operational modes are as follows:

1. Local Time of Day
2. Responsive Ramp Metering Control
3. Adaptive Ramp Metering Control

4.1 LOCAL TIME OF DAY

Local Time of Day (TOD) mode consists of using predetermined metering rates using a schedule of operation. It requires an off line determination based on mainline and ramp data history. This determination can be based on software, engineering judgment or a combination. TOD mode is typically used when real time traffic data is unavailable, and it used as a backup when higher level modes cannot operate due to equipment failures.

4.1.1 Technology Requirements

TOD requires a controller that can store tables of rates, dates, times, and holidays. All NTCIP compliant ramp metering firmware can operate TOD mode.

4.1.2 Pros

- When properly setup, reduces delay and congestion on mainline
- Simple form of control
- Serves as an effective backup mode when more complex modes cannot operate

4.1.3 Cons

- Not responsive to real time conditions including congestion and incidents
- May meter when not necessary
- May not meter when necessary
- Requires continual metering rate evaluations including seasonal variations

4.2 RESPONSIVE RAMP METERING CONTROL

Responsive Ramp Metering Control (RRMC) is a mode where a single meter uses traffic data from the set of vehicle detectors on freeway mainline adjacent to the on-ramp. RRMC can be performed within a local controller or at a central location.

Typically, RRMC is based on a simple algorithm that uses the local mainline's volume, occupancy and/ or speed data to lookup in a table the desired metering rate. This mode is included in all NTCIP compliant ramp metering firmware. When RRMC is operated from central it can be configured in many ways including using multiple mainline stations and using a more complex method to compute metering rates.

4.2.1 Technology Requirements

Local RRMC requires a controller that can access the local mainline traffic data.



4.2.2 Pros

- When properly tuned, can improve reductions in delay and congestion on mainline over TOD mode
- Can be set to turn on/off meters based on conditions if there is an algorithm present in the controller for Local RRM
- Responds to local mainline conditions
- Requires little ongoing parameter maintenance

4.2.3 Cons

- Requires mainline detectors
- Not responsive to downstream conditions including congestion and incidents

4.3 ADAPTIVE RAMP METERING CONTROL

Adaptive Ramp Metering Control (ARMC) is a mode that controls a set of ramp meters assigned to a specified corridor adapting to traffic conditions derived from multiple sets of freeway mainline detectors. Typically the corridor is segregated based on its bottlenecks and the set of meters upstream from each bottleneck work together to regulate traffic flow into the bottleneck. Adaptive algorithms also feature dynamic on/off strategies.

4.3.1 Technology Requirements

ARMC require a central system, an adaptive algorithm, mainline detectors, and controllers that can accept metering rates in real time.

4.3.2 Pros

- When properly tuned, can significantly reduce delay and congestion on mainline
- Respond to conditions throughout a corridor including incidents
- Requires little ongoing parameter maintenance

4.3.3 Cons

- Requires mainline detectors, a central system, and a controller that can accept real time rates
- Complexity often not understood



5 ADAPTIVE RAMP METERING

This section highlights the key features of the most common used adaptive algorithms in the US and internationally.

5.1 SWARM

The System Wide Adaptive Ramp Metering (SWARM) algorithm was initially developed in 1994 a part of a demonstration project in Caltrans District 12. It has subsequently undergone several improvements and is currently operating in several North American jurisdictions.

SWARM:

- Makes continuous forecasts of traffic conditions in real time based traffic data at dynamically determined bottleneck locations
- Creates metering rates based on the forecasts, ramp capacities, and allowable metering rates using a propagation methodology
- Has many subsystems that determine allowable metering rates

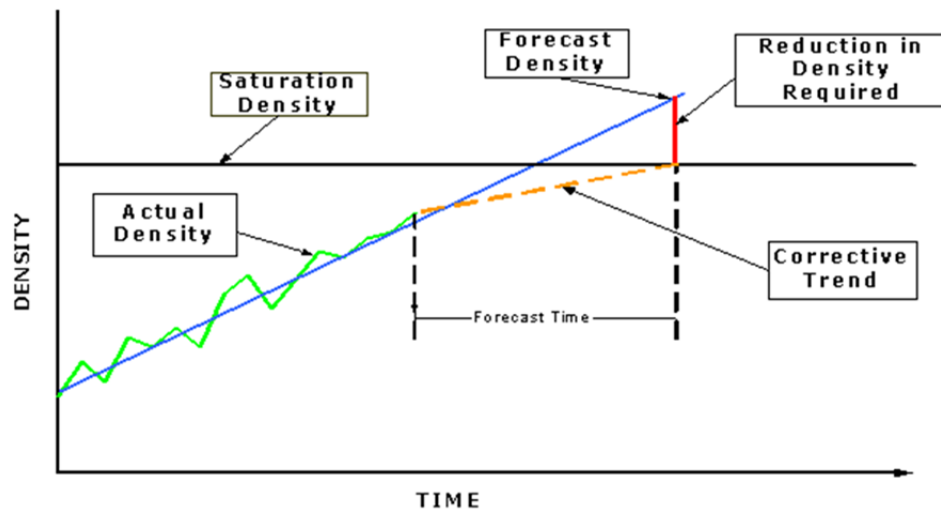


Figure 5-1. SWARM Concept

5.1.1 SWARM – Network

- Looks at the complete system
- Forecasts traffic conditions x minutes into the future
- Changes metering rates now to avoid predicted future problems

5.1.2 SWARM – Local

- Looks at local traffic conditions near ramp
- Based on current data



- SWARM 2a - Headway (time between vehicles)
- SWARM 2b - Storage
- SWARM 2C – Two-station algorithm

Deployments: Los Angeles, CA; Portland, OR; Atlanta, Georgia

5.2 CARMA

Corridor Adaptive Ramp Metering Algorithm (CARMA) computes metering rates based on mainline speeds and prevailing local controller conditions then optimizes them over each freeway direction.

CARMA computes a metering rate at each mainline station regardless of whether there is an associated metered ramp or not. VDSs are ordered by geography and are processed starting with the furthest downstream location. The concept is based on the assumption that a ramp can allow maximum vehicles when the speed is high and should theoretically allow no vehicles when the speed is at a jam condition.

CARMA features include:

- Smoothed mainline speed
- Computes rates at each mainline Vehicle Detector Station (VDS)
- Tempers rates based on downstream conditions
- Bounds rates based on local maximum and minimum rates
- Adapts to ramps in queued states
- Adapts to ramps operating in non-CARMA modes
- Controls hours of operation
- Given the Mainline Speeds at which:
 - A Maximum Rate would be applied
 - No vehicles should be allowed entry
 - A linear relationship is established
- Current Smoothed Mainline Speeds are input to this linear relationship to compute the desired Local Raw Rate
- Note: Local Raw Rates can be greater than Absolute Maximum and even less than zero

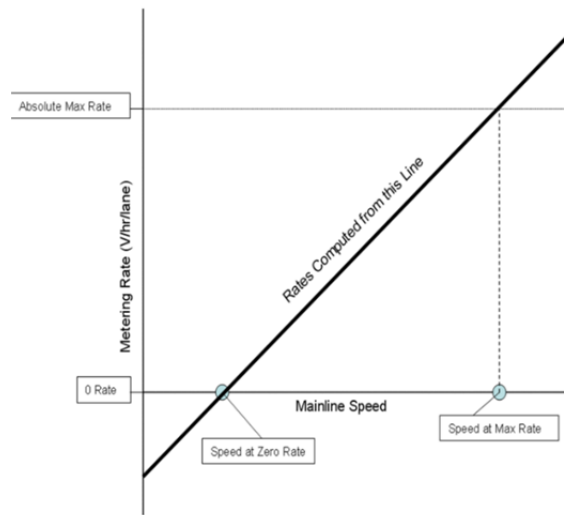


Figure 5-2. CARMA Concept

Deployments: Kansas City, KS

5.3 FUZZY LOGIC

The fuzzy logic algorithm was developed by WSDOT under a research project with the University of Washington. It addresses multiple objectives and weighs rules that implement those objectives. It has a user-friendly tuning process that uses linguistic variables, not numerical variables.

- The rule groups used by the WSDOT algorithm include:
 - Local mainline speed and occupancy
 - Downstream speed and occupancy
 - Ramp queue occupancy
- A process known as “fuzzification” translates each numerical input into a set of fuzzy classes: very small (VS), small (S), medium (M), big (B), and very big (VB). Each has a scale from 0 to 1 to describe the probability that the parameter fits in that class. The charts below show the fuzzification for local occupancy and for downstream occupancy that were developed for the WSDOT algorithm.

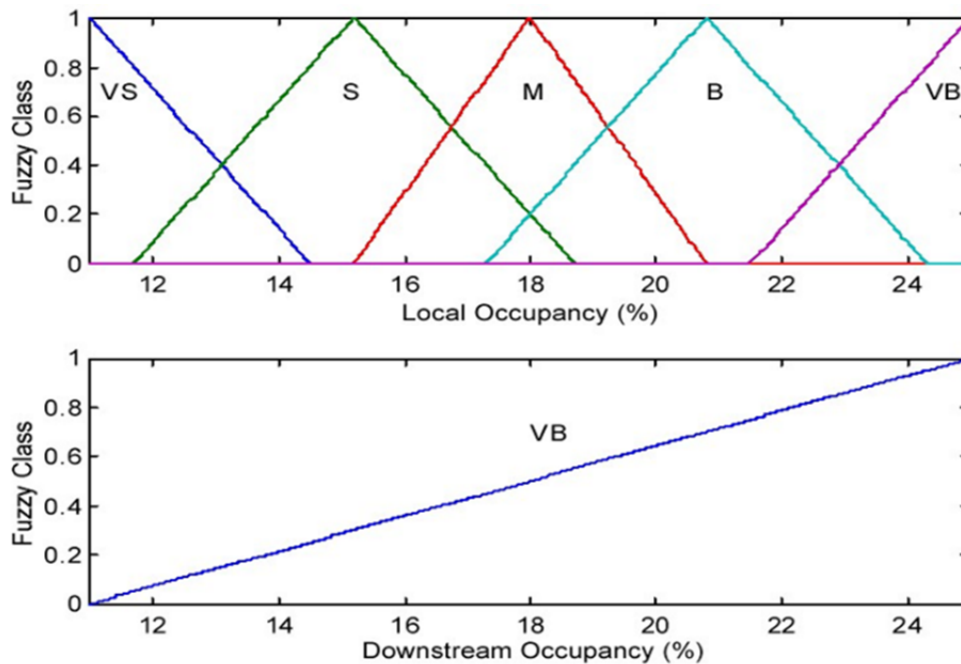


Figure 5-3. Fuzzy States

After the fuzzy states are determined, weighted rules determine the metering rate. The numerical metering rate is based on the rule weight and the degree of activation of each rule outcome. The final meter rate determination combines the contributions from all the weighted rules.

Key features of the Fuzzy Logic algorithm include:

- The overall framework allows rules can be changed or added. Weights can be modified to tune to local conditions.
- The parameters are robust and do not need extensive or frequent tuning.
- The fuzzy logic algorithm can be used to turn metering on and off.
- Ramp queues are integral to algorithm, not an adjustment to the outcome.

Deployments: Seattle, WA; Miami, FL

5.4 MN ZONE ALGORITHM

The zone algorithm was developed by MnDOT and put in use in the early 1970's. In the zone algorithm, the freeways are divided into multiple zones, generally 3 to 6 miles long and defined by an upstream typically free flow location and a downstream bottleneck. The zone is comprised of distinct elements, including the mainline, metered ramps, freeway to freeway connectors, unmetered ramps, and exit ramps. The zone algorithm establishes a total allowable metering rate for the ramps in the zone that would maintain mainline flow, then allocates the flow to each ramp based on preset rates at the ramp. The preset rates are based on typical demands at the ramp with high volume ramps in the zone getting higher allocations allowed entrance volume. The rates are continually adjusted to maintain consistent traffic flow on the mainline. For each zone the algorithm attempts to maintain the mainline condition below critical density levels by allocating inputs into the zone from ramps with the exiting volume at



ramps and at the bottleneck. It selects metering rates, ranging from no metering to a cycle length of 15 seconds. The zone algorithm requires detection at the ramp merge and exit points and on the mainline.

Deployments: Minnesota

5.4.1 Stratified Zone Algorithm

The objective of the stratified zone remains the same as that of the Zone algorithm, which is to regulate zones through metering so that the total volume exiting a zone exceeds the volume entering. SZM, though, incorporates the more dynamic nature of a freeway by allowing multiple zone bottleneck locations by assigning a ramp to a series of zones then optimizing the ramp meter rate based on the most critical zone at the time, rather than pre-established fixed zone locations.

Stratified zone metering also addresses the need to manage queue wait times by having a separate function for monitoring and managing queues. The separate queue wait calculation runs parallel to the stratified zone algorithm in setting ramp flow rates. The queue wait system only overrides calculated zone rates with a less restrictive rate whenever the queue wait threshold is reached. The current threshold is four minutes on local ramps and two minutes on freeway to freeway connectors. When the queue wait rate is in effect and increasing the flow rate on a given ramp in a zone, the SZM attempts to rebalance the remainder of the zone by making other meter rates for ramps in the active zone more restrictive.

Deployments: Minneapolis/St. Paul, MN

The **key features** of the Zone and Stratified Zone algorithms include:

- The zone algorithm limits total number of vehicles entering a zone to total number leaving the zone. It distributes the spare capacity among the meters in a zone based on current demands at the ramps.
- Capacity is considered a constant relative to the number of lanes at the bottleneck, during all times at all bottlenecks.
- Stratified zone algorithm allows for dynamic bottleneck locations to adjust to changing traffic conditions based on incidents, weather, or other factors.
- Queue detectors are used to calculate queues. Queue waiting time is limited generally to about four minutes. The metering rate at a ramp can be raised to assure wait time is limited.
- “Spare” capacity is calculated from volume and speed and utilized to increase ramp flow rates, and reduce queues, when mainline conditions can handle additional vehicles.

5.5 BOTTLENECK

BOTTLENECK has been applied in Washington State for a number of years. It provides local- and system-level control on a selected freeway section. Bottleneck computes two metering rates for each on-ramp, one based on local conditions and the other based on system-wide condition, and selects whichever is more restrictive. It has three components:

1. Local metering algorithm (occupancy control);
2. Coordination algorithm is the unique aspect of BOTTLENECK; and
3. Adjustment to meter rates.



It incorporates occupancy control as their local controllers to account for localized congestion. It can work with dynamic bottlenecks.

Deployments: Washington State

5.6 HERO

The **HE**uristic **R**amp metering **co**Ordination (HERO) estimates queue lengths and calculates the desired meter rate based on critical occupancy, the queue estimate, and ramp demand. It is based on readily available real-time data without the need for real-time model calculations or external disturbance prediction.

HERO uses an extended version of ALINEA at a local level.

- Dynamic, coordinated algorithm
- It has two aspects:
 - Uses ALINEA algorithm for local control
 - Uses the HERO algorithm to provide coordination between ramps. HERO distributes rate restrictions upstream to nearby ramps. The figure at right shows the components of the HERO algorithm

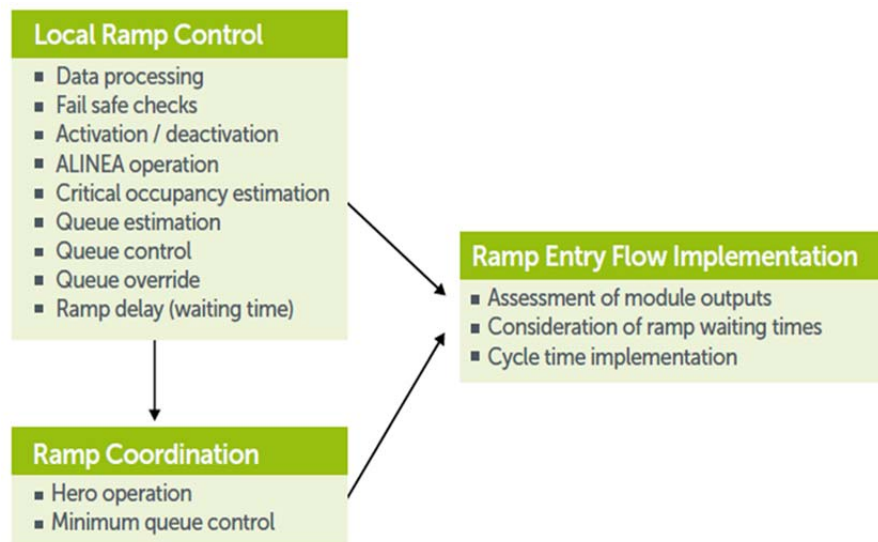


Figure 5-4. HERO Algorithm Components

The characteristics of HERO are as follows:

- Coordinates local ramp metering actions in a suitable way so as to avoid the pitfalls of uncoordinated application
- Algorithm is feedback-based to reduce sensitivity to unexpected disturbances.
- Simple and transparent, e.g., rule-based



- Reactive so that no real-time model involvement and no external disturbance prediction are needed
- Approaches the efficiency of sophisticated optimal control schemes
- It is generic (i.e., directly applicable to any freeway network) without a need for cumbersome parameter calibration or fine-tuning

The basic philosophy for HERO is:

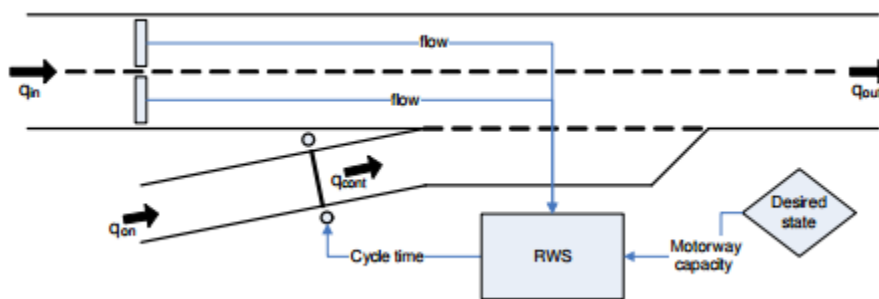
- HERO identifies potentially active mainstream bottlenecks
- To retard or avoid ramp queue control of the concerned on-ramp (master) and the resulting mainstream congestion, HERO activates increasingly storage space via recruitment of upstream located slave-ramps
- The formed cluster of ramps is dissolved when the mainstream occupancy at the bottleneck or the master-ramp queue become sufficiently low

Notice that, while HERO is recruiting increasingly slave ramps with corresponding minimum queues, the master-ramp's ALINEA continues to operate normally so as to continue to maximize the mainstream throughput at the potential bottleneck location.¹

5.7 RIJKSWATERSTAAT (RWS)

It is a capacity-demand feed-forward control algorithm, its goal is to prevent or postpone congestion from forming. Currently, RWS is the only algorithm implemented in Dutch ramp metering systems. This type of metering algorithm calculates the metering rate by subtracting the motorway traffic demand from the motorway capacity.²

Once congestion in the motorway has form and the speed drops below the congestion threshold, the performance of the ramp meter will be mostly determined by the motorway congestion detection and the on-ramp queue detection. When congestion on the motorway is detected the flow on the on-ramp is restricted, by implementing the maximum cycle time (approximately 4.5 secs).³



¹ HERO Coordinated Ramp Metering Implemented at the Monash Freeway white paper

² Adaptive Ramp Metering – ITS EDU Lab, Marc Stanescu – May 2008

³ Coordination of Ramp Metering - ITS EDU Lab, Yufei Yuan – July 2008



5.8 TRAFFIC INTRODUCTION METERING

The overall system overview can be divided into two segments, the Central level and the Local one. The Central level consists of a central computer; the Local one is the Omnivue system that can be used for monitor the system by the operators. The Central system, called Traffic Introduction Metering (TIME) system, handles the centralized control of when to allow green periods to the ramps, basing on all the traffic data.

The control actions are calculated on the basis of a two-level strategy which takes into account the data received from the local computing units (MFO - multifunctional out stations). At the central level, the overall control strategy is computed every 60 seconds, so as to be able to optimize traffic distribution and prevent a buildup of queues on any single ramp. The central server can exchange data with other traffic management systems, including variable message signs, video surveillance, and traffic monitoring and enforcement systems. TIME can also take into account traffic predictions received from other systems.⁴

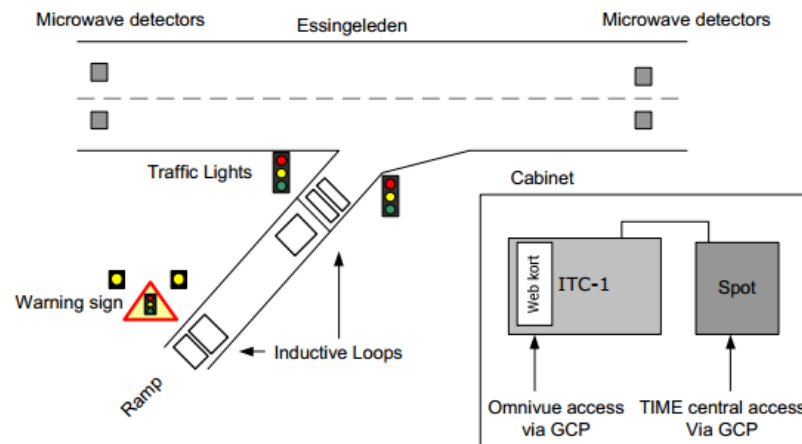


Figure 5-5. Local Control Overview

⁴ ITS Presentation – Ramp Metering http://www.largevents.eu/wp/wp-content/uploads/2012/10/ramp_metering.pdf

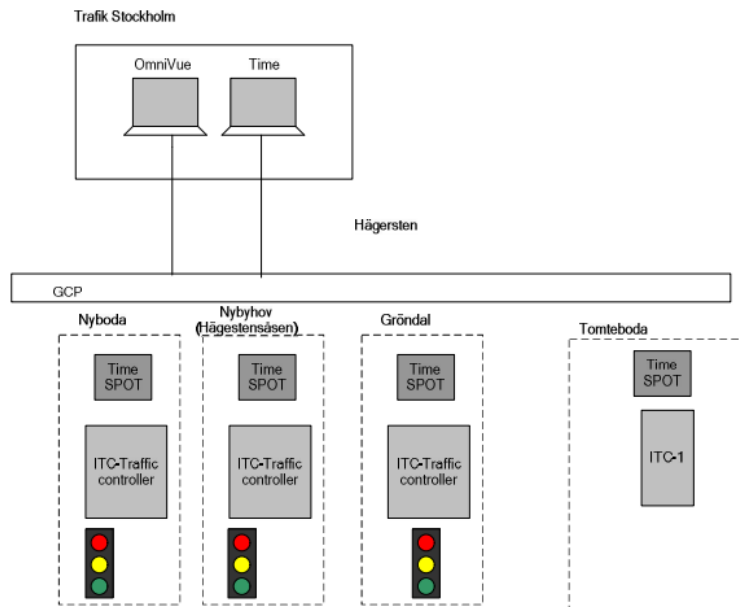
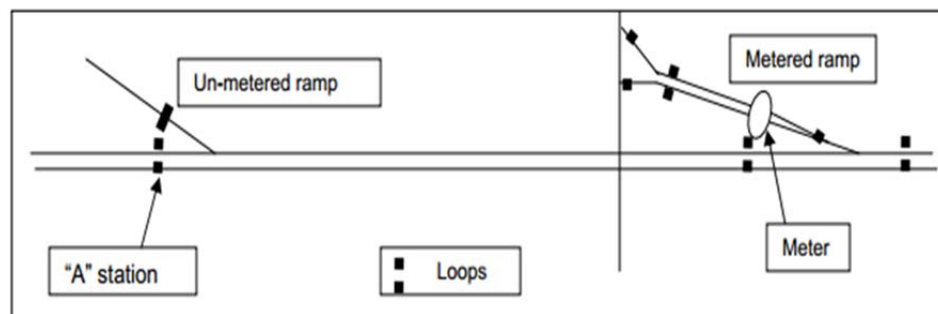


Figure 5-6. System Overview

5.9 RAMP METER DESIGN SYSTEM

The SCATS Ramp Metering System (SRMS) chosen for this trial was an “off the shelf” product developed by the Roads and Traffic Authority, NSW (RTA). This software requires detector loops for its operation.

- Software requires detector ops for its operation
- The ramp meter timings are fully controlled by freeway mainline flow conditions, but can be adjusted to reflect surface arterial road conditions
- Ramp meter timings can also be adjusted to balance flow rates between competing on-ramps based on detected queues, by considering the relative requirements of all ramps within a “bottleneck sub-system”
- Designed to operate groups of ramps, and can “balance” the competing demands between the ramps within the sub-system in a manner that can enable the sub-system to avoid flow breakdown





6 LOCAL RAMP METERING

6.1 HELPER

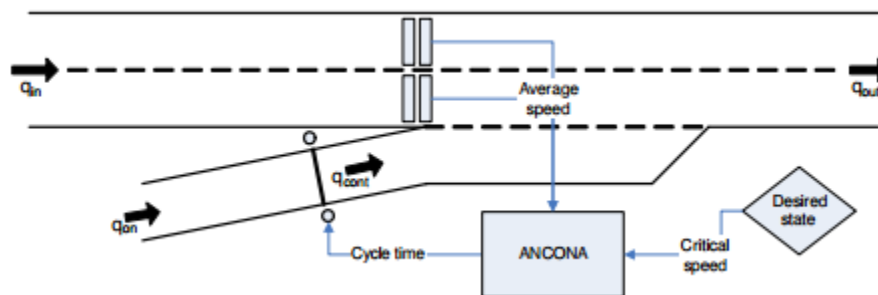
The Helper algorithm is comprised of a local traffic-responsive algorithm with the added feature of central override control. Within a freeway corridor, controlled on-ramps are divided into six location groups, with each group containing one to seven controlled on-ramps. With local traffic-responsive component, one of six pre-set metering rates is selected at each on-ramp, based on local conditions near the ramp. (The local conditions are measured by mainline occupancy reported from the detector station upstream of the on-ramp.)

The algorithm also monitors on-ramp queues by keeping track of occupancies on queue detectors and adjusts metering rates in case of any excess queue development. If an on-ramp is operating at the minimum metering rate, and occupancy on the queue detector exceeds a pre-determined threshold value, the on-ramp is categorized as “critical” and the central override feature becomes active. The centralized algorithm increases the rate at the critical on-ramp by one level and reduces the rate for the upstream on-ramp by one level. The distribution continues one level at a time to other upstream on-ramps, until no on-ramp is categorized as critical.⁵

Deployments: Denver, CO

6.2 ANCONA

ANCONA was developed by Boris Kerner. The theory states that there are three stages of traffic: free flow, synchronized flow and the wide moving jam. Breakdown at a bottleneck such as an on-ramp is associated with a transition from free-flow to a synchronized flow state. ANCONA is based on the transition. After congestion has begun on the motorway, synchronized flow should be maintained around the on-ramp by switching between a high and a low metering rate.⁶



⁵ Using Archived ITS DATA to Measure the Operational Benefits of a System-Wide Adaptive Ramp Metering System
- Robert L Bertini & Soyoung Ahn, Portland State University

⁶ Adaptive Ramp Metering – ITS EDU Lab, Marc Stanesco May 2008



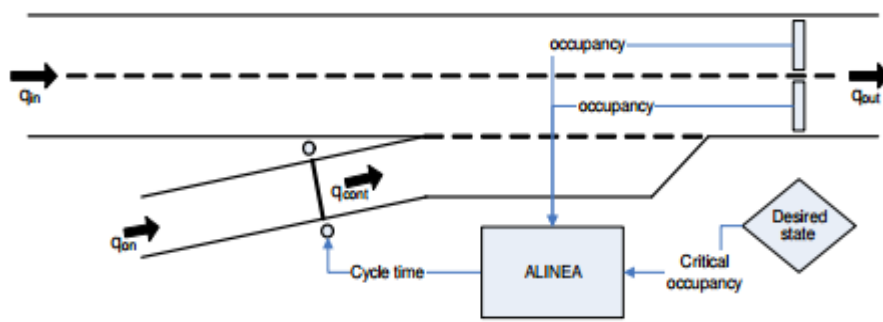
6.3 ALINEA

ALINEA (Asservissement Linéaire d'Entrée Autoroutière) was developed by Markos Papageorgiou and it is an occupancy-based feedback control strategy. It lets the inflow be determined as proportional to the difference between the ideal occupancy and the observed occupancy⁷.

ALINEA algorithm is a local traffic responsive (adaptive) algorithm and it is not system wide. Its key factors are the location of mainline detectors, occupancy estimate and the regulator parameter. It has a feedback method and it attempts to maintain the mainline throughput by maintaining a desired occupancy on a downstream mainline freeway station. ALINEA:

- Considers conditions last time period (feedback)
- Targets optimal mainline occupancy downstream of ramp
- Queue override can be incorporated
- Additional module can dynamically estimate optimal occupancy

Currently, ALINEA is being used in most European ramp metering sites. The EURAMP partners reported that there have been modifications to ALINEA to cover additional needs.



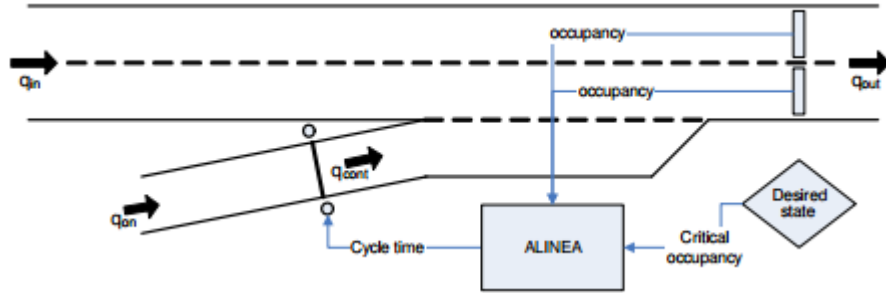
Deployments: UK, France, Germany, Belgium, Shanghai (China), Turkey, Israel

6.3.1 Variable ALINEA

The Variable-ALINEA (V-ALINEA) algorithm, or EDA (simple metering algorithm), is a version of the ALINEA algorithm designed at RWS by Frans Middelham et al. [18]. The difference from the ALINEA algorithm is the use of speed measurements instead of occupancy for the metering rate calculation. Also, the V-ALINEA algorithm is not a closed loop feedback controller. The advantage of using the speed instead of the flow is the same as with the occupancy, the observation is unique for both congested and free flowing traffic.⁸

⁷ Adaptive Ramp Metering – ITS EDU Lab, Marc Stanescu May 2008

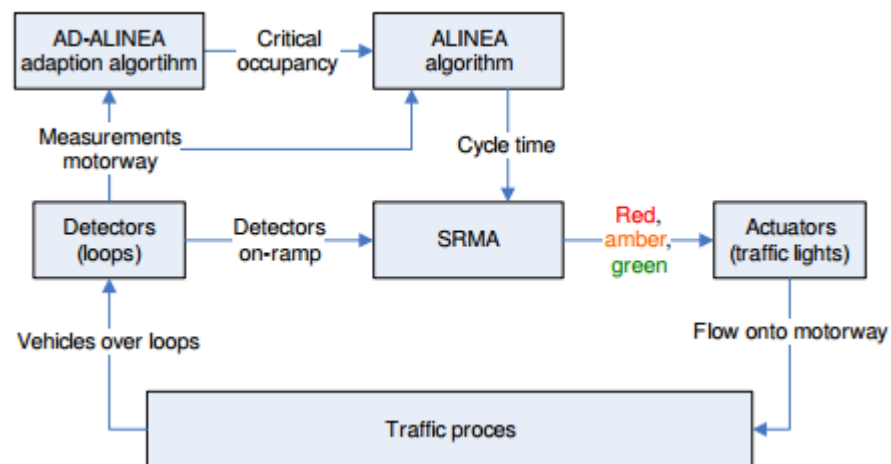
⁸ Adaptive Ramp Metering – ITS EDU Lab, Marc Stanescu May 2008



6.3.2 AD-ALINEA

Although occupancy has shown less sensitivity to external circumstances than motorway capacity, it is still difficult to estimate and maintain a correct value for the critical occupancy. To fix this problem Kosmatopoulos et al. have developed the AD-ALINEA metering algorithm, an adaptive version of the original ALINEA algorithm. The ALINEA metering algorithm itself remains unchanged.

For AD-ALINEA only an estimation module has been added to it.⁹



6.3.3 UP-ALINEA

Upstream measurements are used by this variation of ALINEA

6.3.4 Variable Cycle ALINEA

Variable Cycle ALINEA (VC-ALINEA) computes long metering cycles instead of not metering when the traffic is fluid, as opposed to ALINEA which does not start metering in this case. VC ALINEA also releases the control more quickly than ALINEA, which explains a higher number of activations. Coordinated metering switches on less often at upstream ramps because metering remains on longer, which is due to the fact that they serve as slaves for the downstream ramps¹⁰.

⁹ Adaptive Ramp Metering – ITS EDU Lab, Marc Stanescu May 2008

¹⁰ EURAMP – IST2002-23110 European Ramp Metering Project Contract No 507645



6.3.5 METALINE

METALINE is an extension of the ALINEA algorithm, and its control logic is Proportional-Integral state feedback. The metering rate of each ramp is computed based on the change in measure occupancy of each freeway segment under METALINE control, and the deviation of occupancy from critical occupancy of each segment that has a controlled on-ramp. With METALINE there is no direct consideration of queue overflow, HOV/bus priority, and bottleneck effects.

It has been implemented in freeways in France, the Netherlands and the United States.



7 ALGORITHM ASSESSMENT

The assessment of the algorithms is based on Caltrans applicable requirements and needs, as well as the algorithms deployed in North America. The following are the characteristics that were used in the algorithm assessment.

7.1.1 Operator Interaction

- In order to keep staffing levels reasonable, the algorithm should be fully automated with minimal operator interaction. This includes the ability to turn metering on and off automatically. The algorithm should respond appropriately and effectively to non-recurring congestion scenarios, such as incidents, without operator input.
- The algorithm should require minimal and infrequent adjustment or calibration.
- The algorithm should be easy to understand and tune. There should be a reasonable number of parameters that are easy to change or modify. A tool to help in calibration would be helpful.
- The operator should be able to override metering rates and be able to turn meters on and off manually.

7.1.2 Ramp queue management

- The algorithm should be able to equitably spread wait times throughout the corridor. This is important so the travelers closer in do not have a time disadvantage compared to those who live further out in the corridor.
- The algorithm should take quick action when congestion is detected. It should also quickly propagate reduced metering rates upstream to balance ramp queuing.
- The algorithm should minimize the likelihood of queue override conditions that “flush” the ramp. The algorithm needs a more sophisticated way to mitigate queues than simple queue override or queue adjustment. It should have the functionality to treat ramp queues differently, preferably with ramp queues inherently balanced against mainline conditions in the basic formulation of the algorithm.

7.1.3 Other operational characteristics

- The algorithm must function meaningfully if one or more ramps go offline. There may be communication problems or controller failures that would take certain ramps out of the algorithm. The algorithm must effectively respond to those conditions.
- The algorithm must work in concert with the Caltrans local algorithm. The local controller firmware will control the ramp meter signals. The central algorithm must work with the local controller firmware in order to be effective.
- The ramp metering system needs to respond quickly to congestion at multiple locations in the corridor, not just pre-determined bottlenecks. Each ramp needs to be able to respond to congestion at multiple locations in the corridor.
- The algorithm has to respond to downstream conditions before congestion reaches the mainline in the vicinity of the ramp.
- The algorithm should be able to incorporate preferential metering for HOVs.



- The algorithm should support the existing field configuration for ramp meters, particularly mainline detector placement.

Table 7-1 presents the characteristics mentioned above along with the weighting factor (1-5), where 5 is the highest possible score for each feature.

Table 7-1. Algorithm Comparison

Desired Functionality	Candidate Algorithm Rankings				
	MN Zone	Fuzzy Logic	HERO	SWARM	CARMA
Operator Interaction					
Fully automated with minimal operator interaction	5	5	5	5	5
Minimal and infrequent adjustment/calibration needed	5	5	5	5	5
Easy to understand and tune. Reasonable number of parameters that are easy to change or modify	4	4	4	4	5
Can override metering rates and turn meters on and off	5	5	5	5	5
Ramp Queue Management					
Impacts of congestion stay localized	3	3	3	3	3
Equitably spread wait times throughout the corridor	3	3	3	3	3
Quick action and quick propagation of ramp queues upstream	5	5	1	5	5
Minimizes the likelihood of queue override conditions that “flush” the ramp	5	5	1	5	5
Ability to function meaningfully if one or more ramps go offline	4	4	3	5	5
Respond quickly to congestion at multiple locations in the corridor, not just pre-determined bottlenecks	5	5	2	5	5
Ability to respond before congestion occurs	4	4	4	5	5
Can incorporate preferential metering for HOVs	4	4	3	4	4
Algorithm should support existing field configuration for ramp meters, particularly mainline detector placement	5	5	3	5	5
Ease of implementation	2	2	2	4	5
Weighted Score	4.2	4.2	3.1	4.5	4.7

The rule based coordinated ramp metering strategies make their real-time decisions by checking appropriate heuristic rules and activating specific regulators or actions at individual on-ramps. Since no



common general method is used, rule-based strategies may be quite different in approach and complexity, required calibration effort, and, most importantly, efficiency.¹¹

In addition, Table 7-2 provides a list of different rule-based strategies along with a brief description.

Table 7-2. List of different rule-based strategies¹²

No.	Name	Description
1	ACCEZZ algorithm	The method is based on fuzzy logic. The rule base, defined as the set of rules in the fuzzy logic algorithm, incorporates human expertise.
2	Zone algorithm	The motorway network is divided into zones which end at a bottleneck. The algorithm aims at balancing the entering and exiting traffic volumes of each zone.
3	Helper algorithm	It performs a form of hierarchical coordinated control where decisions with respect to local ramp metering are taken on a higher level.
4	Bottleneck algorithm	Demand-capacity strategy is used at local level. At a network-wide level, the formation of congestion at various bottleneck locations is identified and a decision is made with respect to the required volume reduction.
5	Fuzzy logic algorithm	The fuzzy logic approach requires the use of a number of inference rules, which provide the guidelines for the system's behaviour.
6	Linked-ramp metering system	The coordination aspect of this system rests on a heuristic logic, similar with that of the Helper Algorithm.
7	Sperry ramp metering algorithm	The strategy operates at two distinct modes, the restrictive and the non-restrictive with respect to a predefined threshold.
8	SWARM strategy	It uses a linear regression and Kalman filter applied to detector data for the forecast of the future traffic demands.
9	HERO algorithm	HERO (HEuristic Ramp metering coOrdination) incorporates local ALINEA regulators. When the queue of an on-ramp becomes larger than a predetermined threshold, then the burden of decreasing this queue is assigned to upstream on-ramps.

¹¹ Coordination of Ramp Metering in Motorway Networks - ITS EDU LAB

¹² Coordination of Ramp Metering in Motorway Networks - ITS EDU LAB



8 DEPLOYMENTS

The following section provides a snapshot of the countries and cities (in the US) that have implemented ramp metering.

Figure 8-1 provides a list a cities/counties where ramp metering has been implemented, as well as the type of algorithm deployed.



Figure 8-1. Who Meters?

8.1 US DEPLOYMENTS

The following section highlights US deployments, the range of their implementation and the central algorithms used throughout the country.

Table 8-1 provides a list of the central algorithm used by different agencies.

Table 8-1. US Deployments - Central Algorithm

Large Systems (> 50 metered ramps)	Small Systems (< 50 metered ramps)
Chicago, IL	Columbus, OH
Los Angeles, CA (>1000)	Cincinnati, OH
Minneapolis/St Paul, MN (~420)	Denver, CO
New York, NY	Detroit, MI (on hold)
Orange County, CA (~300)	Northern Virginia, VA



Large Systems (> 50 metered ramps)	Small Systems (< 50 metered ramps)
Portland, OR (~150)	Houston & San Antonio, TX
San Diego, CA (~290)	Milwaukee, WI
CA Bay Area (~250)	Kansas City, KS/MO
Seattle, WA (>200)	Riverside & San Bernardino, CA
Arizona (~200)	Las Vegas, NV
Miami, FL	Louisiana
Atlanta, GA (~160)	Fresno, CA
	Sacramento, CA

North America Deployments	Central Algorithm
Seattle, WA	Fuzzy Logic Algorithm
Washington	Bottleneck
Portland, OR	System Wide Adaptive Ramp Metering (SWARM)
Los Angeles, CA	System Wide Adaptive Ramp Metering (SWARM)
Denver, Colorado	Helper
Minneapolis/St Paul, MN	The Stratified Zone Algorithm
Kansas City, MO/KS	Corridor Adaptive Ramp Metering Algorithm (CARMA)

8.2 INTERNATIONAL DEPLOYMENTS

The following section highlights international deployments and the central algorithms used in the various countries. Countries that have implemented ramp metering include: UK, Germany, Netherlands, Italy, Australia, Taiwan, Canada, South Africa, New Zealand, and Japan.

Table 8-2 provides a list of the central algorithm used by different countries.

Table 8-2. International - Central Algorithm

International Deployments	Central Algorithm	Type of Algorithm
Belgium	ALINEA	Isolated



Canada	COMPASS	Coordinated
Israel (Ayalon Hwy, Tel Aviv)	ALINEA	Isolated
Istanbul, Turkey	ALINEA	Isolated
Italy (Mestre Ring Road)	TIME	Coordinated
France	METALINE (based on ALINEA)	Coordinated
France	V-C ALINEA	Isolated
France (A6 south of Paris)	ALINEA	Isolated
Germany (A94 Munich)	ALINEA	Isolated
Germany	ACCEZZ (based on Fuzzy Logic)	Coordinated
Japan (Tokyo Metropolitan Fwy)	ALINEA	Isolated
Melbourne, Australia (VicRoads)	Heuristic Ramp metering coOrdination (HERO)	Coordinated
Netherlands	Rijkswaterstaat (RWS)	Coordinated
Netherlands	METALINE	Isolated
New Zealand (SH20)	Easy Merge Ramp Signal	Coordinated
UK (M6)	ALINEA	Isolated
UK (M8, Glasgow)	ALINEA	Isolated
Shanghai (Urban Expressway)	ALINEA	Isolated
Stockholm, Sweden	TIME	Coordinated
Taiwan (Fwy no. 5)	Fuzzy Logic	Coordinated

9 SOFTWARE SELECTION IMPLICATIONS

There are some features of the software that will be required that regardless of the algorithm.

- The algorithm will be able to be set to automatically turn on and off within a possible ramp metering window. That window could be 24 hours per day, 7 days a week. It will also be able to turn on and off based solely on time of day.



- The algorithm will have parameters that can be tuned from the graphical user interface by those with the authority to make adjustments. The algorithm should be easily tuned or a tool should be available to allow for easy tuning or adjustment of parameters to optimize ramp metering performance.
- Operators will have the authority to turn meters on and off and to override metering rates in situations that warrant that degree of intervention.
- The systems will be able to assign detector stations or individual detectors to individual ramps for rate calculations.
- The algorithm will have a more sophisticated way to mitigate queues than simple queue override or queue adjustment features.
- The algorithm will need to be able to operate even if some ramps have failed communication.



10 RESOURCE LIST

The documents listed below were reviewed and used as references in developing this report.

	Source	Overview
1	National Cooperative Highway Research Program (NCHRP) – Proactive Ramp Management Under the Threat of Freeway-Flow Breakdown	A study was conducted with the objective to develop procedures for ramp metering implementation at freeway sections that frequently experience breakdowns and congestion.
2	University of California, Berkley for the California PATH Program – Design, Field Implementation and Evaluation of Adaptive Ramp Metering Algorithms http://www.me.berkeley.edu/~horowitz/Publications_files/All_papers_numbered/horowitz_T_O4136_PATH_report05.pdf	The objective of the research is to develop, validate and implement strategies for new-traffic responsive ramp metering in order to reduce congestion in California highways. Microsimulation and Macrosimulation traffic models were used as part of the research.
3	A flow-maximizing adaptive local ramp metering strategy – El Sevier for the Transportation Research Board I(TRB) http://www.dssl.tuc.gr/en/members/kosmatopoulos/JournalPapers/20.pdf	Proposed strategy for ALINEA to extend the feedback local ramp metering, to allow the automatic tracking of the critical occupancy and help maximize mainstream flow. Also, evaluation of AD-ALINEA and AU-ALINEA.
4	Caltrans District 7 – Ramp Metering www.topslab.wisc.edu/its/rampmetering/other/CA_Dist7RM.doc	Overview of the different types of ramp metering.
5	Texas A&M University: Development and Evaluation of Operational Strategies for Providing an Integrated Diamond Interchange Ramp-Metering Control System http://repository.tamu.edu/bitstream/handle/1969.1/113/etd-tamu-2004A-CVEN-Tian-1.pdf?sequence=1	The goal of the research is to develop operational strategies for managing integrated diamond interchange ramp metering systems (IDIRMS). Overview of freeway operations and ramp metering classifications and algorithms.
6	University of Nevada, Reno – Modeling and Implementation of an Integrated Ramp Metering-Diamond Interchange Control System http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.116.5984&rep=rep1&type=pdf	Overview of a modeling approach to analyzing an integrated system that includes freeway mainlines, ramp metering, and upstream signalized diamond interchange.
7	FHWA – Ramp Management and Control Handbook http://ops.fhwa.dot.gov/publications/ramp_mgmt_handbook/manual/manual/5_1.htm	Overview of ramp management strategies that can be implemented to better manage traffic on and adjacent to freeway ramps.



	Source	Overview
8	Texas Transportation Institute - Ramp Metering Algorithms and Approaches for Texas http://d2dtl5nnlpfr0r.cloudfront.net/tti.tamu.edu/documents/0-4629-1.pdf	Comparison of ramp metering algorithms in order to develop guidelines from implementation in Texas.
9	Washington DOT – Evaluation of Fuzzy Logic Ramp Metering Algorithm: A Comparative Study among Three Ramp Metering Algorithms used in the Greater Seattle Area	Study of multiple sites using various algorithms.
10	Minnesota DOT – Twin cities Ramp Meter Evaluation http://www.dot.state.mn.us/rampmeter/pdf/finalreport.pdf	MnDOT evaluation of the effectiveness of ramp metering in the Twin Cities.
11	Highways Agency, UK - Ramp Metering and Integrated Traffic Management	Presentation on the ramp metering, current deployments and Integrated Traffic Management (ITM)
12	EasyWay, Europe - Traffic Management Services, Ramp Metering – Deployment Guideline http://www2.liikennevirasto.fi/ew/ew-tms-dg03_rampmetering_01-02-00.pdf	EasyWay project, is a project for Europe-wide ITS deployment. Development of guidelines for best practices in Europe for ramp metering.
13	FHWA - Traffic Detector Handbook: Third Edition http://www2.liikennevirasto.fi/ew/ew-tms-dg03_rampmetering_01-02-00.pdf	Comprehensive reference to aid in the design of traffic sensors for signalized intersections and freeways.
14	US Department of Transportation – Ramp Metering Status in North America, 1995 http://www.oregon.gov/ODOT/HWY/ITS/pdfs/benefitsofits/rampmeteringstatus1995.pdf	Overview of the ramp metering systems deployed in the USA. Case studies for entrance ramp metering, connector metering, mainline metering, ramp metering considerations, and guidelines for ramp metering.

Review of Existing Ramp Metering Algorithms

- SWARM
- CARMA*
- Fuzzy Logic*
- MN Zone*
- Stratified Zone
- Bottleneck*
- Helper
- ANCONA
- ALINEA*
- Variable ALINEA
- AD ALINEA
- METALINE
- HERO
- Rukswaterstaat (RWS)

PARSONS

US Deployments – Central Algorithms

North America Deployments	Central Algorithm
Seattle, WA	Fuzzy Logic Algorithm
WA	Bottleneck
Portland, OR	System Wide Adaptive Ramp Metering (SWARM)
Los Angeles, CA	System Wide Adaptive Ramp Metering (SWARM)
Denver, Colorado	Helper
Minneapolis/St Paul, MN	Stratified Zone Algorithm
Kansas City, MO/KS	Corridor Adaptive Ramp Metering Algorithm (CARMA)

Who meters in the US?

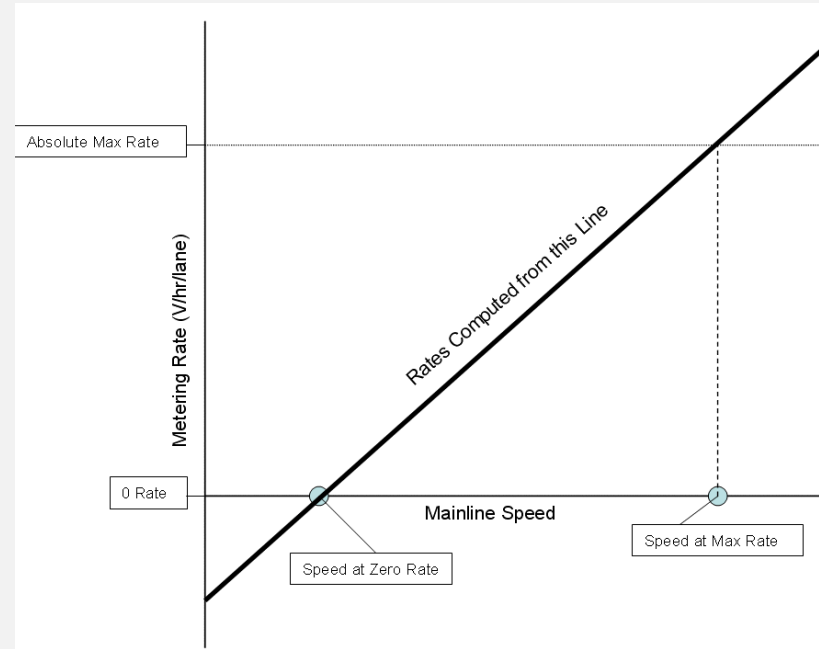
Large Systems (> 50 metered ramps)	Small Systems (< 50 metered ramps)
Chicago, IL	Columbus, OH
Los Angeles, CA (>1000)	Cincinnati, OH
Minneapolis/St Paul, MN (~420)	Denver, CO
New York, NY	Detroit, MI (on hold)
Orange County, CA (~300)	Northern Virginia, VA
Portland, OR (~150)	Houston & San Antonio, TX
San Diego, CA (~290)	Milwaukee, WI
CA Bay Area (~250)	Kansas City, KS/MO
Seattle, WA (>200)	Riverside & San Bernardino, CA
Arizona (~200)	Las Vegas, NV
Miami, FL	Louisiana
Atlanta, GA (~160)	Fresno, CA
	Sacramento, CA

SWARM

- The System Wide Adaptive Ramp Metering (SWARM) algorithm:
 - Makes continuous forecasts of traffic conditions in real time based traffic data at dynamically determined bottleneck locations
 - Creates metering rates based on the forecasts, ramp capacities, and allowable metering rates using a propagation methodology
 - Has many subsystems that determine allowable metering rates
 - Forecasts traffic conditions x minutes into the future
 - Changes metering rates now to avoid predicted future problems

CARMA

- Corridor Adaptive Ramp Metering Algorithm (CARMA)
- Based on Smoothed Mainline Speed
- Computes Rates at each Mainline Vehicle Detector Station (VDS)
- Tempers Rates based on Downstream Conditions
- Bounds Rates based on Local Maximum and Minimum Rates
- Adapts to Ramps in Queued States
- Adapts to Ramps operating in Non-CARMA modes
- Controls Hours of Operation
- Current Smoothed Mainlines Speeds are input to this linear relationship to compute the desired Local Raw Rate



Fuzzy Logic

- Developed by WSDOT with the University of Washington.
- It addresses multiple objectives and weighs rules that implement those objectives.
- The rule groups include:
 - Local mainline speed and occupancy
 - Downstream speed and occupancy
 - Ramp queue occupancy
- A process known as “fuzzification” translates each numerical input into a set of fuzzy classes: very small (VS), small (S), medium (M), big (B), and very big (VB).

MN Zone

- It divides Freeways into multiple zones, generally 3 to 6 m long
- Zones (upstream free flow location/downstream bottleneck)
- Balances volumes entering/exiting fixed freeway r/m zones
- Distributes the spare capacity among the meters in a zone based on current demands at the ramps
- Capacity is considered a constant relative to the number of lanes at the bottleneck, during all times at all bottlenecks
- Dynamic bottleneck locations to adjust to changing traffic conditions based on incidents, weather, or other factors.
- Queue detectors are used to calculate queues. Queue waiting time is limited generally to about four minutes. The metering rate at a ramp can be raised to assure wait time is limited.
- “Spare” capacity is calculated from volume and speed and utilized to increase ramp flow rates, and reduce queues, when mainline conditions can handle additional vehicles.

Stratified Zone

- Incorporates the more dynamic nature of a freeway by allowing multiple zone bottleneck locations by assigning a ramp to a series of zones then optimizing the ramp meter rate based on the most critical zone at the time, rather than pre-established fixed zone locations
- Addresses the need to manage queue wait times by having a separate function for monitoring and managing queues.

Bottleneck

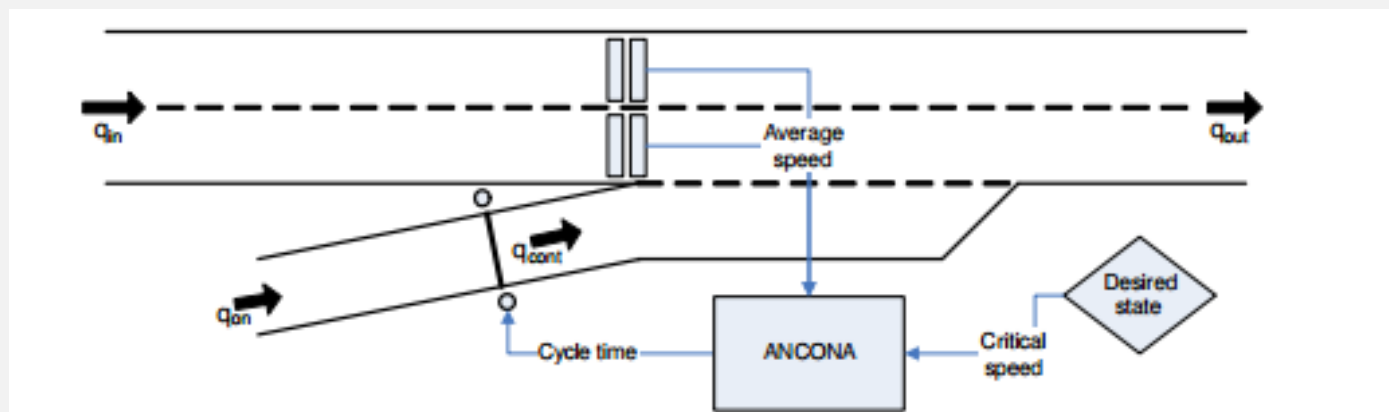
- Bottleneck has been applied in Washington State for years. It has three components:
 - Local metering algorithm (occupancy control);
 - Coordination algorithm is the unique aspect of Bottleneck; and
 - Adjustment to meter rates.
- It incorporates occupancy control as their local controllers to account for localized congestion. It can work with dynamic bottlenecks.

Helper

- It is comprised of a local traffic-responsive algorithm with the added feature of central override control.
- Within a freeway corridor, controlled on-ramps are divided into six location groups, with each group containing one to seven controlled on-ramps.
- Helper monitors on-ramp queues by keeping track of occupancies on queue detectors and adjusts metering rates in case of any excess queue development.

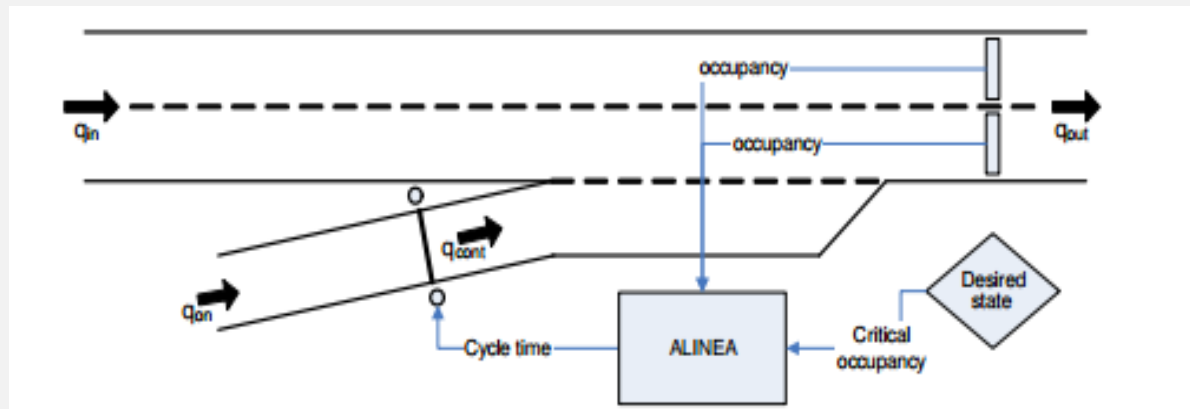
ANCONA

- The theory states that there are three stages of traffic: free flow, synchronized flow and the wide moving jam.
- Breakdown at a bottleneck such as an on-ramp is associated with a transition from free-flow to a synchronized flow state.
- ANCONA is based on the transition. After congestion has begun on the motorway, synchronized flow should be maintained around the on-ramp by switching between a high and a low metering rate.



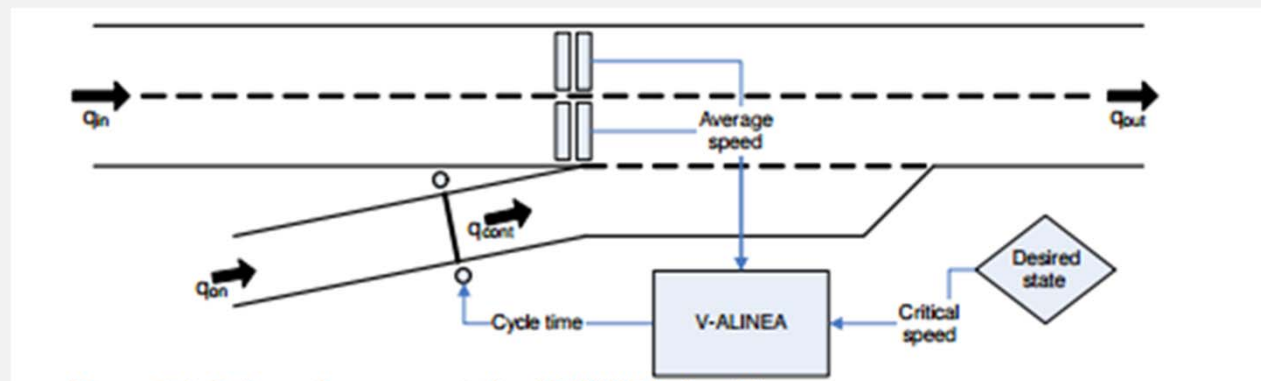
ALINEA

- ALINEA is a local traffic responsive algorithm with feedback structure (not adaptive), but it is the basis of HERO (adaptive algorithm):
 - Considers conditions last time period (feedback)
 - Targets optimal mainline occupancy downstream of ramp
 - Queue override can be incorporated
 - Additional module can dynamically estimate optimal occupancy



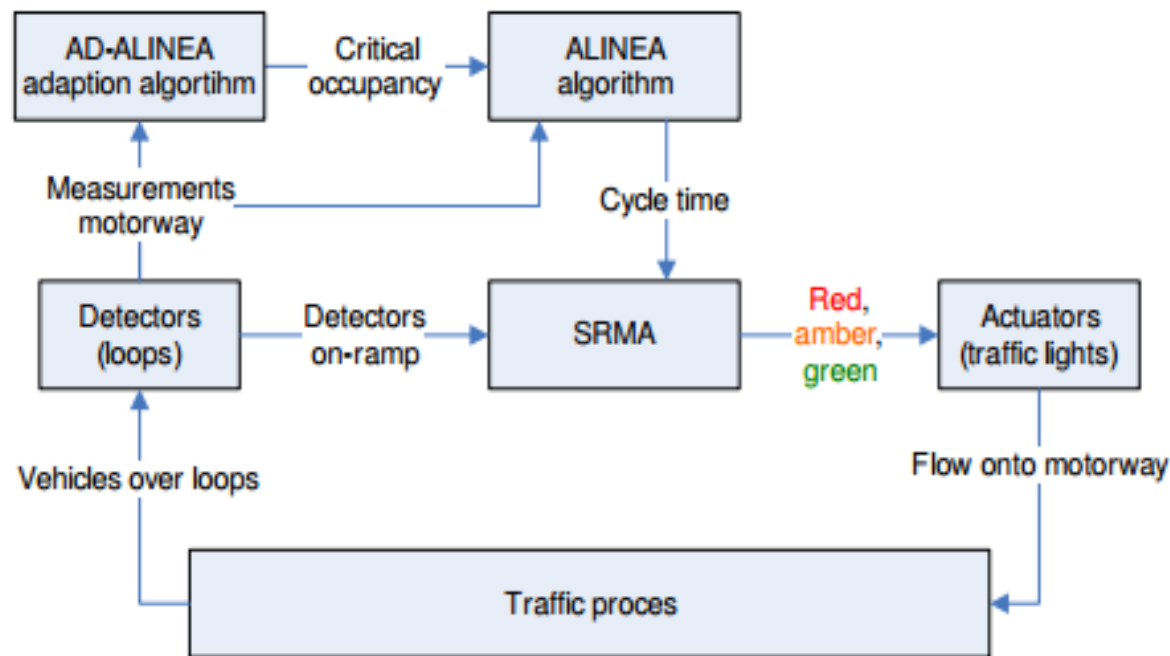
Variable ALINEA

- The V-ALINEA or EDA (simple metering algorithm), is a version of the ALINEA. The difference is the use of speed measurements instead of occupancy for the metering rate calculation.
- V-ALINEA is not a closed loop feedback controller.
- The advantage of using the speed instead of the flow is the same as with the occupancy, the observation is unique for both congested and free flowing traffic.



AD-ALINEA

- Although occupancy has shown less sensitivity to external circumstances than motorway capacity, it is still difficult to estimate and maintain a correct value for the critical occupancy. To fix this problem Kosmatopoulos et al. have developed the AD-ALINEA metering algorithm, an adaptive version of the original ALINEA algorithm. The ALINEA metering algorithm itself remains unchanged.
- For AD-ALINEA only an estimation module has been added to the original ALINEA



METALINE

- METALINE is an extension of the ALINEA algorithm
- Its control logic is Proportional-Integral state feedback
- The metering rate of each ramp is computed based on the change in measure occupancy of each freeway segment under METALINE control, and the deviation of occupancy from critical occupancy of each segment that has a controlled on-ramp.
- No direct consideration of queue overflow, HOV/bus priority, and bottleneck effects.

HERO

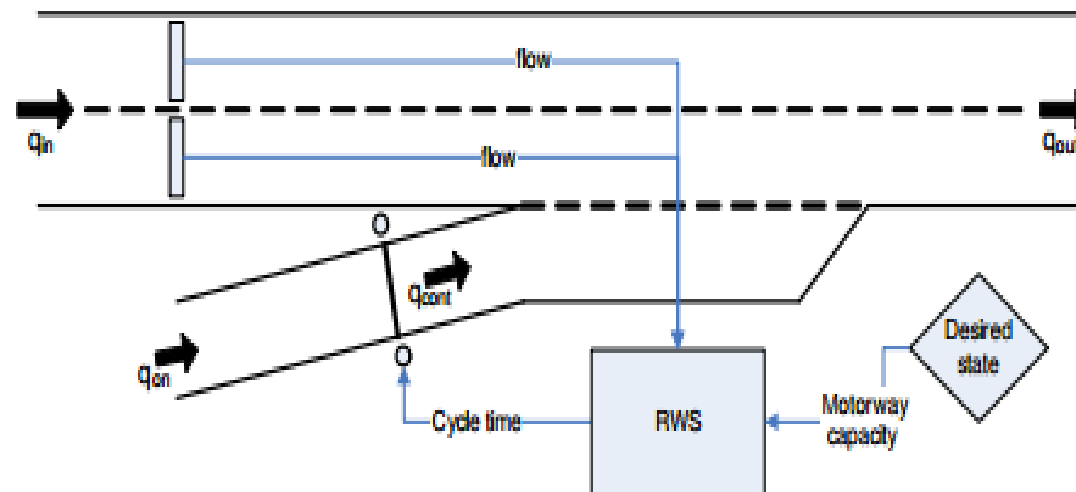
- The **HE**uristic **R**amp metering **co**Ordination (HERO) estimates queue lengths and calculates the desired meter rate based on critical occupancy, the queue estimate, and ramp demand.
- Based on readily available real-time data without the need for real-time model calculations or external disturbance prediction.
- HERO uses an extended version of ALINEA at a local level.
 - ALINEA algorithm for local control
 - HERO algorithm to provide coordination between ramps.

The basic philosophy for HERO is:

- HERO identifies potentially active mainstream bottlenecks
- To retard or avoid ramp queue control of the concerned on-ramp (master) and the resulting mainstream congestion, HERO activates increasingly storage space via recruitment of upstream located slave-ramps
- The formed cluster of ramps is dissolved when the mainstream occupancy at the bottleneck or the master-ramp queue become sufficiently low

Rukswaterstaat (RWS)

- It is a capacity-demand feed-forward control algorithm, its goal is to prevent or postpone congestion from forming
- Only algorithm implemented in Dutch ramp metering systems
- Calculates the metering rate by subtracting the motorway traffic demand from the motorway capacity
- Performance of the ramp meter will be mostly determined by the motorway congestion detection and the on-ramp queue detection. When congestion on the motorway is detected the flow on the on-ramp is restricted.



Traffic Induction Metering

- Overall system overview can be divided into Central and Local level
- The Central level consists of a central computer; the Local one is the Omnivue system that can be used for monitor the system by the operators
- The Central system, called Traffic Introduction Metering (TIME) system, handles the centralized control of when to allow green periods to the ramps, basing on all the traffic data
- At the central level, the overall control strategy is computed every 60 seconds, so as to be able to optimize traffic distribution and prevent a buildup of queues on any single ramp
- TIME can also take into account traffic predictions received from other systems

Key Differentiators

- Instrumentation
- Rate range
- Rate selection
- Rate stability
- HOV/Transit Vehicle Priority

PARSONS

Instrumentation

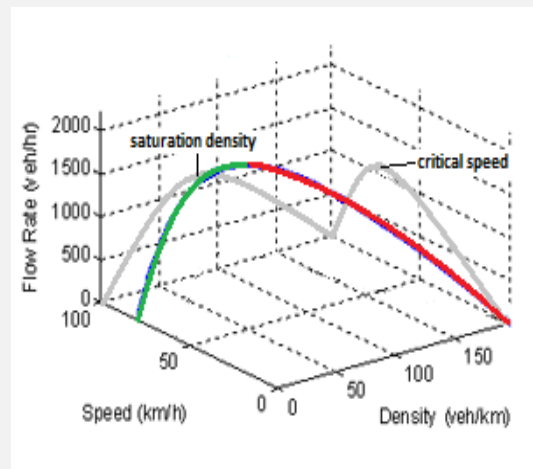
- Algorithms must accurately measure occupancy and speed using stations at ramps and at regular spatial intervals along the freeway. They need to accurately measure state of ramp queues. Different algorithms rely on different detector configurations. Isolated algorithms consider local conditions at the ramp only. Coordinated algorithms also consider conditions elsewhere on the freeway.
- We need a coordinated algorithm for the DCCM application. Metering rates will depend on local conditions at the ramp and conditions downstream on the freeway.

Rate Range

- Algorithms must determine minimum and maximum rates at each ramp. Some algorithms use predefined ranges that are either fixed or can vary by time of day. Other algorithms collect ramp volumes in real time, and choose a minimum rate consistent with the historical demand and the ramp storage capacity.
- A fixed predefined range is sufficient for the DCCM application.

Rate Selection

- Algorithms must select the rate to apply at each meter. Responsive algorithms select metering rates deterministically according to current traffic conditions and predefined thresholds (e.g., saturation density or critical speed).



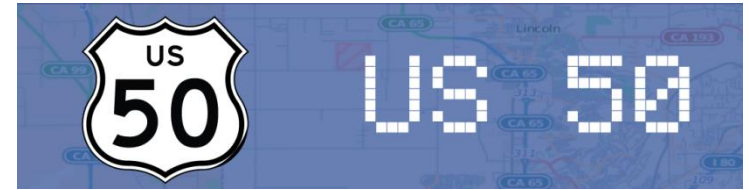
- Adaptive algorithms are able to dynamically update these thresholds based on collected traffic data, and can therefore adapt to construction and incidents. Adaptive algorithms sometimes use prediction to avoid congestion rather than simply responding to it.
- A responsive algorithm is sufficient for DCCM. Dynamic updating of thresholds and the use of prediction requires additional effort to configure and troubleshoot, and is not considered to be of high value for this project.

Rate Stability

- Algorithms must avoid excessive fluctuation in the ramp metering rates from one minute to the next; balancing this with the need to respond quickly to changing traffic conditions. Some algorithms use a smoothed rate (based on a weighted average of the current and past values). Other algorithms apply a maximum differential between successive rates.
- Smoothing can mask issues and adds latency. A maximum differential between successive metering rates will be used for DCCM.

HOV/Transit Vehicle Priority

- Algorithms may support a bypass lane for HOVs and transit vehicles at each ramp. Some algorithms measure the volume of HOV and transit vehicles using the bypass lane and subtract from the metering rate for the general purpose lanes at the same ramp. Other algorithms separately meter the HOV/transit lanes.
- Separate metering of HOV/transit lanes will be used.



US 50 Integrated Corridor Management



**City of Rancho Cordova
City Council
Date: February 20, 2018**

AGENDA ITEM 10.4

What is Integrated Corridor Management?

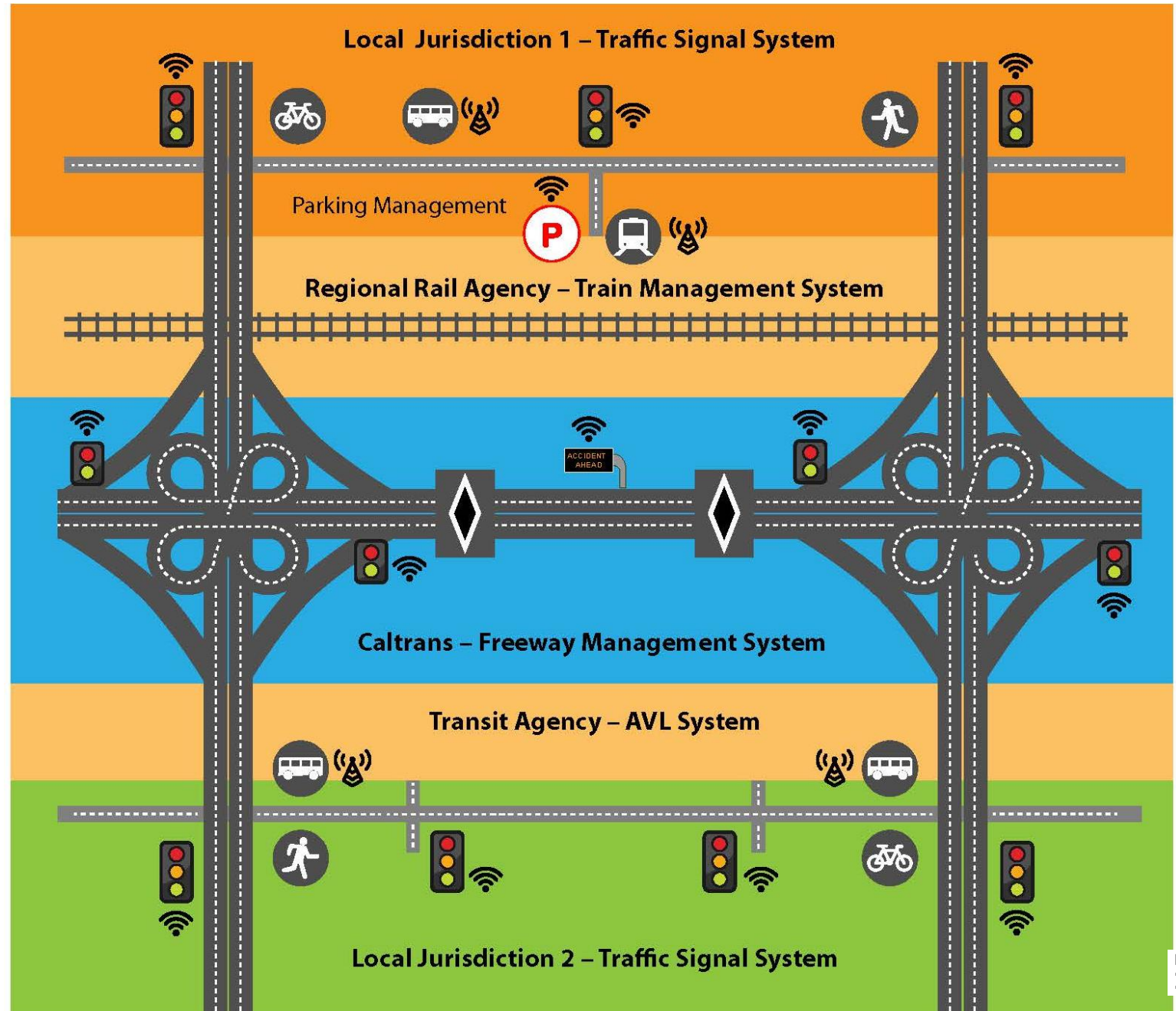
- ❖ ICM strategies aim at shifting away from the isolated transportation networks to a more **regional multi-jurisdictional transportation system that collaborates, coordinates and communicates with each other** utilizing intelligent transportation systems (ITS) technology and transportation management systems (TMS).



Future Fully Integrated System

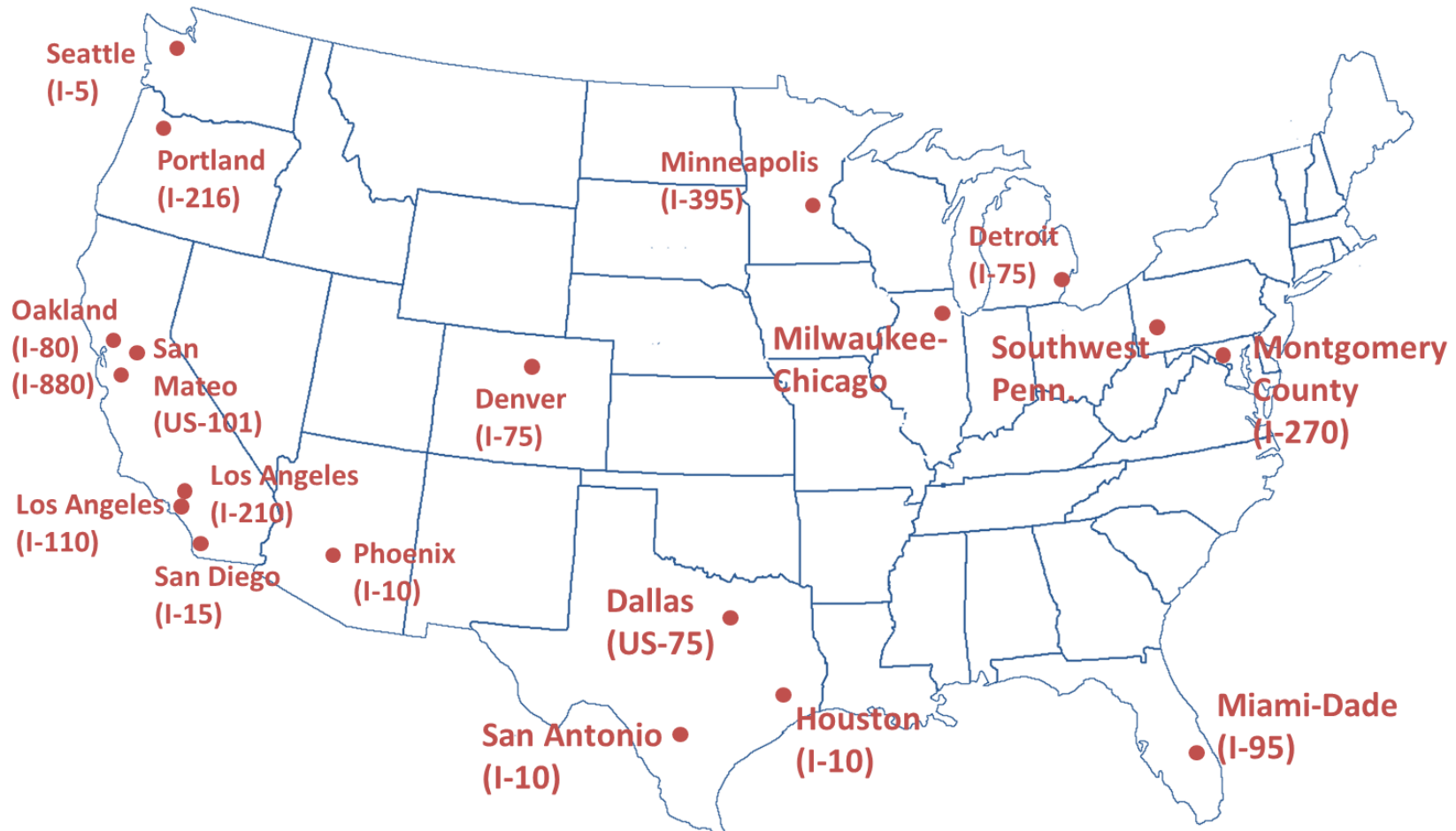
LEGEND

- Traffic Signal System 1
- Regional Rail/Transit Agencies
- Caltrans: Freeway Management System
- Traffic Signal System 2
-  Traffic Signal System
-  Pedestrian
-  Local Transit
-  Parking
-  Rail Agency
-  Bike
-  Rail Agency
-  Local Streets
-  Freeway
-  CMS Board
-  Wifi
-  Cell Tower



Other ICM Efforts (United States)

- Agencies across the country are embracing ICM approach.
- The US 50 corridor will be the 1st multimodal ICM in our region.



Dr Cameron Part

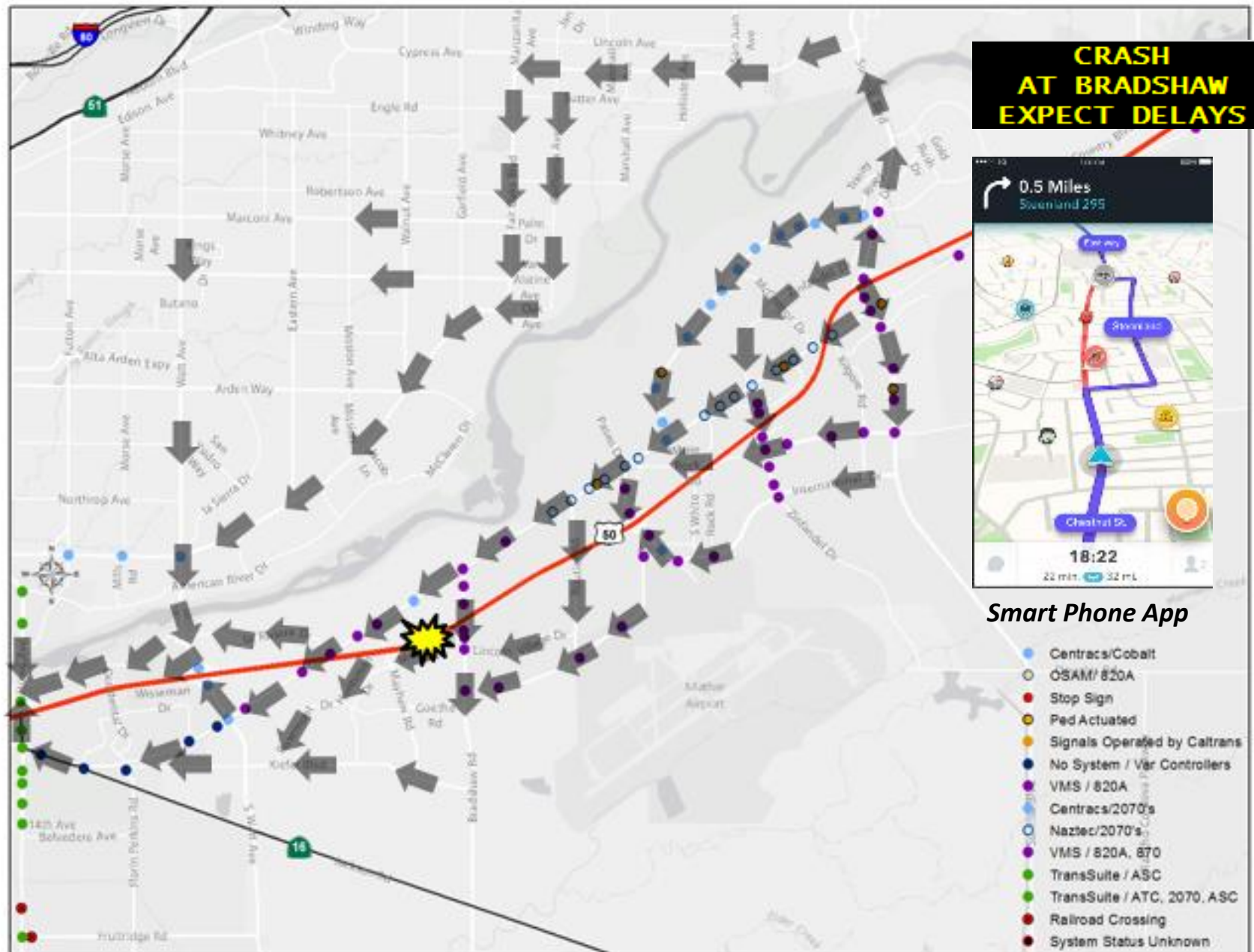


Current Operations

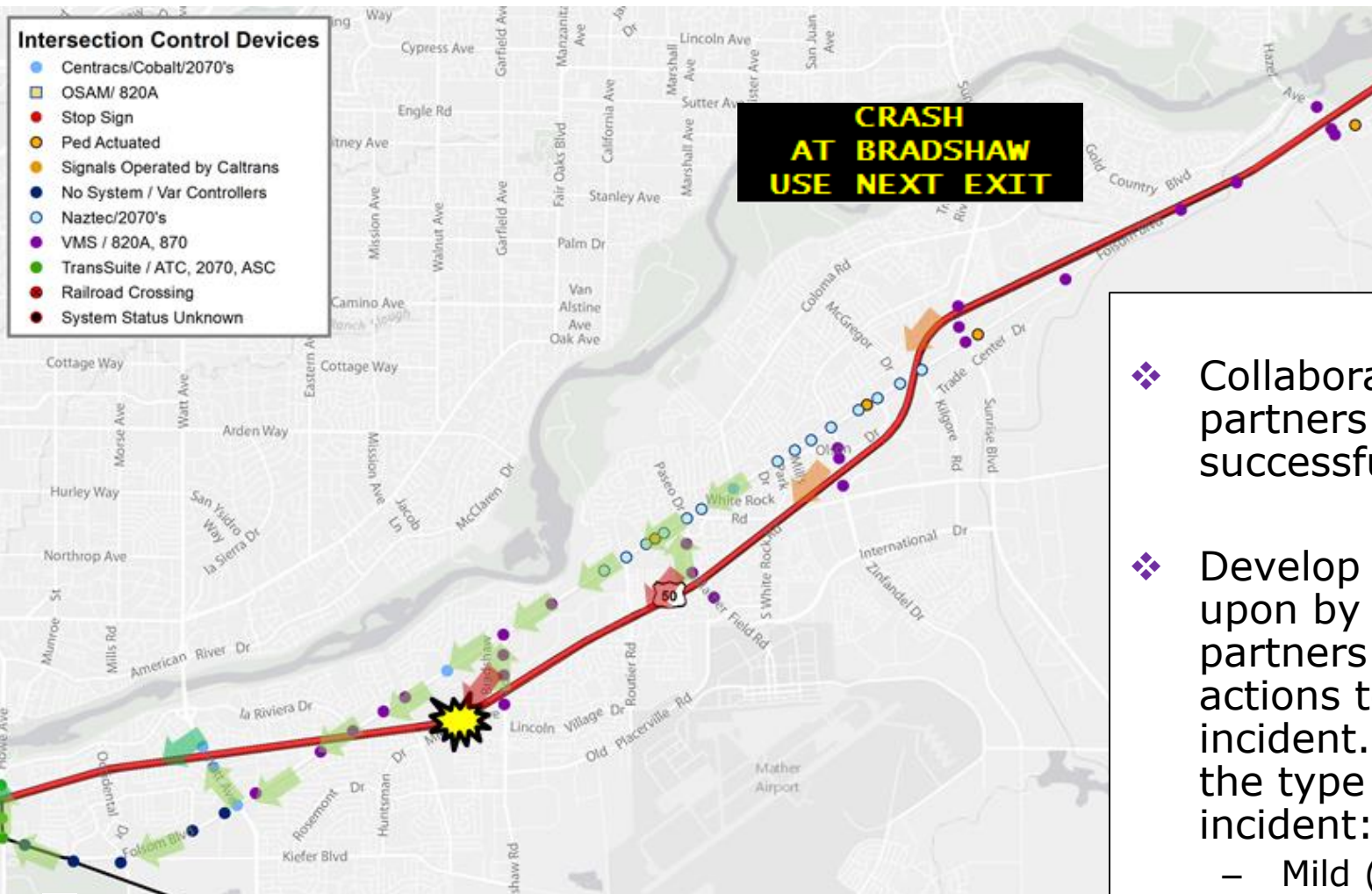
- ❖ **Transportation Infrastructure Not Fully Utilized**
- ❖ **Networks are independently operated**
- ❖ **Traveler Information Needs Upgrades**



User Response to Incidents



ICM Response to Incidents



- ❖ Collaboration between partners is key to a successful ICM system.
- ❖ Develop a "playbook" agreed upon by local and regional partners that outlines the actions to take during an incident. Actions depend on the type and severity of the incident:
 - Mild (1 lane blocked)
 - Assertive (2 lanes blocked)
 - Aggressive (Single lane only open)
 - Most Aggressive (All lanes blocked)

ICM – Benefits

- ❖ Improved corridor mobility (improved travel times and reduced delay)
- ❖ Reductions in neighborhood intrusion
- ❖ Streamlined and better coordinated response to incidents
- ❖ Increase alternative modal choices by providing better real-time information on travel conditions
- ❖ Reduced greenhouse gas emissions

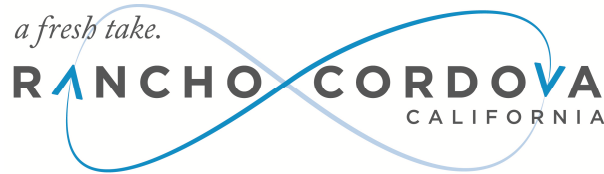
Existing Efforts and Next Steps

Existing ITS & ICM Efforts

- STARNET Agreement – Signed July 1, 2005
- US 50 ICM Plan – Finalized June 16, 2017
- SACOG Smart Region Sacramento: ITS Architecture and Future Technology Master and Implementation Plan – Started January 2018

Next Steps

- Ongoing Outreach
- US 50 ICM Charter
- Continual collaboration and coordination:
 - Staff level through US 50 ICM working groups
 - Executive Management level through quarterly Public Works Directors meeting



**CONCURRENT MEETING
CITY COUNCIL/SUCCESSOR AGENCY TO THE COMMUNITY REDEVELOPMENT
AGENCY (CRA)/RANCHO CORDOVA FINANCING CORPORATION (RCFC)**

**City Hall
2729 Prospect Park Drive, Rancho Cordova**

Monday, February 05, 2018

**5:30 PM – Regular Meeting
David B. Roberts Council Chambers**

DRAFT MINUTES

1. REGULAR MEETING - CALL TO ORDER / ROLL CALL

Mayor Budge called the regular meeting to order in the David B. Roberts Council Chambers at 5:34 PM.

Council Members Present: McGarvey, Terry, Budge, Gatewood.

Council Members Absent: Sander

Staff Members Present: Abhar, Boyer, Cowles, Delaney, Ehnat, Goulart, Harriman, Haven, Humphrey, Kniestedt, Leitner, Lindgren, Pittman, Lt. Schelldorf, Sparkman, Stricker, and Weber.

5:38 p.m. – Council Member David Sander Arrived

2. METRO CABLE TV TELEVISION ANNOUNCEMENT

The City Clerk read the meetings recordings and playback schedules.

3. PLEDGE OF ALLEGIANCE

Jim Tabuchi, Executive Director of Sacramento Madarins, led the pledge.

4. INVOCATION

Kyle Kerchner from River City Christian Church gave the invocation.

5. PRESENTATIONS

- 5.1 Recognition of the 2018 Youth at City Council.
- 5.2 Community Enhancement Fund Grant Check Presentations to 1) Cordova Community Council Foundation: Launch of Rancho Cordova Youth Basketball League and 2) Cordova Community Council Foundation: Activation of Mills Station.
- 5.3 Introduction of New City Employee Nick Ehnat, Facilities Service Worker, by Todd Humphrey, Facilities Services Manager.

6. PUBLIC COMMENT

Mayor Budge opened the public comment period. The following individuals addressed the Council:

- Walt Myers

Mayor Budge closed the public comment period.

7. COUNCIL REPORTS

Council reported on events since the last meeting.

8. CITY MANAGER'S REPORT

City Manager Cyrus Abhar gave his report.

9. CONSENT CALENDAR ITEMS - ROLL CALL VOTE

Item 9.3 was pulled by Council Member Gatewood for separate discussion.

ACTION: Motion to approve item 9.1 and 9.2 by Sander second by Terry;
Carried by a 5:0 roll call vote.

ACTION: Motion to approve items 9.3 by Terry second by McGarvey;
Carried by a 5:0 roll call vote.

- 9.1 **Subject:** Meeting Minutes of the January 9, 2018 Special Meeting, January 16, 2018 Regular Meeting, and January 30, 2018 Special Meeting.

Recommendation: Adopt Minutes.

- 9.2 **Subject:** Resolution declaring the results of the mail ballot election relating to the imposition of the Annual Stormwater Utility Fee on the Kilgore Road Soccer Complex Project in the City of Rancho Cordova.

Recommendation: Adopt Resolution No. 8-2018 declaring the results of the mail ballot election relating to the imposition of the Stormwater Utility Fee on the Kilgore Road Soccer Complex Project.

Result of Recommended Action: Adoption of the Resolution will declare the results of the ballot tabulation in connection with the imposition of the annual Stormwater Utility Fee on the Kilgore Road Soccer Complex Project. If majority approval exists, the City

Council may impose the annual Stormwater Utility Fee on the Kilgore Road Soccer Complex Project pursuant to the Fee Ordinance. If there is no majority approval, the Stormwater Utility Fee shall not be imposed for the project.

Staff Report: Elizabeth Sparkman, Interim Community Development Director.

Advances Goals: 5.

- 9.3 **Subject:** Resolution Authorizing the City Manager to Execute Contract Amendment 10-2013-2 with Roush Landscape Services to Increase the Contract Amount from \$1,637,600 to a Not to Exceed Amount of \$2,107,600 and Extend the Contract Term from March 1, 2018 to June 30, 2019 for Landscape Maintenance Services.

Recommendation: Adopt Resolution No. 12-2018.

Result of Recommended Action: Adoption of this Resolution will authorize the City Manager to execute Contract Amendment 10-2013-2 with Roush Landscaping Services (“Roush”) for landscape maintenance services. This will increase the contract amount from \$1,637,600 to \$2,107,600 and extend the contract term from March 1, 2018 to June 30, 2019.

Staff Report: Albert Stricker, Public Works Director and Steve Harriman, Maintenance and Operations Division Manager.

Advances Goals: 1, 2, and 5.

10. CONSENT PUBLIC HEARING ITEMS - ROLL CALL VOTE

Mayor Budge opened the public hearing. There were no speakers. Mayor Budge closed the public hearing.

ACTION: Motion to approve item 10.1 by Terry second by Sander;
Carried by a 5:0 roll call vote.

- 10.1 **Subject:** T-Mobile Antenna Addition Conditional Use Permit Amendment - Project No. DD9744 - Located at 10430 Peter A. McCuen Boulevard.

Recommendation: Adopt Resolution No. 15-2018.

Result of Recommended Action: Adoption of Resolution 15-2018 would allow the applicant to install additional cellular antennas and corresponding ground equipment on an existing water tank located at 10430 Peter A. McCuen Boulevard. The telecommunication facility will provide increased T-Mobile service.

Staff Report: June Cowles, Senior Planner.

Advances Goals: 5 and 6.

11. PUBLIC HEARING ITEMS

12. REGULAR CALENDAR ITEMS

- 12.1 **Subject:** Resolution Authorizing the City Manager to Execute Contract No. 8-2018 with Bennett Engineering Services, Inc. in an Amount Not to Exceed \$130,140 for Engineering and Design Services for the Cordova Park Safe Routes to School Project.

Recommendation: Adopt Resolution No. 14-2018.

Adoption of this Resolution will authorize the City Manager to execute Contract No. 8-2018 with Bennett Engineering Services, Inc. in an amount not to exceed \$130,140 for engineering and design services for the Cordova Park Safe Routes to School Project.

Staff Report: Albert Stricker, Public Works Director, and Chris Boyer, Associate Civil Engineer.

Advances Goals: 1, 2, and 5.

ACTION: Motion to approve Resolution 14-2018 by Terry second by Sander;
Carried by a 5:0 roll call vote.

- 12.2 **Subject:** Discussion and Direction Regarding Bingo Game and Bingo Parlors.
Recommendation: Receive information from City staff related to Bingo Games and Bingo Parlors and options for allowing these as a primary use or provide direction to continue to prohibit the uses.
Result of Recommended Action: No action will be taken. If directed to do so, City staff will prepare amendments to the Municipal Code to be brought back to Council at a later date. If Council desires to continue the current prohibition on bingo gaming and bingo parlors as a primary use, no further action is necessary.
Staff Report: Darcy Goulart, Principal Planner, and Kate Cook, Deputy City Attorney.
Advances Goals: 1, 2, and 6.

DIRECTION:

1. Retain Chapter 4.28 with amendments.
2. Permit Bingo Parlors.
3. Review and amend Chapter 4.26.
4. Amendment of Title 23.
5. Restrict the number of bingo parlors: two for the next two years.
6. Restriction the Location: No residential, schools, parks. Office-Industrial Zone is preferred.
7. Fees: Entertain a proposal from staff.

Motion to approve by Terry second by Sander;
Carried by a 5:0 roll call vote.

- 12.3 **Subject:** Presentation by City Attorney Summarizing Relevant New Legislation.
Recommendation: Receive and consider presentation summarizing relevant legislation that was recently enacted by the California Legislature.
Result of Recommended Action: The Council is kept informed and updated on important legislative updates impacting Rancho Cordova.
Staff Report: Adam Lindgren, City Attorney.
Advances Goals: 1, 2, 3, 5, and 6.

ACTION: Discussion item only; no action taken.

13. COUNCIL REQUESTS FOR FUTURE AGENDA ITEMS

Mayor Budge requested that staff invite Golden State Water to discuss water rate increases at a future meeting.

14. ADJOURNMENT

Mayor Budge adjourned meeting at 7:38 PM in memory of Jack Siebert, Rancho Cordova Chamber of Commerce Board Member.

15. CLOSED SESSION - CALL TO ORDER/ROLL CALL

Mayor Budge called the closed session to order in the Community Board Room at 7:45 PM.

16. CLOSED SESSION

CONFERENCE WITH LEGAL COUNSEL: EXISTING LITIGATION: Pending Litigation in One Case Pursuant to Government Code 54956.1(d)(1): People of the State of California, by and through Adam U. Lindgren City Attorney for the City of Rancho Cordova v. Jack A. McGuire and Margaret Y. McGuire, Superior Court of California, County of Sacramento, Case No. 34-2017-00206453-CU-PO-GDS.

CONFERENCE WITH LEGAL COUNSEL - ANTICIPATED LITIGATION: Significant exposure to litigation in one potential case pursuant to Government Code section 54956.(d)(2): Claimant: Mikel McIntyre Family.

17. OPEN SESSION - REPORT FROM CLOSED SESSION

City Attorney Adam Lindgren reported that there was no reportable action taken in closed session.

18. ADJOURNMENT

Mayor Budge adjourned the closed session at 7:54 PM.

Stacy Leitner, City Clerk

MEMORANDUM

DATE: February 20, 2018

TO: Honorable Mayor and Council Members

FROM: Kim Juran-Karageorgiou,
Administrative Services Director

SUBJECT: Treasurer's Report – December 31, 2017



RECOMMENDATION

This report is informational only. It is recommended that the City Council receive and file the December 31, 2017 Treasurer's Report.

RESULT OF RECOMMENDED ACTION

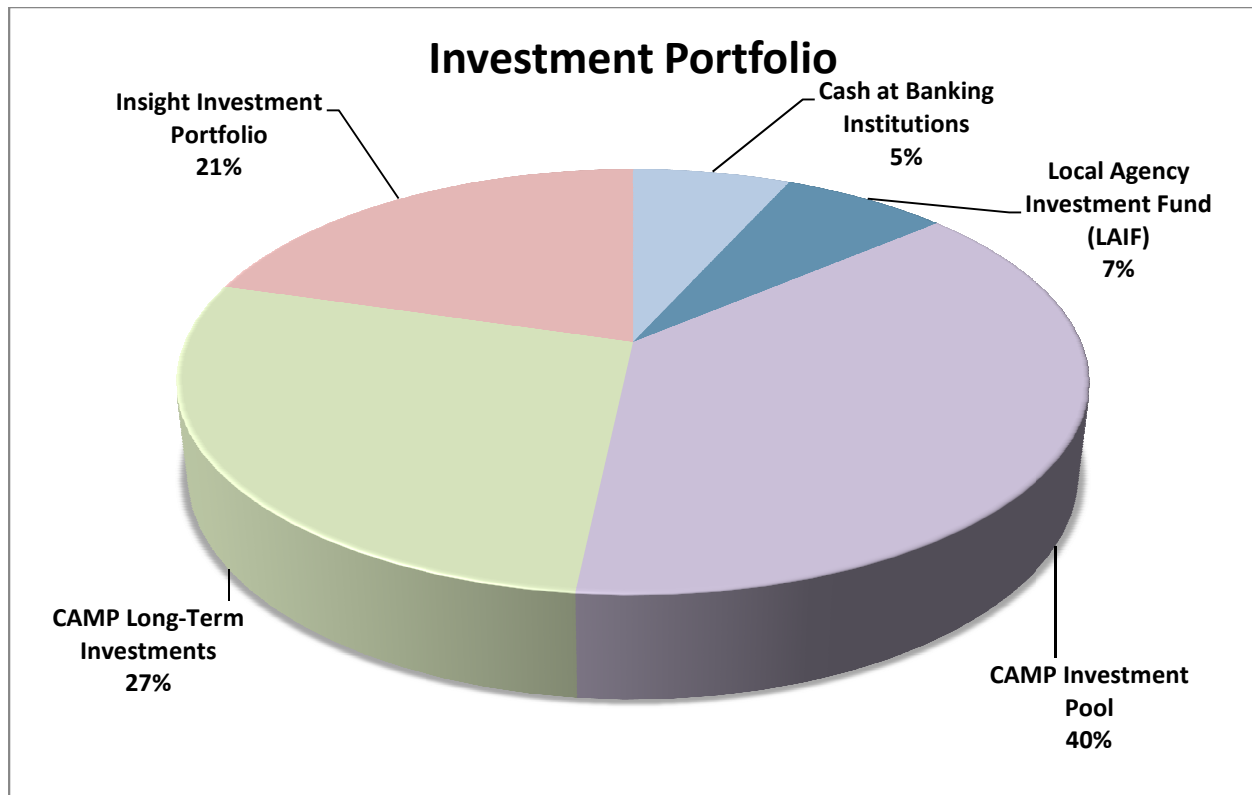
The Treasurer's Report is required to be submitted to the City Council at least quarterly in accordance with California Government Code Section 53600 et. seq. The purpose of the Treasurer's Report is to update the City Council and the public on the status of the City's cash balances and investments, and highlight material changes from one period to another. The scope of this report covers the fourth quarter of this calendar year, ending December 31, 2017, and is in compliance with the State's reporting requirements.

BACKGROUND

Attached is the quarterly Treasurer's Report for the period ending December 31, 2017. Treasurer's reports are provided to Council on a quarterly basis.

At September 30, 2017 the value of the City's total portfolio was \$128.6 million. Since that time, the balances increased by \$3.6 million with an ending balance of \$132.2 million as of December 31, 2017. The funds are held as follows:

Investment Distribution	Par Value	Market Value
Cash at Banking Institutions	\$ 8,864,340	\$ 8,864,340
Local Agency Investment Fund (LAIF)	9,374,752	9,374,752
CAMP Investment Pool	50,272,726	50,272,726
CAMP Long-Term Investments	36,996,315	36,763,231
Insight Investment Portfolio	27,078,928	26,969,118
Total	\$ 132,587,061	\$ 132,244,167



At December 31, 2017 the City's cash balance was allocated by fund type/purpose as follows:

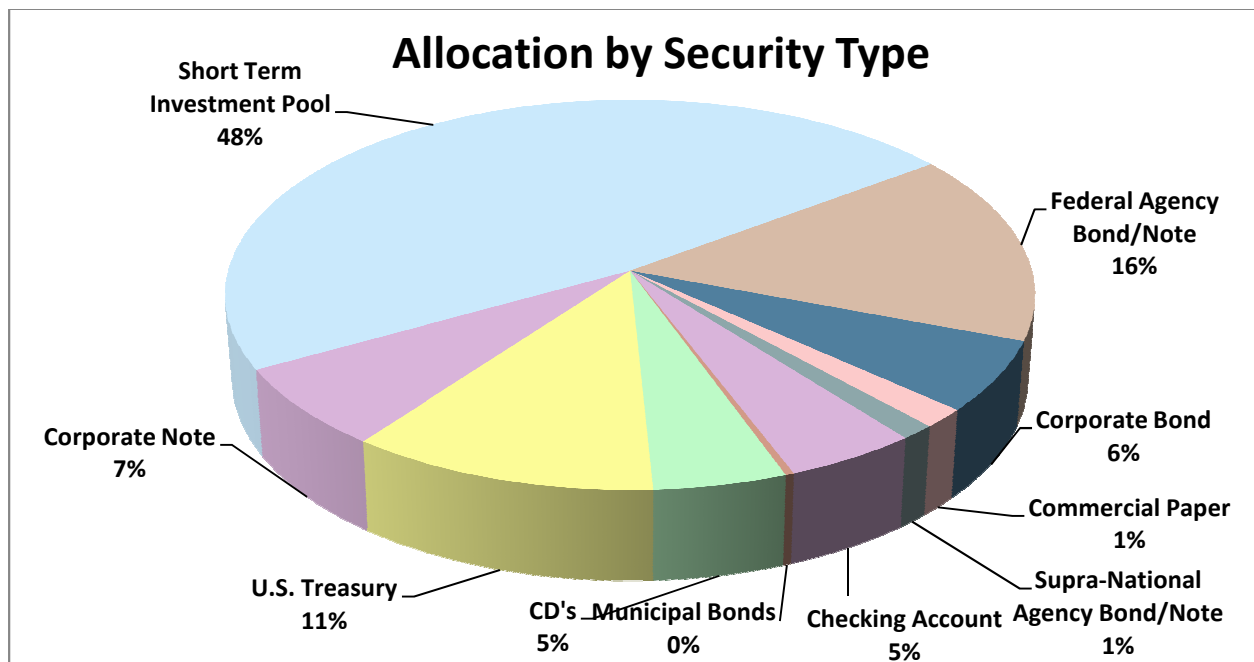
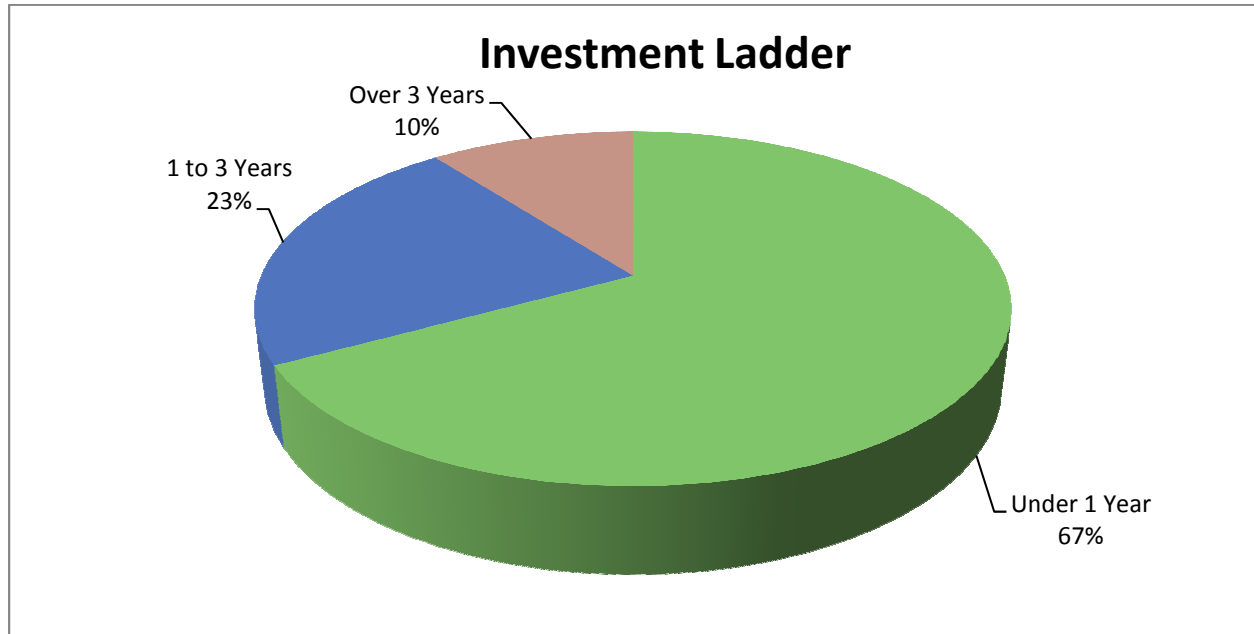
- General Fund: \$26.1 million
- Community Enhancement Fund: \$5.7 million
- Sunrise Development Impact Fees (restricted for specific improvements needed as a result of development in the area): \$22.2 million
- Transportation Funds: \$45.2 million
- Storm Drain Fund: \$9.9 million
- Capital Projects/Grant/Special Revenue Funds: \$14.4 million
- Agency Funds (monies held on behalf of other agencies): \$8.8 million

The overall portfolio is well diversified with \$63.7 million invested in marketable securities, \$59.7 million is invested in short-term investments that are considered liquid (LAIF, CAMP, and money markets), and another \$8.8 million is on deposit with our banks. Staff, in conjunction with our financial advisors, periodically reviews the mix of liquid and long-term investments and adjusts the portfolio according to the market conditions and our short-term cash needs.

The combination of the December Fed interest rate hike coupled with the passage of the new tax legislation sent interest rates higher in December, causing the market value of the portfolio to drop below par value. This decreased market value of the portfolio is common in a rising interest rate environment, as unrealized losses exceeded the amount of investment income received for the quarter. It is important to note the City holds the majority of its portfolio to duration and its investments mature at par value. Overall, it is important that the City maintain a long term view of its investment portfolio.

Staff thoroughly reviews investment statements and makes appropriate inquiries of CAMP, LAIF, and MBIA, as necessary, to confirm the existence and viability of the City's assets. The City invests conservatively in investment policy options in accordance with California State Government Code. The long-term assets are in securities that can be held to maturity, thus are less vulnerable to the fluctuations of the market. All securities are in compliance with the City's investment policy. There are sufficient funds to meet the City's expenditure requirements for the next six months.

The distributions of investments are displayed in the following charts:



ATTACHMENTS

1. City of Rancho Cordova Treasurer's Report as of December 31, 2017.

City of Rancho Cordova
Treasurer's Report December 31, 2017 ATTACHMENT 1

Security Held	Coupon	Par Value	Cost	Market Value
Wells Fargo Checking		\$ 8,864,340	8,864,340	8,864,340
Wells Fargo Adv Treasury Plus MMF		\$ 53,928	53,928	53,928
Local Agency Investment Fund (LAIF)	1.20%	\$ 9,374,752	9,374,752	9,374,752
California Asset Management Program (CAMP)	1.29%	\$ 50,272,726	50,272,726	50,272,726
Insight Investment Portfolio				
JP Morgan Chase	6	400,000	474,708	400,556
Wells Fargo	1.49	400,000	400,124	399,957
Freddie Mac	0.85	1,000,000	1,000,500	999,630
USA Treasury	0.875	1,000,000	1,000,781	999,717
Wal-Mart	5.8	400,000	480,332	401,774
Federal Home Loan Bank Notes	1.125	1,000,000	1,006,580	999,760
Fannie Mae	1.1	1,000,000	1,004,830	999,460
USA Treasury	1	750,000	751,348	749,474
General Electric Co	5.625	850,000	995,195	860,141
Apple Inc.	1	400,000	396,704	399,011
Federal Home Loan Bank Notes	1.05	750,000	748,748	748,448
Federal Farm Credit Bank	2.58	750,000	780,645	753,443
U.S. Treasury Notes	0.875	1,000,000	997,813	996,406
Federal Home Loan Bank	1.125	750,000	754,133	746,827
Federal Farm Credit Bank	1.29	1,000,000	1,008,840	995,130
Federal Home Loan Bank	1.75	900,000	919,710	899,017
Toyota Motor Credit Corp	2.1	500,000	510,390	501,223
Cisco Systems Inc	2.125	775,000	783,866	775,870
Federal Farm Credit Bank	1.16	1,000,000	1,001,870	991,950
Freddie Mac	3.75	800,000	844,704	818,707
Toyota Motor Credit Corp	1.4	1,000,000	1,006,730	990,969
Federal Farm Credit Bank	1.42	1,000,000	998,942	991,640
Fannie Mae	1.075	1,000,000	999,500	986,900
Fannie Mae	0.875	2,100,000	2,096,101	2,066,343
Berkshire Hathaway	2.1	600,000	606,588	600,286
USA Treasury	1.375	850,000	846,846	842,662
Pepsi Co.	1.35	650,000	647,127	642,268
Freddie Mac	1.5	750,000	750,600	743,213
Microsoft Corp	1.85	750,000	751,725	747,094
The Walt Disney Company	1.95	700,000	702,198	697,725
Freddie Mac	1.5	750,000	750,278	742,073
Federal Home Loan Bank	1.375	500,000	497,442	491,150
Federal Farm Credit Bank	1.5	950,000	940,196	936,368
		27,025,000	27,456,091	26,915,190
CAMP Long-Term Investments				
TAOT 2017-B A3	1.76	700,000	699,946	695,386
ALLYA 2017-3 A3	1.74	300,000	299,969	298,302
HAROT	1.79	120,000	119,987	119,100
AMXCA 2017-4 A	1.64	260,000	259,958	258,655
ALLYA 2017-3 A3	1.75	300,000	299,969	297,599

City of Rancho Cordova
Treasurer's Report December 31, 2017 ATTACHMENT 1

Security Held	Coupon	Par Value	Cost	Market Value
ALLYA 2017-5 A3	1.99	300,000	299,977	299,036
FORDO 20177-C A3	2.01	700,000	699,874	697,947
CCCIT 2017-A3 A3	1.92	700,000	701,869	695,633
Royal Bank of Canada NY CD	1.7	750,000	750,000	749,997
Canadian Imperial Bank of NY CD	1.76	700,000	699,454	698,522
Nordea Bank Finland NY CD	1.76	700,000	700,000	700,434
Svenska Handelsbanken NY LT CD	1.89	575,000	575,000	572,458
Bank of Montreal Chicago CD	1.88	700,000	700,000	700,866
Sumitomoto Mitsui Bank NY CD	2.05	700,000	700,000	699,521
Skandinav Enskilda Banken NY CD	1.84	700,000	699,727	691,012
Bank of Tokyo Mitsubishi UFJ LT CD	2.07	350,000	350,000	348,362
Skandinav Enskilda Banken NY CD	1.84	700,000	699,727	699,363
WestPac Banking Corp NY CD	2.05	625,000	625,000	623,963
Swedbank (New York) Cert Depos	2.27	700,000	700,000	696,219
Credit Agricole CIP NY Comm Paper	0	700,000	695,216	698,844
BNP Paribas NY Branch	0	700,000	692,542	694,337
Bank of Tokyo MITS UFJ LTD COMM	0	700,000	691,422	692,792
IBM Copr Notes	1.125	200,000	199,390	199,879
JP Morgan Chase Corp Notes (Callabe)	1.7	275,000	274,929	274,974
Chevron Corp Notes	1.365	100,000	100,000	99,933
American Honda Finance Corp Notes	1.5	155,000	154,792	154,944
General Elec CAP Corp Global Notes	1.625	600,000	601,338	599,711
Toyota Motor Credit Corp	1.2	100,000	99,976	99,850
PEPSICO, Inc Corp Notes	1.25	250,000	249,970	249,792
Microsoft Corp Global Notes	1	145,000	144,909	144,759
Apple Inc Global Notes	1	265,000	264,022	264,345
Berkshire Hathaway Notes	1.3	210,000	209,878	209,520
Cisco Systems Inc Corp Note	1.65	475,000	474,919	474,594
Chevron Corp Global Notes	1.72	380,000	380,000	379,999
John Deere Capital Corp Notes	1.95	130,000	129,992	129,890
Toyota Motor Credit Corp	1.7	300,000	299,964	298,664
American Honda Finance Corp Notes	1.7	110,000	109,978	109,548
Berkshire Hathaway Inc. Notes	1.7	80,000	79,939	79,741
Goldman Sachs Grp Inc	2	415,000	414,734	413,749
Goldman Sachs Grp Inc	2	85,000	84,764	84,744
Citigroup Inc. Corporate Notes	2.05	80,000	79,958	79,768
American Honda Finance	1.2	100,000	99,900	98,617
Burlington Nth Corp	4.7	400,000	441,560	416,941
American Express Credit Corp Notes	1.7	75,000	74,911	74,226
Microsoft Corp	1.85	300,000	299,799	299,113
Toyota Motor Credit Corp	1.95	300,000	299,862	298,792
Home Depot Inc Corp Notes	1.8	175,000	174,899	173,608
American Honda Finance Corp Notes	1.95	70,000	69,929	69,449
Caterpillar Finl Service Note	1.85	275,000	274,769	271,790
Faccar Financial Corp Notes	2.05	150,000	149,987	148,858
Wal-Mart Stores Inc Corp Note	1.9	350,000	349,493	347,746
Branch Banking & Trust (Callable) Notes	2.15	175,000	174,920	173,345
Bank of America Corp Note	2.625	125,000	125,970	125,638
Morgan Stanley Corp Notes	2.5	350,000	351,134	349,414
American Express Credit (Callable) Notes	2.25	500,000	502,735	496,055
Bank of America Corp (Callable)	2.328	225,000	225,000	224,366

City of Rancho Cordova
Treasurer's Report December 31, 2017 ATTACHMENT 1

Security Held	Coupon	Par Value	Cost	Market Value
Citigroup Inc. Corp (Callable) Notes	2.9	350,000	354,165	352,303
John Deere Capital Corp Notes	2.65	250,000	248,898	251,456
FNMA Note	1.5	500,000	499,680	494,812
FNMA Note	1.5	750,000	747,728	740,723
FHLB Global Note	1.375	525,000	523,315	515,851
FHLMC Agency Notes	1.625	470,000	469,149	464,631
FHLMC Notes	1.875	700,000	699,328	696,331
FHLB Global Note	1.125	700,000	695,743	676,744
FHLMC Series KP03 A2	1.78	186,836	188,700	185,020
Fannie Mae Series 2015-M13	1.646	124,479	125,725	124,064
Univ of Cal Taxable Rev Bonds	2.054	385,000	385,000	385,601
Inter-American Devel. Bank Note	1.625	700,000	698,341	693,424
International Bank of Reconstruction and Dev	1.561	850,000	847,960	834,845
Inter-American Development Bank	2.125	700,000	706,488	700,592
U.S. Treasury Notes	1.25	100,000	98,746	98,637
U.S. Treasury Notes	2	650,000	672,242	651,067
U.S. Treasury Notes	1.375	550,000	556,123	541,965
U.S. Treasury Notes	1.75	500,000	515,723	496,524
U.S. Treasury Notes	2	600,000	621,680	599,648
U.S. Treasury Notes	1.375	900,000	882,141	880,523
U.S. Treasury Notes	1.375	1,250,000	1,217,529	1,221,875
U.S. Treasury Notes	2	1,000,000	1,010,898	996,719
U.S. Treasury Notes	2	1,150,000	1,156,963	1,146,227
U.S. Treasury Notes	2	1,200,000	1,203,609	1,196,063
U.S. Treasury Notes	1.25	600,000	588,492	581,250
U.S. Treasury Notes	1.875	700,000	692,727	691,633
		36,996,315	37,035,049	36,763,231
TOTAL		132,587,061	133,056,886	132,244,167

MEMORANDUM

DATE: February 20, 2018

TO: Honorable Mayor and Council Members

FROM: Lieutenant Chad Lewis, Assistant Chief of Police

SUBJECT: Resolution Authorizing the City Manager to Execute an Agreement with Tyler Technologies BRAZOS to process electronic traffic citations



RECOMMENDATION

Adopt Resolution 31-2018.

RESULT OF RECOMMENDED ACTION

Adoption of Resolution 31-2018 will authorize the City Manager to execute an agreement with Tyler Technologies BRAZOS to process electronic traffic citations and interface with the Sacramento Superior Court Carol Miller Justice Center by the May 1, 2018 deadline.

BACKGROUND

The City of Rancho Cordova contracts with the Sacramento County Sheriff's Department to provide police services. This contract includes the provision of traffic enforcement services with the City.

The Sacramento Superior Court Carol Miller Justice Center has mandated that all agencies in Sacramento County shall transmit all traffic citations electronically to the court by May 1, 2018. This project has been underway for several years in an effort to speed up ticket processing for defendants and to eliminate the amount of errors that delay due process and have historically bogged down the court process. The City's current traffic citation provider (Crossroads) has been aware of the new court requirements and has made no attempt to adapt their services to comply with the court mandate. The Sacramento Superior Court has identified BRAZOS with Tyler Technologies as its selected provider of services and all agencies in the County are transitioning to this provider, as this system has already been designed, tested, and implemented for Sacramento County agencies with the court.

FISCAL IMPACT

The total cost to purchase the BRAZOS application is \$116,397.40. The funding for this purchase will come from the Community Oriented Policing Services (COPS) grant fund.

ATTACHMENTS

1. Resolution 31-2018.
2. Tyler Technologies BRAZOS contract quote.

ATTACHMENT 1**CITY OF RANCHO CORDOVA****RESOLUTION NO. 31-2018****A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, AUTHORIZING THE CITY MANAGER TO SIGN AN AGREEMENT WITH TYLER TECHNOLOGIES BRAZOS FOR ELECTRONIC TRAFFIC CITATION PROCESSING**

WHEREAS, the Sacramento Superior Court Carol Miller Justice Center mandated that all agencies in Sacramento County transmit traffic citations to the court electronically by May 1, 2018; and

WHEREAS, transmitting traffic citations electronically will speed up ticket processing for defendants and eliminate the amount of errors that have historically bogged down the court process; and

WHEREAS, the Sacramento Superior Court has identified BRAZOS with Tyler Technologies as its selected provider of services and all agencies in Sacramento County are transitioning to this provider; and

WHEREAS, the City of Rancho Cordova wishes to contract with Tyler Technologies BRAVOS for electronic traffic citation processing as mandated by the Sacramento Superior Court; and

WHEREAS, the agreement will exceed the maximum amount the City manager has authorization to approve; and

WHEREAS, there are sufficient funds available to cover the costs of the contract.

NOW, THEREFORE, BE IT HEREBY RESOLVED THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA does authorize the City Manager to execute a contract with Tyler Technologies BRAVOS, attached as **Exhibit 1**.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 20th day of February, 2018 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Linda Budge, Mayor

ATTACHMENT 1**ATTEST:**

Stacy Leitner, City Clerk



Quoted By: Seth Dinehart
 Quote Expiration: 2/28/2018
 Quote Name: Rancho Cordova Police Department - Brazos
 eCitation, eCrash and Field Interview
 Quote Number: QUO-30243-Y9S2D6
 Quote Description: Brazos 50 Licenses, eCitation, eCrash, and Field
 Interview Module.

Sales Quotation For

Rancho Cordova Police Department

Shipping Address

Attn: Sgt. Wall
 Rancho Cordova Police Department 2897 Kilgore Rd
 Rancho Cordova, CA 95670

Billing Address

Attn: Sgt. Wall
 Rancho Cordova Police Department 2897 Kilgore Rd
 Rancho Cordova, CA 95670

Software

Description	Quantity	License	Software Total	Annual Maintenance
LIC: REF License - MDC or TABLET	50.0	\$800.00	\$40,000.00	\$11,200.00
TASK: Field Interview	1.0	\$3,000.00	\$3,000.00	\$840.00
LIC: Crash Report Software (w/Drawing Tool)	50.0	\$400.00	\$20,000.00	\$5,600.00
INTERFACE: RMS - Versadex	1.0	\$3,000.00	\$3,000.00	\$840.00
INTERFACE: CMS - Sacramento County CA	1.0	\$3,000.00	\$3,000.00	\$840.00
Total:			\$69,000.00	\$19,320.00

Professional Services

Description	Quantity	Cost	Services Total	Annual Services
SERVICE: Set Up & Configuration	1.0	\$16,895.00	\$16,895.00	

ATTACHMENT 2

SERVICE: Project Management	2.0	\$1,000.00	\$2,000.00
Training: Standard Train-The-Trainer	4.0	\$1,000.00	\$4,000.00
MOD: Crash Report - set up and config	1.0	\$2,500.00	\$2,500.00
Training: Crash Reporting (Train the Trainer)	1.0	\$1,500.00	\$1,500.00
Total:			\$26,895.00
			\$0.00

Third-party Hardware and Software

Part Number	Description	Quantity	Price	Third-party Total
BT SETUP	SERVICE: Set Up Fees - Third Party Hardware	50.0	\$50.00	\$2,500.00
ZQ52-AUE0000-00	Zebra, Printer, ZQ520	24.0	\$587.78	\$14,106.72
P1031365-059	Zebra, Acc-Printer, ZQ520, Battery	24.0	\$63.73	\$1,529.52
LD-R4KN5B	Zebra, Acc-Printer, ZQ520/RW420, Paper, 36 rolls per case	6.0	\$91.88	\$551.28
AC18177-5	Zebra, Acc-Printer, ZQ500/RW QUAD Battery Charger	6.0	\$302.48	\$1,814.88
Total:				\$20,502.40

Summary	One Time Fees	Recurring Fees
Total Tyler Software	\$69,000.00	\$19,320.00
Total Tyler Services	\$26,895.00	\$0.00
Total Hardware	\$20,502.40	
Total Taxes	\$0.00	
Contract Total	\$116,397.40	

AGENDA ITEM 14.3

Comments

Agency is responsible for paying any applicable s

Subject to the applicable terms of your existing contract with Tyler (for existing customers), and for the fees quoted herein, subject to the Quote Expiration, we grant to : (i) a per-unit license to the software located on the ticket writer hardware provided under this purchase order, and (ii) a per-unit license to access a remote database via the ticket writer hardware, both for your internal business purposes only. We will provide remote database access according to our industry standard hosting terms of service.

*Only applies to orders that include the purchase of software licenses.

Customer Approval:	_____	Date:	_____
Print Name:	_____	P.O. #:	_____

All primary values quoted in US Dollars.

MEMORANDUM

DATE: February 20, 2018

TO: Honorable Mayor and Council Members

FROM: Liisa Behrends, Sr. Accountant



SUBJECT: LOCAL AGENCY INVESTMENT FUND (LAIF) INVESTMENT AUTHORIZATION – Resolution Authorizing City Staff to Deposit and Withdraw City Funds in the State’s Local Agency Investment Fund (LAIF).

RECOMMENDATION

Adopt Resolution 11-2018, revising the authorization list on the City’s LAIF accounts to reflect the current titles/staff positions in the City.

RESULT OF RECOMMENDED ACTION

The City’s authorizations with LAIF were last updated in August 2003, and there have been City position changes since that time. As a result, an updated Resolution is required. The proposed Resolution grants authority to the City Manager, Administrative Services Director/Finance Director and Senior Accountant, or their successors, to initiate investment-related transactions with LAIF.

BACKGROUND

LAIF is a State investment pool administered by the Treasurer of the State of California into which cities and other local governmental entities may invest idle funds. By pooling the cash deposited by these local agencies, LAIF, is able to invest through a diversified portfolio with savings on security purchase costs due to economies of scale. The pool invests in high quality securities to ensure the portfolio’s safety; however, the portfolio is managed so that any agency can withdraw up to all of its deposits on any given day, subject to certain restrictions. LAIF has managed to achieve respectable yields over the life of the investment pool considering its emphasis on safety and liquidity. California Government Code section 16429.3 protects the local governmental entities’ funds from seizure, impoundment, loan or transfer by the State of California. If the State fails to adopt a budget, California Government Code section 16429.4 protects the rights of participating local agencies to withdraw funds upon demand. Such rights cannot be “altered, impaired or denied in any way” by any State official or State agency under this code section.

FISCAL IMPACT

Resolution 11-2018 has no fiscal impact.

ATTACHMENT

1. Resolution 11-2018.

ATTACHMENT 1**CITY OF RANCHO CORDOVA****RESOLUTION NO. 11-2018****A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, AUTHORIZING CITY STAFF TO DEPOSIT AND WITHDRAW CITY FUNDS IN THE STATE'S LOCAL AGENCY INVESTMENT FUND**

WHEREAS, The Local Agency Investment Fund (LAIF) is established in the State Treasury under Government Code section 16429.1 et seq. for the deposit of money of a local agency for purposes of investment by the State Treasurer; and

WHEREAS, the City Council hereby finds that the deposit and withdrawal of money in the Local Agency Investment Fund in accordance with Government Code section 16429.1 et seq. for the purpose of investment as provided therein is in the best interests of the City of Rancho Cordova.

NOW, THEREFORE, BE IT HEREBY RESOLVED THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA hereby authorizes the deposit and withdrawal of City monies in the Local Agency Investment Fund in the State Treasury in accordance with Government Code section 16429.1 et seq. for the purpose of investment as provided therein.

BE IT FURTHER RESOLVED, as follows:

Section 1. The following City officers holding the title(s) specified herein below or their successors in office are each hereby authorized to order the deposit or withdrawal of monies in the Local Agency Investment Fund and may execute and deliver any and all documents necessary or advisable in order to effectuate the purposes of this resolution and the transactions contemplated hereby:

Cyrus Abhar
(NAME)

Kim Juran-Karageorgiou
(NAME)

Liisa Behrends
(NAME)

City Manager
(TITLE)

ASD/CFO/Finance Director
(TITLE)

Sr Accountant/Sr Finance Analyst
(TITLE)

(SIGNATURE)

(SIGNATURE)

(SIGNATURE)

Section 2. This Resolution shall remain in full force and effect until rescinded by the City Council by Resolution and a copy of the Resolution rescinding this Resolution is filed with the State Treasurer's Office.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 20th day of February, 2018 by the following vote:

AYES:

NOES:

ATTACHMENT 1**ABSENT:****ABSTAIN:**

Linda Budge, Mayor**ATTEST:**

Stacy Leitner, City Clerk

MEMORANDUM



DATE: February 20, 2018

TO: Honorable Mayor and Council Members

FROM: Albert Stricker, Public Works Director

SUBJECT: **APPROVE PARCEL MAP OF SUBDIVISION NO. FM-2017-003-01, 3390 SUNRISE BOULEVARD.**

RECOMMENDATION

Approve Parcel Map of Subdivision No. FM-2017-003-01, 3390 Sunrise Boulevard; located on the west side of Sunrise Boulevard approximately 420 feet north of Recycle Road.

RESULT OF RECOMMENDED ACTION

Approval of this recommendation will result in the recording of the parcel map creating two separate parcels.

BACKGROUND

The City Council approved the tentative parcel map on September 5, 2017 with conditions. The 2.45 acre net site is currently utilized as an auto dismantler with two buildings on site. The division of one parcel into two new parcels will allow the existing buildings to be placed on individual lots. The parcel map has been examined and checked for compliance with Title 22 of the City Code and the California State Map Act. A copy of the parcel map (Attachment 1) and vicinity map (Attachment 2) are included with this letter.

FISCAL IMPACT

There is no fiscal impact to the City.

ATTACHMENTS

1. Copy of Parcel Map
2. Vicinity Map

PARCEL MAP
SUBDIVISION NO. FM-2017-003-01
LOT 35 OF 58 PM 19
 CITY OF RANCHO CORDOVA, COUNTY OF SACRAMENTO,
 STATE OF CALIFORNIA
 DECEMBER, 2017 SCALE N/A
 RFE ENGINEERING, INC.
 SHEET 1 OF 2

OWNER'S STATEMENT:

THE UNDERSIGNED HEREBY CONSENTS TO THE PREPARATION AND RECORDATION OF THIS PARCEL MAP.

VHZ INVESTMENTS, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY

BY: _____
 VACHAGAN ZAKARYAN, MEMBER

DATE _____

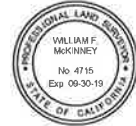
SIGNATURE _____

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCES AT THE REQUEST OF VACHAGAN ZAKARYAN IN SEPTEMBER, 2017. I HEREBY STATE THAT THIS PARCEL MAP SUBSTANTIALLY CONFORMS TO THE APPROVED OR CONDITIONALLY APPROVED TENTATIVE MAP, IF ANY. ALL MONUMENTS SHOWN HEREON ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED. THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

WILLIAM F. MCKINNEY, PLS 4715
 EXPIRATION DATE: SEPTEMBER 30, 2019

DATE _____

**NOTARY'S ACKNOWLEDGMENT:**

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA
 COUNTY OF _____

ON _____ BEFORE ME, _____
 (INSERT NAME AND TITLE OF THE OFFICER)

PERSONALLY APPEARED _____
 WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL.

SIGNATURE _____

NOTARY PUBLIC, STATE OF _____

PRINT NAME _____

MY PRINCIPAL PLACE OF BUSINESS IS: _____ COUNTY

MY COMMISSION NUMBER IS: _____ AND

EXPIRES ON: _____

CITY ENGINEER'S STATEMENT:

I HEREBY STATE THAT I HAVE EXAMINED THIS PARCEL MAP AND FIND IT TO BE SUBSTANTIALLY THE SAME AS THE TENTATIVE MAP APPROVED BY THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, AND ANY APPROVED ALTERATIONS THEREOF. THAT ALL PROVISIONS OF THE SUBDIVISION MAP ACT AND ALL APPLICABLE CITY ORDINANCES HAVE BEEN COMPLIED WITH.

CITY ENGINEER, ALBERT STRICKER
 R.C.E. 64057
 EXPIRATION DATE: 9/30/18

DATE _____

CITY SURVEYOR'S STATEMENT:

I HEREBY STATE THAT I AM SATISFIED THAT THIS PARCEL MAP IS TECHNICALLY CORRECT

LAND SURVEYOR, CYRUS E. ABHAR
 P.L.S. 7723
 EXPIRATION DATE: 12/31/17

DATE _____

CITY CLERK'S STATEMENT:

I HEREBY STATE THAT THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA HAS APPROVED THIS PARCEL MAP.

PRINTED NAME _____

SIGNATURE _____

DATE _____

TRUSTEE'S STATEMENT

CHICAGO TITLE COMPANY, A CALIFORNIA CORPORATION, AS TRUSTEE UNDER DEED OF TRUST RECORDED MAY 10, 2017 IN BOOK 20170910, PAGE 883, OFFICIAL RECORDS OF SACRAMENTO COUNTY COUNTY.

BY: _____ BY: _____

PRINT NAME _____ PRINT NAME _____

TITLE _____ TITLE _____

NOTARY'S ACKNOWLEDGMENT:

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA
 COUNTY OF _____

ON _____ BEFORE ME, _____
 (INSERT NAME AND TITLE OF THE OFFICER)

PERSONALLY APPEARED _____
 WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL.

SIGNATURE _____

NOTARY PUBLIC, STATE OF _____

PRINT NAME _____

MY PRINCIPAL PLACE OF BUSINESS IS: _____ COUNTY

MY COMMISSION NUMBER IS: _____ AND

EXPIRES ON: _____

RECORDER'S STATEMENT:

FILED THIS _____ DAY OF _____, 2017, AT _____ M. IN

BOOK _____ OF PARCEL MAPS, AT PAGE _____, AT THE REQUEST OF RFE

ENGINEERING INC. TITLE TO THE LAND INCLUDED IN THIS PARCEL MAP BEING VESTED AS

PER CERTIFICATE NO. _____ ON FILE IN THIS OFFICE.

DONNA ALLRED, COUNTY RECORDER

BY: _____
 DEPUTY COUNTY RECORDER

FILE NO. _____

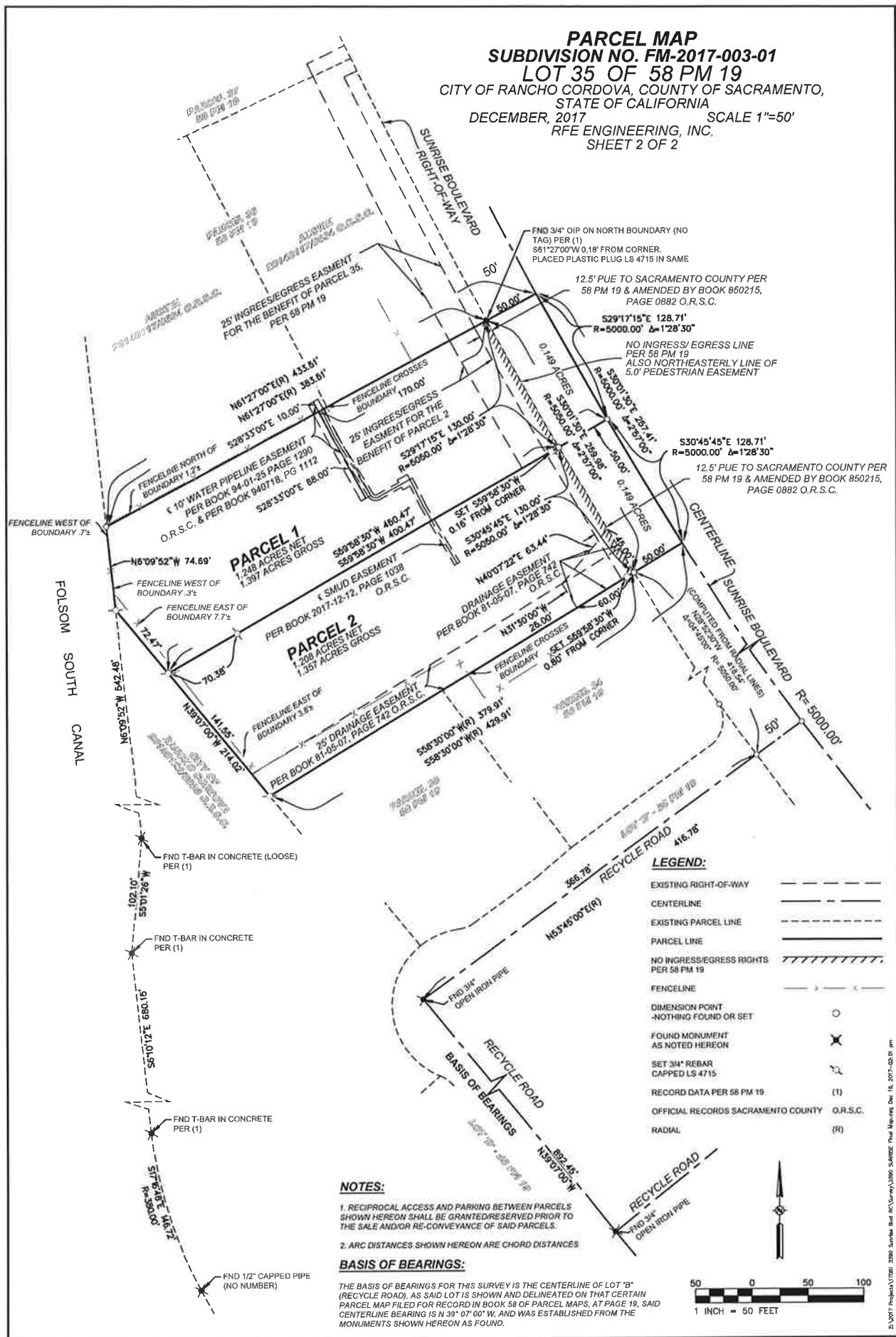
IMPROVEMENT REQUIREMENTS:

THE FOLLOWING PUBLIC IMPROVEMENTS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF RANCHO CORDOVA IMPROVEMENT STANDARDS WITHIN A REASONABLE TIME FOLLOWING APPROVAL OF THE PARCEL MAP AND PRIOR TO THE ISSUANCE OF ANY PERMIT OR OTHER GRANT OF APPROVAL FOR DEVELOPMENT OF THE HEREON-CREATED PARCELS:

STREETS: REPLACE EXISTING ROLLED CURB AND GUTTER ON ENTIRE PROPERTY FRONTAGE WITH NEW VERTICAL CURB
 STREET LIGHTS: NONE
 SEWER: UTILITY LATERALS
 DRAINAGE: UTILITY LATERALS
 WATER / HYDRANTS: UTILITY LATERALS



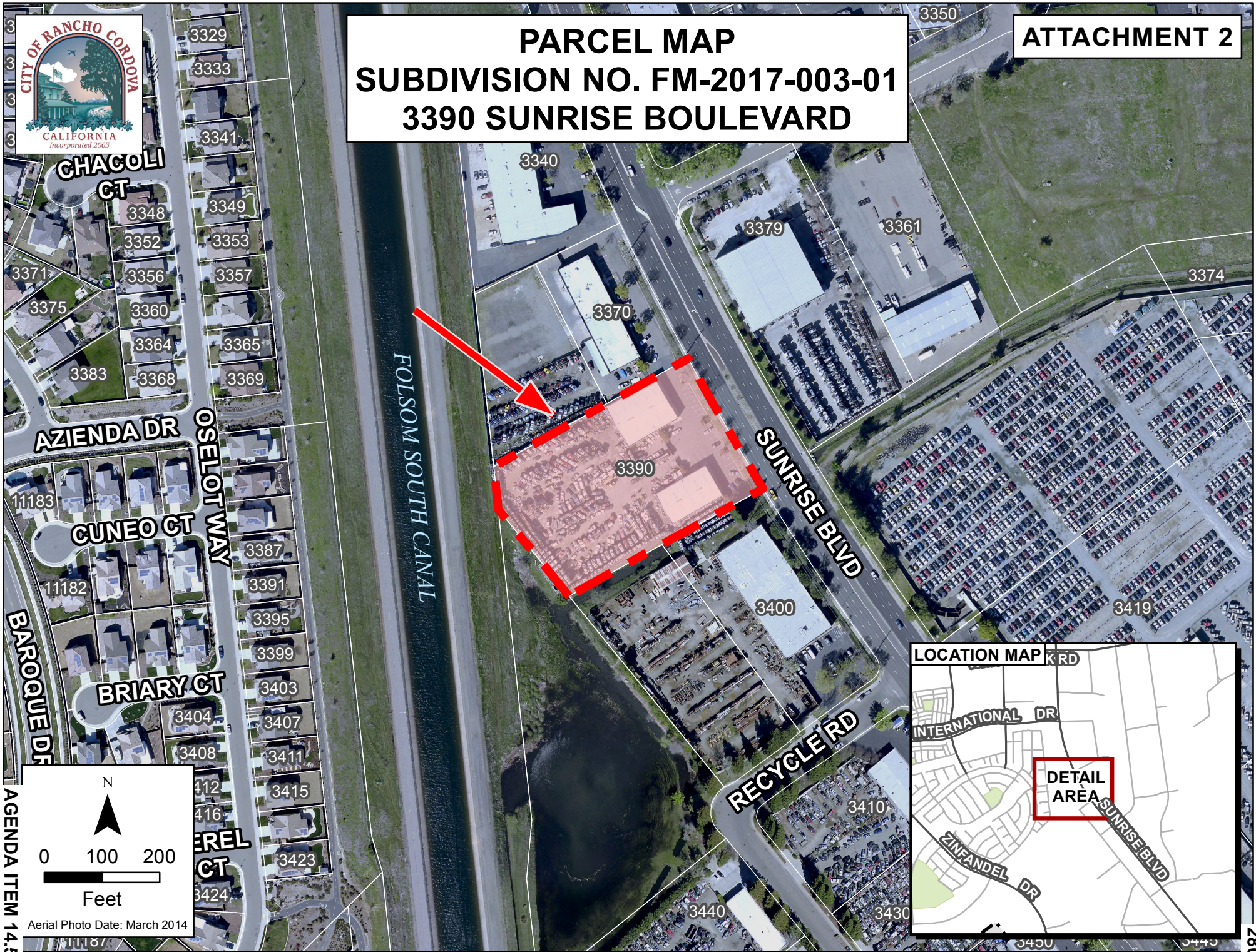
RFE ENGINEERING, INC.
 Civil Engineers • Planners • Surveyors
 2260 Douglas Blvd., Suite 100, Roseville, CA 95661
 Ph: 916-772-7800 Fax: 916-772-7804
 www.RFEengineering.com





**PARCEL MAP
SUBDIVISION NO. FM-2017-003-01
3390 SUNRISE BOULEVARD**

ATTACHMENT 2



MEMORANDUM



DATE: February 20, 2018

TO: Honorable Mayor and Council Members

FROM: Albert Stricker, Public Works Director and Zach Bosch, Associate Civil Engineer

SUBJECT: **ORDINANCE AMENDING SECTIONS 10.50.010 AND 10.50.020 OF THE RANCHO CORDOVA MUNICIPAL CODE TO ESTABLISH RADAR ENFORCEABLE SPEED LIMITS ON THE ROADS LISTED IN ORDINANCE 1-2018**

RECOMMENDATION

Introduce and waive the first reading of Ordinance No. 1-2018.

RESULT OF RECOMMENDED ACTION

Adoption of Ordinance No. 1-2018 will allow the City of Rancho Cordova to establish radar enforceable speed limits on the roads listed in the Ordinance.

BACKGROUND

State law establishes the process for setting speed limits for roadways in California. The California Vehicle Code (CVC) and the California Manual on Uniform Traffic Control Devices contain guidelines and processes to make speed limits radar enforceable by law enforcement agencies. Certain roadways are assigned speed limits by default in the CVC, including 25 mph in residential and business districts, and 55 mph on two-lane highways. These speed limits do not require additional analysis to be radar enforceable because they are established in the CVC.

In order to establish radar enforceable speed limits other than the default speed limits in the CVC, local jurisdictions must conduct and approve Engineering and Traffic Surveys (ETS) every five years, unless additional terms are met. An ETS establishes speed limits on specific roadways based upon two factors, including 1) the measured 85th percentile speed (that speed at which 85% of the traffic is traveling at or below), and 2) whether or not conditions are readily apparent to motorists.

In the interest of public safety and to comply with the requirements of the CVC, staff has completed ETS to determine the appropriate speed limits for specific roads nearing the end of the five-year cycle. A summary of the speed surveys is shown in Attachment 3, and a copy of the complete set of speed surveys is available in the Office of the City Clerk.

Adoption of this Ordinance will result in a reduction to speed limits on the following roadways:

- Chrysanthy Blvd. between Sunrise Blvd and the eastern terminus from 40 mph to 35 mph
- Gold Center Drive between Zinfandel Dr. and Prospect Park Dr. from 35 mph to 30 mph
- Kilgore Road between White Rock Road and Baroque Drive from 45 mph to 40 mph
- McGregor Road between Zinfandel Blvd. and Coloma Road from 30 mph to 25 mph
- Systems Parkway from Routier Road to Old Placerville Road from 40 mph to 35 mph
- Trade Center Drive from Sun Center Drive to Mercantile Rd from 35 mph to 30 mph

- Sunrise Blvd from Herodian Drive to Kiefer Blvd from 55 mph to 50 mph.

FISCAL IMPACT

Ordinance 1-2018 has no impact on the General Fund.

ATTACHMENTS

1. Ordinance No. 1-2018.
2. List of Streets Survey.

CITY OF RANCHO CORDOVA

ORDINANCE NO. 1-2018

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA
AMENDING SECTIONS 10.50.010 AND 10.50.020 OF CHAPTER 10.50 OF TITLE 10
OF THE RANCHO CORDOVA MUNICIPAL CODE REGARDING REDUCED
SPEED LIMITS ON SPECIFIC STREETS

**THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA DOES ORDAIN AS
FOLLOWS:**

Section 1. Purpose and Declarations.

WHEREAS, California Vehicle Code Section 22358 authorizes the City of Rancho Cordova ("City") to determine and declare by ordinance a prima facie speed limit less than the speed limit set forth in Vehicle Code Section 22349 if the City determines upon the basis of an engineering and traffic survey that the speed limit set forth in Vehicle Code Section 22349 is more than is reasonable or safe upon any portion of any street other than a state highway where the speed limit set forth in Vehicle Code Section 22349 is applicable; and

WHEREAS, an engineering and traffic survey ("Survey") was conducted by the City; and

WHEREAS, the Survey established speed limits for certain City streets, as set forth in Section 3; and

WHEREAS, the City Council has determined that the speed limits set forth in the Survey are most appropriate to facilitate the orderly movement of traffic within the City and are reasonable and safe; and

WHEREAS, this Ordinance would modify Rancho Cordova Municipal Code section 10.50.010 and 10.50.020 by establishing speed limits for certain City streets, based upon the results of the Survey.

Section 2. Amendment of Code. Section 10.50.010 of Chapter 10.50 of Title 10 of the Rancho Cordova Municipal Code is hereby amended to read as follows:

10.50.010 Determination and declaration of prima facie speed limits.

The City Council approves and adopts the engineering and traffic surveys dated February 20, 2018, prepared by the city, for the streets and portions thereof set forth therein, copies of which are on file and available for public inspection in the offices of the City Clerk. The City Council finds and determines that the surveys were conducted in accordance with the Vehicle Code and methods of conducting engineering and traffic surveys prescribed in the California Department of Transportation and that the survey justifies the speed limits recommended for the streets and portions of streets therein described. The City Council declares these speed limits as prima facie speed limits for the streets or portions thereof, which limits shall be effective when appropriate signs giving notice thereof are erected upon the streets or portions thereof.

Section 3. Amendment of Code. Section 10.50.020 of Chapter 10.50 of Title 10 of the Rancho Cordova Municipal Code is hereby amended to read as follows:

10.50.020 Prima Facie Speed Limits Declared

The following prima facie speed limits are established based on prevailing speeds and according to traffic and engineering studies:

1. Baroque Drive:
 - a. Between Zinfandel Drive and Zinfandel Drive, 35 mph;
2. Bear Hollow Drive:
 - a. Between Zinfandel Drive and North Mather Boulevard, 35 mph;
3. Business Park Drive:
 - a. Between Horn Road and Bradshaw Road, 35 mph;
4. Capital Center Drive:
 - a. Between White Rock Road and International Drive, 35 mph;
5. Chase Drive:
 - a. Between Coloma Road and Hagan Park, 25 mph;
6. Chrysanthy Boulevard:
 - a. Between Sunrise Boulevard and eastern terminus of street, 35 mph;
7. Coloma Road:
 - a. Between Folsom Blvd and Sunrise Blvd, 40 mph;
8. Data Drive:
 - a. Between International Drive and White Rock Road, 35 mph;
9. Disk Drive:
 - a. Between Data Drive and Prospect Park Drive, 35 mph;
10. Douglas Road:
 - a. Between Sunrise Boulevard and Rancho Cordova Parkway, 55 mph,
 - b. Between Rancho Cordova Parkway and Americanos Boulevard, 50 mph;
11. Explorer Drive:
 - a. Between Lincoln Village Drive to Lincoln Village Drive, 25 mph;
12. Femoyer Street:
 - a. Between Mather Boulevard and International Drive, 40 mph;
13. Fitzgerald Road:
 - a. Between White Rock Road and Recycle Road, 35 mph;
14. Folsom Boulevard:
 - a. Between Horn Road and Routier Road, 45 mph,
 - b. Between Routier Road and Cordova Lane, 40 mph,
 - c. Between Cordova Lane and Sunrise Boulevard, 45 mph,
 - d. Between Sunrise Boulevard and Hazel Avenue, 45 mph;
15. Georgetown Drive:
 - a. Between Coloma Road and McGregor Drive, 25 mph;
16. Gold Camp Drive:
 - a. Between Sun Center Drive and Prospect Park Drive, 35 mph;
17. Gold Canal Drive:
 - a. Between Sun Center Drive and White Rock Road, 35 mph;
18. Gold Center Drive:
 - a. Between Zinfandel Drive and Prospect Park Drive, 30 mph,
 - b. Between Prospect Park Drive (west) and Prospect Park Drive (east), 35 mph;
19. Horn Road:
 - a. Between Routier Road and Paseo Rio Way, 35 mph;
20. International Drive:
 - a. Between Mather Field Road and Sunrise Boulevard, 45 mph;
21. Kiefer Blvd:
 - a. Between Sunrise Blvd and Rancho Cordova Parkway, 45 mph;
22. Kilgore Road:
 - a. Between Folsom Boulevard and White Rock Road, 35 mph,
 - b. Between White Rock Road and Baroque Way, 40 mph;

23. Lincoln Village:
 - a. Between Bradshaw Road and Draco Drive, 35 mph,
 - b. Between Draco Drive and Routier Road, 25 mph;
24. Luyung Drive:
 - a. Between White Rock Road and Mechanical Drive, 35 mph;
25. Mather Field Road:
 - a. Between Peter A McCuen Boulevard and Folsom Boulevard, 45 mph;
26. McGregor Drive:
 - a. Between Folsom Boulevard and Coloma Road, 25 mph;
27. Mills Park Drive:
 - a. Between White Rock Road and Folsom Boulevard, 25 mph;
28. Mills Station Road:
 - a. Between Routier Road and Mather Field Road, 35 mph,
 - b. Between Mather Field Road and White Rock Road, 25 mph;
29. Monier Circle:
 - a. Between Sunrise Boulevard and Sunrise Boulevard, 30 mph;
30. Old Placerville Road:
 - a. Between Systems Parkway and Rockingham Drive, 45 mph;
31. Olson Drive:
 - a. Between Mills Park Drive and Zinfandel Drive, 25 mph,
 - b. Between Zinfandel Drive and Folsom Boulevard, 35 mph;
32. Paseo Drive:
 - a. Between Folsom Boulevard and Las Casas Way, 25 mph;
33. Peter A McCuen Boulevard:
 - a. Mather Boulevard and Femoyer Street, 30 mph;
34. Prospect Park Drive:
 - a. Between White Rock Road and White Rock Road, 35 mph,
 - b. Between White Rock Road and Baroque Way, 35 mph;
35. Quality Drive:
 - a. Between International Drive and White Rock Road, 35 mph;
36. Rancho Cordova Parkway:
 - a. Between Kiefer Blvd and Chrysanthy Blvd, 45 mph;
37. Recycle Road:
 - a. Between Sunrise Boulevard and Elks Circle, 30 mph;
38. Reserve Drive:
 - a. Between Data Drive and International Drive, 35 mph;
39. Rockingham Drive:
 - a. Between Mather Field Road and S. White Rock Road, 25 mph,
 - b. Between Mather Field Road and Old Placerville Road, 35 mph;
40. Routier Road:
 - a. Between Old Placerville Road and Folsom Boulevard, 40 mph;
41. S. White Rock Road:
 - a. Between International Drive and White Rock Road, 25 mph;
42. Sun Center Drive:
 - a. Between Prospect Park Drive and Sunrise Boulevard, 35 mph;
43. Sunrise Boulevard:
 - a. Between Kiefer Boulevard and Herodian Drive, 50 mph;
 - b. Between Herodian Drive and White Rock Road, 45 mph;
 - c. Between White Rock Road and Folsom Boulevard, 45 mph;
 - d. Between Folsom Boulevard and Coloma Road, 45 mph;
 - e. Between Coloma Road and City Limits, Southbound, 45 mph
44. Systems Parkway:
 - a. Between Routier Rd and Old Placerville Rd, 35 mph;
45. Trade Center Drive:
 - a. Between Sun Center Road and Mercantile Road, 30 mph;
46. Trinity River Drive:
 - a. Between Coloma Road and Sunrise Boulevard, 30 mph;
47. Vanguard Drive:
 - a. Between Explorer Drive and Routier Road, 25 mph;

48. White Rock Road:
- a. Between Mills Station Road and Mills Park Drive, 25 mph,
 - b. Between S. White Rock Road and Zinfandel Drive, 40 mph,
 - c. Between Zinfandel Drive and Sunrise Boulevard, 45 mph;
49. Zinfandel Drive:
- a. Between Sunrise Boulevard and Folsom Boulevard, 30 mph,
 - b. Between Folsom Boulevard and White Rock Road, 35 mph,
 - c. Between White Rock Road and International Drive, 40 mph,
 - d. Between International Drive and City Limits, 45 mph.

Section 4. Severability. If any provision of this Ordinance or the application thereof to any person or circumstances, is held invalid, the remainder of the Ordinance, including the application of such part or provision to other persons or circumstances, shall not be affected thereby and shall continue in full force and effect. To this end, provisions of this Ordinance are severable. The City Council hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phase hereof irrespective of the fact that any one or more sections, subsections, subdivisions, paragraphs, sentences, clauses or phases be held unconstitutional, invalid or unenforceable.

Section 5. EffectiveDate. Within fifteen (15) days from and after adoption, a Summary of this Ordinance shall be published once in the Grapevine Independent, or the Sacramento Bee, a newspaper of general circulation printed and published in Sacramento County and circulated in the City of Rancho Cordova, in accordance with Government Code Section 36933. This Ordinance shall take effect and be enforced thirty (30) days after its adoption.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the _____ day of _____ 2018 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Linda Budge, Mayor

ATTEST:

Stacy Leitner, City Clerk

LIST OF STREETS SURVEY

ATTACHMENT 2

Location	From - to	Existing Speed (MPH)	Recommended Speed Limit
Coloma Rd	Folsom Blvd to Sunrise Blvd	40	40
Crysanthy Blvd	Sunrise Blvd - Eastern Terminus of the Street	40	35
Gold Center Dr	Zinfandel Dr to Prospect Park Dr	35	30
International Dr	Mather Field Rd to Sunrise Blvd	45	45
Kiefer Blvd	Sunrise Blvd. to RC Parkwy	45	45
Kilgore Rd	Folsom Blvd. to White Rock Rd	35	35
Kilgore Rd	White Rock Road to Baroque Dr	45	40
Lincoln Village Dr	Draco Dr to Routier Rd	25	25
McGregor Rd	Zinfandel Blvd to Coloma Rd	30	25
Mills Station Rd	Mather Field Rd to Routier Rd	35	35
Rancho Cordova Parkway	Kiefer Blvd to Chrysanthy Blvd	45	45
Sunrise Blvd	Keifer Blvd to Herodian Dr	55	50
Sunrise Blvd	Herodian Dr to White Rock Rd	50	45
Sunrise Blvd	White Rock Rd to Folsom Blvd.	45	45
Sunrise Blvd	Folsom Blvd to Coloma Rd	45	45
Sunrise Blvd	Folsom Blvd to American River Bridge	45	45
Systems Parkway	Routier Rd to Old Placerville Rd	40	35
Trade Center Dr	Sun Center Dr to Mercantile Rd.	35	30
Zinfandel	Folsom Blvd to Sunrise Blvd	30	30

MEMORANDUM

DATE: February 20, 2018

TO: Honorable Mayor and Council Members

FROM: Nicholas Sosa, Project Planner



SUBJECT: 3287 MONIER CIRCLE PARCEL SPLIT – PROJECT NO. DD9743 – TENTATIVE PARCEL MAP

PROPERTY OWNER: NextGen Capital, LLC. 3430 Luyung Drive Rancho Cordova, CA 95742	APPLICANT/DEVELOPER: Charles A. Urata 3430 Luyung Drive Rancho Cordova, CA 95742
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PROJECT: 3287 Monier Circle Parcel Split FILE: DD9743 LOCATION: 3287 Monier Circle APN: 072-0410-007 PLANNER: Nicholas Sosa, Assistant Planner

RECOMMENDATION

Adopt the Resolution 30-2018.

RESULT OF RECOMMENDED ACTION

Adoption of Resolution 30-2018 would approve the applicant's request to subdivide an existing developed 1.986+/- acre parcel into two separate parcels; Lot A at 0.969 acres and Lot B at 1.017 acres. This lot split would allow for the sale, lease, or finance of individual parcels. No physical improvements are proposed with this request. No physical improvements or changes in use are proposed with this request.

PROJECT DESCRIPTION

The City of Rancho Cordova received an application requesting a Tentative Parcel Map to divide an existing 1.986+/- acre parcel into two separate parcels for individual sale, lease, or financing. The existing parcel currently includes two 9,472 square foot buildings with outdoor storage and adequate parking. The site is zoned M-2 (Heavy Industrial/Manufacturing) in the Rancho Cordova Zoning Code within the General Plan's Sunrise Boulevard South Planning Area (SBSPA).

The new parcels are shown in Figure 2 and will include:

- Lot A: 0.969 acre parcel with an existing 9,472 sq. foot building and storage yard.
- Lot B: 1.017 acre parcel with an existing 9,472 sq. foot building and storage yard.

The application was routed to the City's commenting agencies and reviewed for any environmental concerns.

Figure 1: Context Map



Figure 2: Proposed Parcel Split

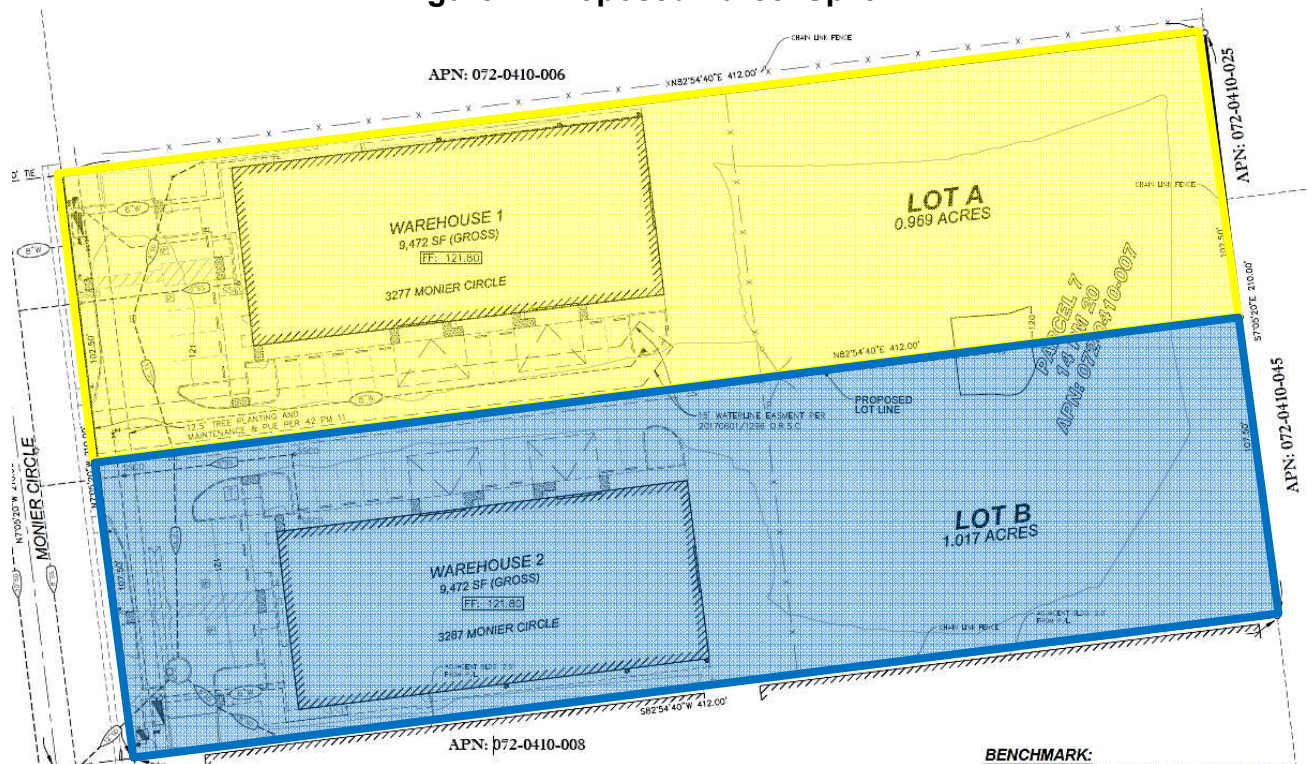
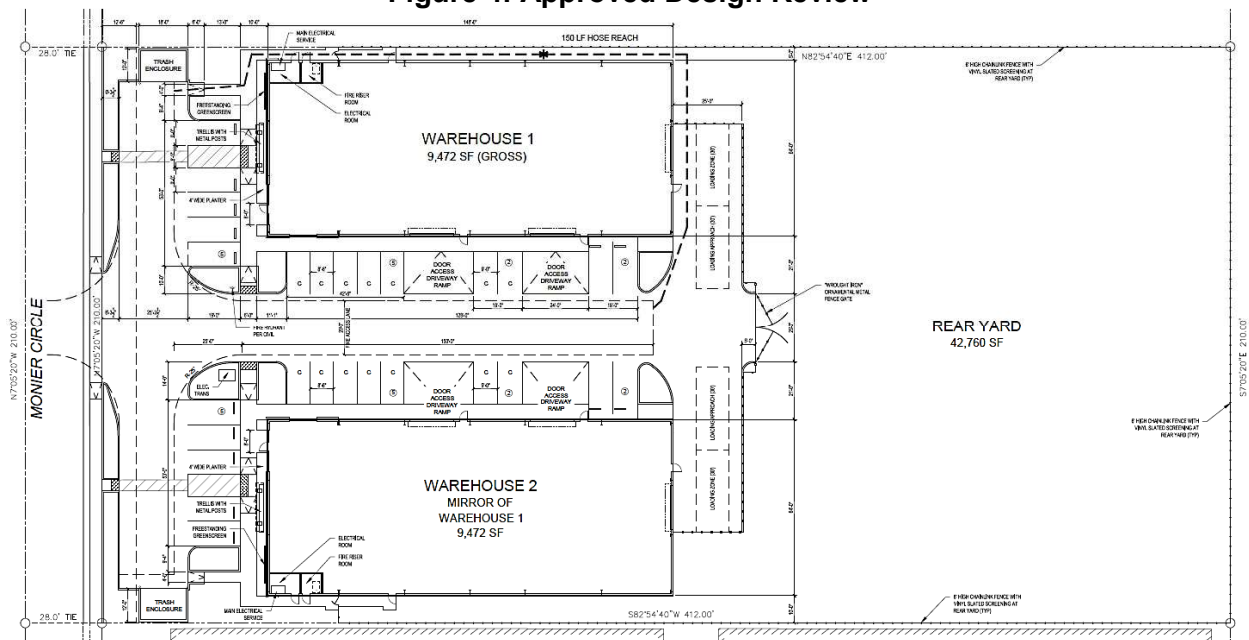


FIGURE 3: Existing Street View

A design review was approved in August of 2016 and the buildings are currently under construction. Once completed the project will have new landscaping, adequate parking, and sufficient lighting for each parcel. No changes are proposed to the original design review.

Figure 4: Approved Design Review

REQUIRED PERMITS AND REGULATORY BASIS

According to the State Subdivision Map Act and Municipal Code, a commercial parcel may be subdivided into multiple separate lots with a Subdivision Map, guided by the following provisions:

1. Subdivision Map Act
2. RCMC Title 22, Land Development, provides the local authority under the Subdivision Map Act to subdivide land

3. RCMC Title 23, Zoning Code

ANALYSIS

The applicant is requesting approval of a Tentative Parcel Map to divide a developed 1.986+/- acre parcel into two new parcels. No physical improvements or changes in use are proposed at this time.

General Plan

The project site is located in the Sunrise Boulevard South Planning Area (SBSPA) designation of the General Plan. Target uses for this area include industrial, office mixed-use, and commercial mixed-use. The existing neighboring uses include indoor/outdoor storage, building materials and wholesale supplies.

Table 1: Surrounding Designations and Existing Uses

Location	Existing Use	General Plan Designation	Zoning Designation
3287 Monier Circle (Project Site)	Under Construction (no current tenant)	SBSPA (Sunrise Boulevard South Planning Area)	M-2 (Heavy Industrial/Manufacturing)
North	Ewing Irrigation and Landscaping Supply	SBSPA (Sunrise Boulevard South Planning Area)	M-2 (Heavy Industrial/Manufacturing)
East	CC Meyers Inc. (Building Supplies)	SBSPA (Sunrise Boulevard South Planning Area)	M-2 (Heavy Industrial/Manufacturing)
South	Storage, Home Improvement Materials, and Animal Supply	SBSPA (Sunrise Boulevard South Planning Area)	M-2 (Heavy Industrial/Manufacturing)
West	Manufacturing/Storage	SBSPA (Sunrise Boulevard South Planning Area)	M-1 (Light Industrial/Manufacturing)

Zoning Code

The project site is zoned M-2 (Heavy Industrial/Manufacturing) which allows for intensive industrial uses that may generate noise, vibration, odor, or other conditions that make particular uses incompatible near residential or mixed use districts. The site is currently under construction with two 9,472 square foot buildings on site with outdoor storage areas. No physical improvements are included with this lot split. Both parcels will include a reciprocal parking and access agreement to integrate parking and meet required zoning code development standards. Any changes to this map must be reviewed by staff for consistency.

Title 22 - Land Development: Title 22 of the City of Rancho Cordova Municipal Code regulates land division and is intended to supplement and implement the Subdivision Map Act. The proposed project, as conditioned, is consistent with requirements and procedures of a tentative parcel map application.

Section 6647 of the California Subdivision Map Act requires a City to deny approval of a tentative map, if any of the findings are found to be false. In the case of the proposed map, none of the required findings were found to be false. The following evidence supports the map request:

1. *Finding: That the proposed map is consistent with applicable general and specific plans as specified in Section 65451.*

Evidence: The proposed project is consistent with the General Plan and the land use designation specified for this parcel. The site currently contains two 9,427 square foot buildings on-site and outdoor storage area consistent with the M-2 zoning designation. Both lots are consistent with the Sunrise Boulevard South Planning Area (SBSPA) designation of the General Plan.

2. *Finding: That the design or improvement of the proposed subdivision is consistent with applicable general and specific plans.*

Evidence: The proposed Tentative Parcel Map is consistent with the existing development standards of the General Plan designation of SBSPA and the zoning standards of the M-2 (Heavy Industrial/Manufacturing) zone. No physical improvements are proposed as part of this map.

3. *Finding: That the site is physically suitable for the type of development.*

Evidence: The site is physically suitable to subdivide. The parcel currently contains 2 newly constructed buildings and storage yards on-site. A reciprocal parking and access agreement will be added as a condition of the map. No physical improvements are proposed as part of this project.

4. *Finding: That the site is physically suitable for the proposed density of development.*

Evidence: The current parcel contains two 9,427 square foot warehouse/storage buildings with additional outdoor storage which is allowed within the M-2 (Heavy Industrial/Manufacturing) zoning designation. No changes in site intensity are proposed. A reciprocal parking and access agreement will be added as a condition of the map.

5. *Finding: That the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.*

Evidence: The proposed project does not involve any physical improvements or changes in use at this time. The proposed project is exempt from environmental review pursuant to section 15315 (Minor Land Division) of the California Environmental Quality Act (CEQA).

6. *Finding: That the design of the subdivision or the type of improvements is likely to cause serious public health problems.*

Evidence: The division of one parcel into two new parcels would permit the newly constructed buildings to be on individual lots and allow for the sale, lease, or finance of each lot separately. The proposed Tentative Parcel Map does not include any physical changes and will not disturb any previously undisturbed area. No public health problems will result from approval of the tentative parcel map.

7. *Finding:* *That the design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of property within the proposed subdivision. In this connection, the legislative body may approve a map if it finds that alternate easements, for access or for use, will be provided, and that these will be substantially equivalent to ones previously acquired by the public.*

Evidence: No improvements are proposed with this map and a condition has been placed on the project to ensure that reciprocal access and parking remains for both parcels.

FISCAL IMPACT

Staff anticipates that this project will result in additional revenues created from the potential sale of the new parcels and through taxes collected for each new parcel.

ENVIRONMENTAL

The project is exempt from the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations, Chapter 3, Division 6 (State CEQA Guidelines) Section 15315 (Minor Land Division). The property is in an urbanized area zoned for heavy industrial uses. The division of one lot into two parcels is in conformance with the General Plan and Rancho Cordova Zoning Code standards as no variances or exceptions are required. All services and access to the proposed parcels are available and no additional modifications or improvements are requested as part of this project.

RECOMMENDED MOTIONS

Staff recommends that the City Council find the project to be in compliance with the California Environmental Quality Act (CEQA) per section 15315 "Minor Land Division" and adopt Resolution Number 30-2018 approving the Tentative Parcel Map for the 3287 Monier Circle Parcel Split DD9743, subject to the findings, Tentative Parcel Map (**Attachment 2, Exhibit A to Resolution 30-2018**) and Conditions of Approval (**Attachment 3, Exhibit B to Resolution 30-2018**).

ATTACHMENTS

1. Resolution 30-2018
2. Exhibit A to the Resolution - Tentative Parcel Map
3. Exhibit B to the Resolution - Conditions of Approval
4. 500' Radius Map and Labels

ATTACHMENT 1**CITY OF RANCHO CORDOVA****RESOLUTION NO. 30-2018****A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA,
STATE OF CALIFORNIA, APPROVING THE 3287 MONIER CIRCLE PARCEL SPLIT
TENTATIVE PARCEL MAP, PROJECT NO. DD9743**

WHEREAS, Charles A. Urata of NextGen Capital, LLC. (hereinafter referred to as Applicant) filed an application with the City of Rancho Cordova for tentative parcel map for 3287 Monier Circle (Assessor's Parcel Number: 072-0410-007); and

WHEREAS, the Applicant has requested to subdivide an existing 1.986+/- acre parcel into two separate parcels; Lot A at 0.969 acres and Lot B at 1.017 acres; and

WHEREAS, the City Council is the appropriate authority to hear and take action on this project; and

WHEREAS, the City Council of the City of Rancho Cordova has conducted a properly noticed public hearing pursuant to Government Code Section 65090 and has duly considered all written and verbal testimony presented during the hearing.

NOW, THEREFORE, BE IT HEREBY RESOLVED, THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA does hereby approve the 3287 Monier Circle Tentative Parcel Map (**Exhibit A**), subject to the following findings and attached Conditions of Approval (**Exhibit B**):

- A. Finds the project site was adequately analyzed according to the California Environmental Quality Act (CEQA) Guidelines and is Exempt under Section 15315, Minor Land Division, as supported by the following:

The property is in an urbanized area zoned for heavy industrial uses. The division of one lot into two parcels is in conformance with the General Plan and Rancho Cordova Zoning Code standards as no variances or exceptions are required. All services and access to the proposed parcels are available. No additional modifications or improvements are requested as part of this project.

- B. Section 66474 of the California Subdivision Map Act requires a City to deny approval of a tentative map, if any of the findings are found to be false. In the case of the proposed map, none of the required findings were found to be false. The following evidence supports the map request:

1. Finding: *That the proposed map is consistent with applicable general and specific plans as specified in Section 65451.*

Evidence: The proposed project is consistent with the General Plan and the land use designation specified for this parcel. The site currently contains two 9,427 square foot buildings on-site and outdoor storage area consistent with the M-2 zoning designation. Both lots are consistent with the Sunrise Boulevard South Planning Area (SBSPA) designation of the General Plan.

ATTACHMENT 1

2. *Finding: That the design or improvement of the proposed subdivision is consistent with applicable general and specific plans.*

Evidence: The proposed Tentative Parcel Map is consistent with the existing development standards of the General Plan designation of SBSPA and the zoning standards of the M-2 (Heavy Industrial/Manufacturing) zone. No physical improvements are proposed as part of this map.

3. *Finding: That the site is physically suitable for the type of development.*

Evidence: The site is physically suitable to subdivide. The parcel currently contains 2 newly constructed buildings and storage yards on-site. A reciprocal parking and access agreement will be added as a condition of the map. No physical improvements are proposed as part of this project.

4. *Finding: That the site is physically suitable for the proposed density of development.*

Evidence: The current parcel contains two 9,427 square foot warehouse/storage buildings with additional outdoor storage which is allowed within the M-2 (Heavy Industrial/Manufacturing) zoning designation. No changes in site intensity are proposed. A reciprocal parking and access agreement will be added as a condition of the map.

5. *Finding: That the design of the subdivision or the proposed improvements are likely to cause substantial environmental damage or substantially and avoidably injure fish or wildlife or their habitat.*

Evidence: The proposed project does not involve any physical improvements or changes in use at this time. The proposed project is exempt from environmental review pursuant to section 15315 (Minor Land Division) of the California Environmental Quality Act (CEQA).

6. *Finding: That the design of the subdivision or the type of improvements is likely to cause serious public health problems.*

Evidence: The division of one parcel into two new parcels would permit the newly constructed buildings to be on individual lots and allow for the sale, lease, or finance of each lot separately. The proposed Tentative Parcel Map does not include any physical changes and will not disturb any previously undisturbed area. No public health problems will result from approval of the tentative parcel map.

7. *Finding: That the design of the subdivision or the type of improvements will conflict with easements, acquired by the public at large, for access through or use of property within the proposed subdivision. In this connection, the legislative body may approve a map if it finds that alternate easements, for access or for use, will be provided, and that these will be substantially equivalent to ones previously acquired by the public.*

ATTACHMENT 1

Evidence: No improvements are proposed with this map and a condition has been placed on the project to ensure that reciprocal access and parking remains for both parcels.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 20th day of February, 2018 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Linda Budge, Mayor

ATTEST:

Stacey Leitner, City Clerk

LEGEND:

CENTERLINE

EASEMENT LINE

EXISTING BOUNDARY LINE

PROPOSED PARCEL LINE

ADJACENT PROPERTY BOUNDARY

RIGHT-OF-WAY

EDGE OF PAVEMENT

OVERHEAD TELEPHONE &ELECTRIC

JOINT POLE

SEWER CLEANOUT

BUILDING / STRUCTURE

TRANSFORMER

SANITARY SEWER

STORM DRAIN

EXISTING WATER

EXISTING WATER METER

ABBREVIATIONS

AC

ASPHALT CONCRETE

DI

DROP INLET

CL

CENTERLINE

(E)

EXISTING

EP

EDGE OF PAVEMENT

FL

FLOW LINE

GR

GRATE

INV

INVERT

IRR

IRRIGATION

OH

OVER HEAD POWER LINES

PUE

PUBLIC UTILITY EASEMENT

(P)

PROPOSED

SDMH

STORM DRAIN MANHOLE

SSMH

SANITARY SEWER MANHOLE

TBC

TOP BACK OF CURB

UG

UNDERGROUND

WA

WATER

WM

WATER METER

EXISTING USE:

HEAVY INDUSTRIAL

PROPOSED USE:

HEAVY INDUSTRIAL

PROPOSED IMPROVEMENTS:

AS REQUIRED BY THE DEPARTMENT OF PUBLIC WORKS

EXISTING ZONING:

M-2 HEAVY INDUSTRIAL

GENERAL PLAN:

M-2 HEAVY INDUSTRIAL

OWNER:

CHARLES A. URATA
3430 LUYUNG DRIVE
RANCHO CORDOVA, CA 95742
PH: (916) 638-5364

ENGINEER & SURVEYOR

RFE ENGINEERING, INC.
2260 DOUGLAS BLVD., SUITE 160
ROSEVILLE, CA 95661
PH: (916) 772-7800

WATER SUPPLY:

CITY OF RANCHO CORDOVA

NUMBER OF LOTS:

TWO INDUSTRIAL LOTS

LOT SIZE:

PROPOSED LOT A: 42,230 SF 0.969 ACRES
PROPOSED LOT B: 44,290 SF 1.017 ACRES

SEWER:

CITY OF RANCHO CORDOVA

RAINAGE:

TY OF RANCHO CORDOVA

FIRE PROTECTION:

ICRAMENTO METROPOLITAN FIRE DISTRICT

SCHOOL DISTRICT:

ILSOM-CORDOVA UNIFIED

PARK DISTRICT:

ORDOVA RECREATION & PARK DISTRICT

ASSESSOR'S PARCEL NUMBER:

2-0410-007

UNDERGROUND UTILITY NOTE:

IE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY
FORMATION AND EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE
UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN
ERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT GUARANTEE THAT THE
UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH HE
DES CERTIFY THAT THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM INFORMATION
AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

TENTATIVE PARCEL MAP

PARCEL 7 14 PM 20

3277 & 3287 MONIER CIRCLE

CITY OF RANCHO CORDOVA

SACRAMENTO COUNTY, CALIFORNIA 95742

DECEMBER, 2017

BENCHMARK:
THE BENCHMARK USED FOR THIS SURVEY IS THE COUNTY OF SACRAMENTO BENCHMARK NO. 01B-090, WHICH IS A RAMSET AND 7/8" DISC STAMPED "CO BM 1B-90" LOCATED IN THE TOP BACK OF VERTICAL CURB AND GUTTER OVER DI AT THE EAST END OF CURB RETURN AT THE SOUTHEAST CORNER OF FITZGERALD ROAD AND SUNRISE BLVD.

ELEVATION: 126.20 NAVD 88

BASIS OF BEARINGS:
THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CENTERLINE OF MONIER CIRCLE AS SHOWN ON THE PARCEL MAP FILED IN BOOK 42 OF PARCEL MAPS, AT PAGE 11, THE BEARING OF WHICH IS N 07° 05' 20" W, AND WAS ESTABLISHED FROM THE FOUND RECORD MONUMENTS PER 42 PM 11 AS SHOWN HEREON.

APPROVED

DATE

BY

REVISION

CHECK NO.

DESIGN

DRAWN

QUANT.

BEI

RFE

0

1

2

ORIGINAL SCALE IS IN INCHES

RFE ENGINEERING, INC

Civil Engineers - Planners - Surveyors

2260 Douglas Blvd., Suite 160

Roseville, CA 95661

Ph: 916-772-7800 Fax: 916-772-7804

www.RFEengineering.com

CHARLES A. URATA

3430 LUYUNG DRIVE

RANCHO CORDOVA, CA, 95742

PH: (916) 638-5364

3277 & 3287 MONIER CIRCLE

APN: 072-0410-007

RANCHO CORDOVA, CALIFORNIA

TENTATIVE PARCEL MAP

Drawing

Sheet

of

of

TPM-1

1

12/07/2017

862

#17127 - 3287 MONIER MAPPING, RANCHO CORDOVA, CALIFORNIA

AGENDA ITEM 15.2

\\fs1\apps\GIS\GISData\Map\Monier Circle\TPM.dwg Dec 07, 2017-03:37 pm

Conditions of Approval

ATTACHMENT 3 EXHIBIT B TO THE RESOLUTION

		<u>Category</u>	<u>Timing/ Implementation</u>	<u>Enforcement / Monitoring</u>	<u>Verification (date & Signature)</u>
General Conditions					
1.	The approved entitlement is for a Tentative Parcel Map, to subdivide one (1) parcel (APN: 072-0410-007) into two (2) parcels, as described in the City Council staff report dated February 20, 2018 and Tentative Parcel Map (Exhibit A) with conditions herein, for project number DD9743.	Project Description	On-Going	Planning	
2.	The Applicant shall hold harmless the City, its Council Members, officers, agents, employees, and representatives from liability for any award, damages, costs and fees incurred by the City and/or awarded to any plaintiff in an action challenging the validity of this permit or any environmental or other documentation related to approval of this permit. Applicant further agrees to provide a defense for the City in any such action.	General	On-Going	Planning	
3.	Any future alteration to the buildings, change in use, intensification of the site, or modification to the parking and landscaped area must be reviewed by the City to ensure compliance with all local, state, and federal regulations. Minor modifications that are found to be in substantial conformance with the approved plans such as colors, plant materials, or minor lot line adjustments, may be approved administratively. Major modifications shall be approved by the applicable decision making body.	General	On-Going	Planning/ Building /Public Works	
4.	Applicant/Developer shall not carry a negative account balance with the City for the processing of the project. If a negative account balance occurs, it will be the developer's responsibility to pay the balance due, in order to avoid delays in the processing of future permits or recordation of maps. Please email the Finance Department at billings@cityofranchocordova.org for the status of your account with the City.	General	On-Going	Finance	
5.	Both parcels must still adhere to conditions of approval for the previous Design Review (DD9655) and ensure that all applicable conditions are met for the overall site.	General	On-Going	Planning	

Conditions of Approval

ATTACHMENT 3 EXHIBIT B TO THE RESOLUTION

		<u>Category</u>	<u>Timing/ Implementation</u>	<u>Enforcement / Monitoring</u>	<u>Verification (date & Signature)</u>
6.	Any proposed changes to the Tentative Parcel Map must be approved through Planning Department and other applicable department review.	Modifications	On-Going	Planning	
7.	SMUD has existing underground 12kV facilities along Monier Circle. The Applicant shall be responsible for maintaining all CalOSHA and State of California Public Utilities Commission General Order No. 128 safety clearances during construction and upon building completion. If the required clearances cannot be maintained, the Applicant shall be responsible for the cost of relocation.	Utilities	On-Going	SMUD	
8.	In the event the Applicant requires the relocation or removal of existing SMUD facilities on or adjacent to the subject property, the Applicant shall coordinate with SMUD. The Applicant shall be responsible for the cost of relocation or removal.	Utilities	On-Going	SMUD	
9.	SMUD reserves the right to use any portion of its easements on or adjacent to the subject property that it reasonably needs and shall not be responsible for any damages to the developed property within said easement that unreasonably interferes with those needs.	Utilities	On-Going	SMUD	
10.	The Applicant shall not place any building foundations within 5-feet of any SMUD trench to maintain adequate trench integrity. The Applicant shall verify specific clearance requirements for other utilities. (e.g., Gas, Telephone, etc.).	Utilities	On-Going	SMUD	
11.	Any necessary future SMUD facilities located on the Applicant's property shall require a dedicated SMUD easement. This will be determined prior to SMUD performing work on the Applicant's property.	Utilities	On-going	SMUD	
12.	Any construction and/or modification to the public sewer system shall be required to the satisfaction of SASD. SASD Design Standards apply to any onsite and offsite sewer construction.	Sewer	On-Going	SASD	

Conditions of Approval

ATTACHMENT 3 EXHIBIT B TO THE RESOLUTION

		<u>Category</u>	<u>Timing/ Implementation</u>	<u>Enforcement / Monitoring</u>	<u>Verification (date & Signature)</u>
13.	Water Supply will be provided by the Sacramento County Water Agency.	Water	On-Going	SCWA	
Prior to Recordation of the Parcel Map					
14.	The Tentative Parcel Map approval is valid for three years from the date of City Council approval, unless an extension of time is subsequently approved per Government Code Section 66452.6(e), unless extended by the terms of a Development Agreement.	Subdivision	Three years, commencing with the date of approval.	Planning/ Public Works	
15.	The Applicant shall provide separate SMUD service points to each parcel to the satisfaction of SMUD.	Utilities	Prior to recordation of the Parcel Map	SMUD	
16.	Provide a Fire Access Roadway Maintenance Agreement between all parcels connected to and served by the fire access roadway. The Fire Access Roadway Maintenance Agreement shall be recorded with the Public Records Office having jurisdiction.	Fire Access	Prior to recordation of the Final Map	Sacramento Metro Fire	
17.	The Applicant shall dedicate a 12.5 foot public utility easement (PUE) for overhead and/or underground facilities and appurtenances adjacent to all public street right-of-ways.	Utilities	Prior to recordation of Tentative Parcel Map	SMUD	
18.	The Applicant shall dedicate any private drive, ingress and egress easement, or Irrevocable Offer of Dedication (and 10-feet adjacent thereto) as a public utility easement for (overhead and) underground facilities and appurtenances. All access roads shall meet minimum SMUD requirements for access roads.	Utilities	Prior to recordation of Tentative Parcel Map	SMUD	
19.	The Applicant shall locate, verify, and provide a drawing to SMUD identifying all electrical utility infrastructures for the existing structures. If necessary, any existing onsite electrical infrastructure that serves existing structures shall be relocated to the satisfaction of SMUD.	Utilities	Prior to recordation of Tentative Parcel Map	SMUD	

Conditions of Approval

ATTACHMENT 3 EXHIBIT B TO THE RESOLUTION

		<u>Category</u>	<u>Timing/ Implementation</u>	<u>Enforcement / Monitoring</u>	<u>Verification (date & Signature)</u>
20.	The Applicant shall grant to SMUD a Grant of Easement to cover the existing electrical facilities on the premises. The Grant of Easement shall be prepared in accordance with SMUD's standard underground right-of-way form.	Utilities	Prior to recordation of Tentative Parcel Map	SMUD	
21.	A note shall be placed on the final map stating that "Reciprocal access and parking between parcels shown hereon shall be granted/reserved prior to the sale and/or re-conveyance of said parcels.	Access and Parking	Prior to approval of the Final map	Planning/ Public Works	
Prior to Approval of Improvement Plans					
22.	If the total area of the developed or redeveloped impervious surfaces (building rooftop, flat work, parking areas, or other disturbed areas cumulative for all phases of work) equals or exceeds 1.0 acres, Incorporate permanent storm water quality treatment measures into the site improvement plans in conformance with applicable County ordinances & standards, and state and federal law.	Storm Water Treatment	Prior to approval of improvement plans	SASD	
23.	The existing building on Lot B is currently connected to public sewer. Sewer service shall continue to be provided by SASD infrastructure to the existing sewer service lateral.	Sewer	Prior to approval of Improvement Plans	SASD	
24.	SASD requires each building on each lot with a sewage source to have a separate connection to the SASD's sewer system. If there is more than one building on any single parcel and the parcel is not proposed for split, then each building on that parcel shall have a separate connection to a private onsite sewer line or a separate connection to the SASD public sewer line.	Sewer	Prior to approval of Improvement Plans	SASD	
25.	Provide separate public water service to each parcel. All water lines shall be located within a public right-of-way or within easement dedicated to SCWA. Easements shall be reviewed and approved by Sacramento County Water Agency prior to Improvement Plan approval or Final Map approval.	Water	Prior to approval of Final Map	SCWA	

Conditions of Approval

ATTACHMENT 3 EXHIBIT B TO THE RESOLUTION

		<u>Category</u>	<u>Timing/ Implementation</u>	<u>Enforcement / Monitoring</u>	<u>Verification (date & Signature)</u>
26.	Destroy all abandoned wells on the proposed project site in accordance with the requirements of the Sacramento County Environmental Health Division. Clearly show all abandoned/destroyed wells on the improvement plans for the project. Prior to abandoning any existing agricultural wells, applicant shall use water from agricultural wells for grading and construction.	Water	Prior to approval of Improvement Plans	SCWA	
Prior to Issuance of Building Permit					
27.	SASD and Regional Sanitation may require additional sewer impact fee payments in accordance with each District's Ordinances. Fees are to be paid prior to recording the Final Map or the issuance of building permits, whichever is first. Applicant should contact Permit Services Unit at (916) 8760-6100 for sewer impact fee information.	Sewer	Prior to issuance of building permit	SASD	
28.	Provide a non-potable water distribution system to the satisfaction of the Sacramento County Water Agency. At present the water meter at proposed Lot B is being used for providing irrigation water supply. Each parcel to have its own irrigation water supply.	Water	Prior to issuance of Building Permit	SCWA	
29.	The project developer/owner shall pay Zone 40 development fees applicable at the time of building permit issuance in accordance with Title 4 of the Sacramento County Water Agency Code.	Water	Prior to issuance of Building Permit	SCWA	

DISCLAIMER: ASSESSORS PARCELS ARE FOR TAX ASSESSMENT PURPOSES ONLY AND DO NOT INDICATE EITHER PARCEL LEGALITY OR A VALID BUILDING SITE. THE COUNTY OF SACRAMENTO ASSUMES NO RESPONSIBILITY ARISING FROM USE OF THIS INFORMATION.

64

072-041

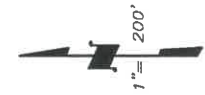


EXHIBIT "A"
072-0410-016-0000

BLD "B"
unit no. sub no.

- 3250A-----0001
- 3250B-----0002
- 3250C-----0003
- 3250D-----0004
- 3250E-----0005
- 3250F-----0006
- 3250G-----0007
- 3250H-----0008
- 3250I-----0009
- 3250J-----0010
- 3250K-----0011

BLD "A"
unit no. sub no.

- 3234A-----0012
- 3234B-----0013
- 3234C-----0014
- 3234D-----0015
- 3234E-----0016
- 3234F-----0017

EXHIBIT "B"

072-0410-018-0000

BLD "1"
unit no. sub no.

- A-1-----0001
- B-1-----0002
- C-1-----0003
- D-1-----0004
- E-1-----0005

BLD "2"
unit no. sub no.

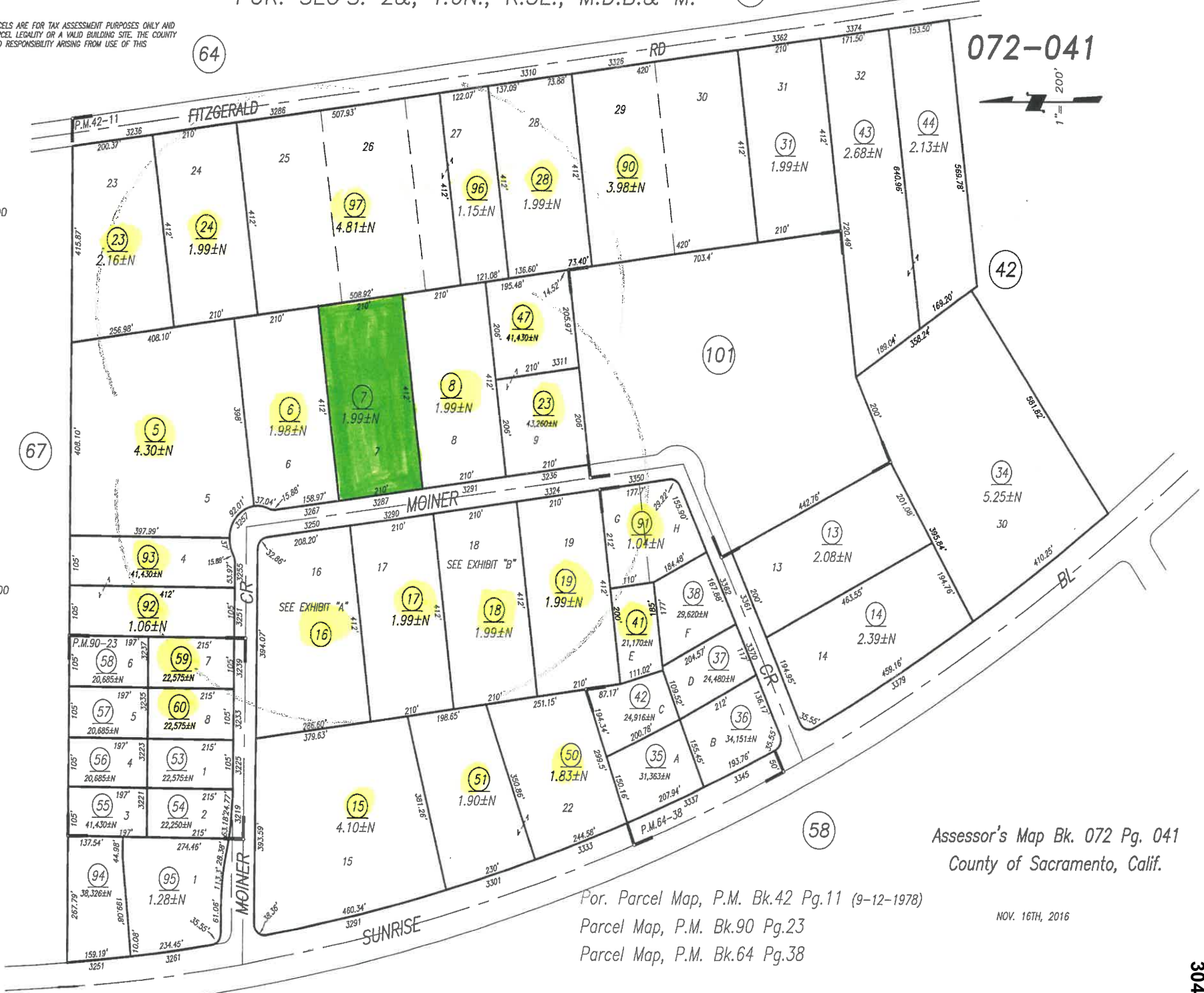
- A-2-----0006
- B-2-----0007
- C-2-----0008
- D-2-----0009
- E-2-----0010
- F-2-----0011

BLD "3"
unit no. sub no.

- A-3-----0012
- B-3-----0013

BLD "4"
unit no. sub no.

- A-4-----0014
- B-4-----0015



Assessor's Map Bk. 072 Pg. 041
County of Sacramento, Calif.

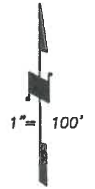
Por. Parcel Map, P.M. Bk.42 Pg.11 (9-12-1978)
Parcel Map, P.M. Bk.90 Pg.23
Parcel Map, P.M. Bk.64 Pg.38

NOV. 16TH, 2016

POR. PROJ T.8&9N., R6&7E., M.D.B. & M.

ATTACHMENT 4

072-101



Por. Monier Park O.S. Bk.46, Pg.9 (6-10-1988)
Monier Park O.S. Bk.46, Pg.9 (9-5-1989)

Assessor's Map Bk.072 Pg. 101
County of Sacramento, Calif.

POR. PROJ. T8 & 9N., R.7., M.D.B. & M.

(37)



Description: Sacramento, CA Assessor Map 72.45 Page: 1 of 1
Order: j Comment:

CLAIMER: ASSESSORS PARCELS ARE FOR TAX ASSESSMENT PURPOSES ONLY AND NOT INDICATE EITHER PARCEL LEGALITY OR A VALID BUILDING SITE. THE COUNTY SACRAMENTO ASSUMES NO RESPONSIBILITY ARISING FROM USE OF THIS DRAWING.



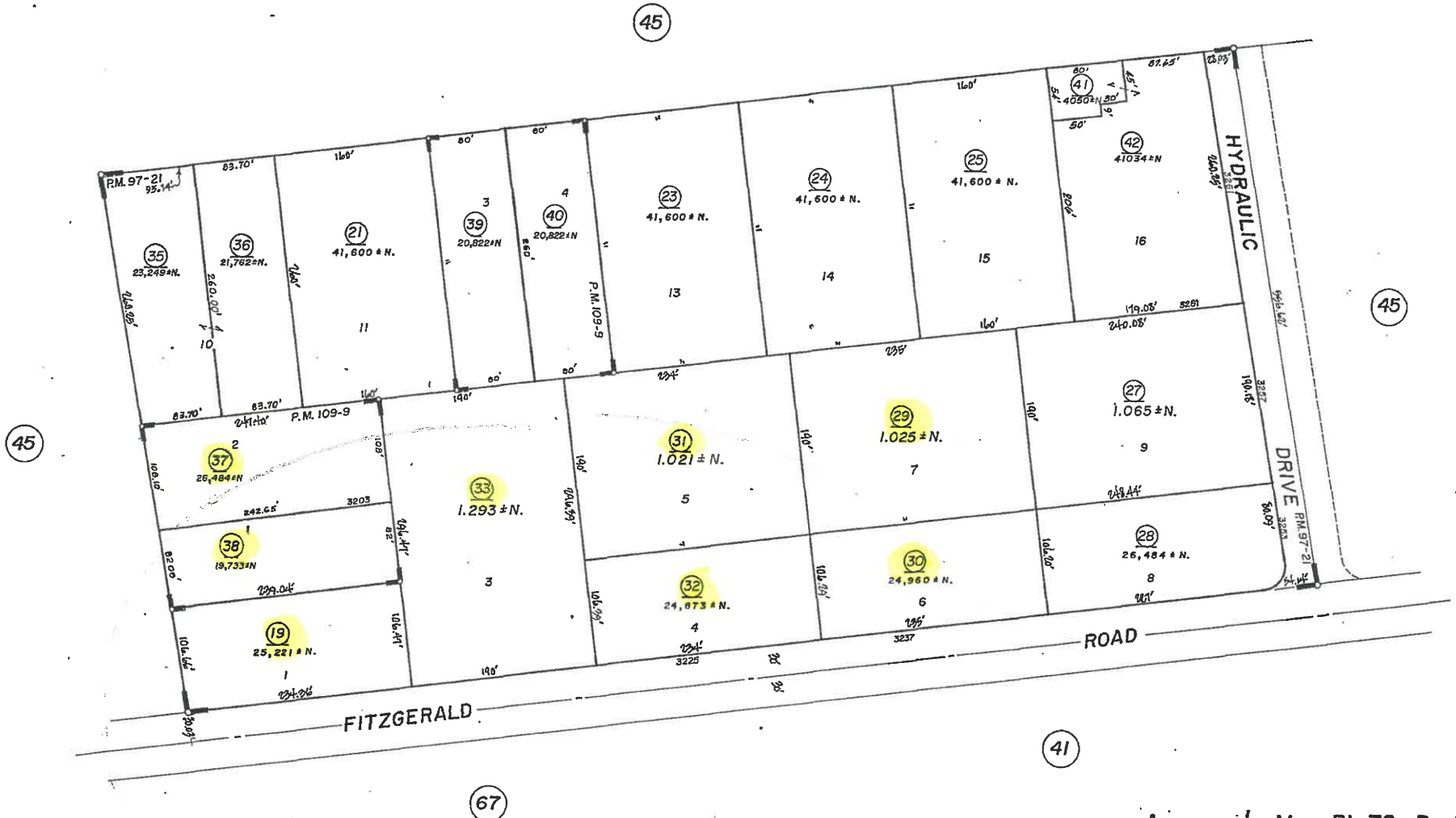
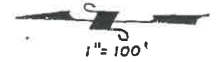
Assessor's Map Bk. 072 Pg. 45
County of Sacramento, Calif.

Cordova Industrial Park Unit No.4 P.M. Bk.154 Pg.10 (5-18-99)
Fitzgerald Industrial Park P.M. Bk.116 Pg.16 (2-1-90)
Record Of Survey O.S. Bk2 Pg.31

NOV.13TH, 2014

POR. PROJ. T.8&9N., R.7E., M.D.B.&M.

ATTACHMENT 4
 072-64



Fitzgerald Trade Center, R.M. Bk. 97, Pg. 21 (12-19-86)

Assessor's Map Bk. 72, Pg. 64
 County of Sacramento, Calif.

ATTACHMENT 4

072-0410-005
Rugen Family General Partnership
3257 Monier Cir A
Rancho Cordova, CA 95742

072-0410-016-0001
J & Ruth Recalde
3250 Monier Cir A
Rancho Cordova, CA 95742

072-0410-016-0002
Jeffrey Urbanik
3250 Monier Cir B
Rancho Cordova, CA 95742

072-0410-016-0005
Abc3000 Llc
3250 Monier Cir
Rancho Cordova, CA 95742

072-0410-016-0011
Kraig Speckert
3250 Monier Cir K
Rancho Cordova, CA 95742

072-0410-016-0012
Troy Marilao
3234 Monier Cir A
Rancho Cordova, CA 95742

072-0410-016-0015
Maria De Sening
3234 Monier Cir D
Rancho Cordova, CA 95742

072-0410-016-0017
Kevin Mcaninch
3234 Monier Cir
Rancho Cordova, CA 95742

072-0410-018-0009
George & Susan Sugarman
3300 Monier Cir 140
Rancho Cordova, CA 95742

072-0410-018-0012
L Q A Associates
3304 Monier Cir 110
Rancho Cordova, CA 95742

072-0410-018-0013
L Q A Associates
3304 Monier Cir 120
Rancho Cordova, CA 95742

072-0410-060
Ebdc Properties Llc
3233 Monier Cir A
Rancho Cordova, CA 95742

072-0410-092
Russell Adventures Llc
3251 Monier Cir
Rancho Cordova, CA 95742

072-0410-093
Russell Adventures Llc
3255 Monier Cir
Rancho Cordova, CA 95742

072-0450-055
Craig Reinhardt
3189 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0640-030
Fitzgerald Building Group Llc
3237 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0640-037
Affinity Eng
3205 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0640-038
Smc Real Estate Ventures Llc
3203 Fitzgerald Rd
Rancho Cordova, CA 95742

072-1010-004
Edward Herman
11358 Monier Park Pl
Rancho Cordova, CA 95742

072-1010-006
Mark Jerbak & Victoria Slocum
11350 Monier Park Pl
Rancho Cordova, CA 95742

20 Labels Printed

ATTACHMENT 4

072-0410-006
Ewing Irrigation Products Inc
3441 E Harbour Dr
Phoenix, AZ 85034

072-0410-007
Nextgen Capital Llc
3430 Luyung Dr
Rancho Cordova, CA 95742

072-0410-008
Monier Building Project
3293 Monier Cir 1
Rancho Cordova, CA 95742

072-0410-015
Istorage Jv Sunrise Monier Llc
5200 Dtc Pkwy 200
Greenwood Village, CO 80111

072-0410-016-0003
Theis Development Llc
Po Box 1245
Folsom, CA 95763

072-0410-016-0004
Handen Family 2015 Revocable Trust
555 Shoreline Pointe
El Dorado Hills, CA 95762

072-0410-016-0008
Seros Family Trust
10111 Savona Dr
Sacramento, CA 95829

072-0410-016-0009
John & Kathleen Bristow
4732 Isabella Ave
Fair Oaks, CA 95628

072-0410-016-0010
Teresa Mcernan
476 Ebi Way
Folsom, CA 95630

072-0410-016-0016
Steven Fenton
5209 Whitney Ave
Carmichael, CA 95608

072-0410-017
Sfc Leasing
3430 Luyung Dr
Rancho Cordova, CA 95742

072-0410-018-0001
Lawrence & Carol Mustain
11583 Prospect Hill Dr
Gold River, CA 95670

072-0410-018-0002
L Q A Associates
3304 Monier Cir 120
Rancho Cordova, CA 95742

072-0410-018-0003
Deangela Smith
2539 Barbera Way
Rancho Cordova, CA 95670

072-0410-018-0004
William Wong & Lynne Lucas
475 Bret Harte Rd
Sacramento, CA 95864

072-0410-018-0005
Bennett Creedon
5545 Overlook Ct
Plymouth, CA 95669

072-0410-018-0006
Leech Family Living Trust
5138 Oak Shade Way
Fair Oaks, CA 95628

072-0410-018-0007
Steve & Lou Ann Wiles Trust
8459 Friar Tuck Way
Fair Oaks, CA 95628

072-0410-018-0008
Lou Wiles & Steven Miles
8459 Friar Tuck Way
Fair Oaks, CA 95628

072-0410-018-0010
George & Susan Sugarman
1049 Columbia Cir
El Dorado Hills, CA 95762

072-0410-018-0011
David L & Julie G Duncan Revocable
6042 Lonely Ridge Ct
Fair Oaks, CA 95628

072-0410-018-0014
Robert Murphy
8196 Toyon Ave
Fair Oaks, CA 95628

072-0410-018-0015
Mcircle Llc
11230 Gold Express Dr 310-252
Gold River, CA 95670

072-0410-019
Devin Davis
Po Box 901343
Kula, HI 96790

072-0410-023
Nolasco 2007 Family Trust
Po Box 1188
Roseville, CA 95678

072-0410-024
Malcolm Rancho Cordova Llc
92 Natoma St 400
San Francisco, CA 94105

072-0410-028
Edward Rincon
3900 Arden Oaks Ln
Sacramento, CA 95864

072-0410-041
Shaw Albert T & Patricia & Tr
Po Box 907
Concord, CA 94522

072-0410-047
Thomas Carver
15008 Anillo Way
Rancho Murieta, CA 95683

072-0410-050
Ethan Conrad
1300 National Dr 100
Sacramento, CA 95834

ATTACHMENT 4

072-0410-059
Peter & Debra Winterling
3450 Palmer Dr 4-251
Cameron Park, CA 95682

072-0410-090
Ferris Browning
18500 N Allied Way
Phoenix, AZ 85054

072-0410-091
Shaw 1989 Revocable Trust
Po Box 907
Concord, CA 94522

072-0410-096
William Heinselman & Sang Tran
3201 Oselot Way
Rancho Cordova, CA 95670

072-0450-056
Alan Salmen
400 Capitol Mall 27Th
Sacramento, CA 95814

072-0450-058
Younger Riggs Family Trust
4504 Martsmith Way
Fair Oaks, CA 95628

072-0450-059
Voll Family Trust
558 Canyon Rd
Emerald Hills, CA 94062

072-0450-060
Ronald Junkert
125 Burnham Ct
Folsom, CA 95630

072-0640-019
Mark & Kristin Minnie
5781 Saddlehorn Rd
Shingle Springs, CA 95682

072-0640-029
Furnas Family Trust
3249 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0640-031
Craig Revocable Living Trust
1791 Kaiser Ave
Irvine, CA 92614

072-0640-032
Jeanne Haley
9237 Central Ave
Orangevale, CA 95662

072-0640-033
Gregory Houck & Barbara Reed Houck
110 Brugler Ct
Folsom, CA 95630

072-1010-001
Voresis Holdings Llc
2725 Garfield Ave
Carmichael, CA 95608

072-1010-003
Diehl Family Revocable Trust
509 Twain Ct
Roseville, CA 95747

072-1010-005
Skyline Group Corporation
786 El Pintado Rd
Danville, CA 94526

072-1010-028
Monier Park Owners Association
11350 Monier Park Pl
Rancho Cordova, CA 95742

47 Labels Printed

ATTACHMENT 4

072-0410-006
Current Resident
3267 Monier Cir
Rancho Cordova, CA 95742

072-0410-007
Current Resident
3287 Monier Cir
Rancho Cordova, CA 95742

072-0410-008
Current Resident
3291 Monier Cir
Rancho Cordova, CA 95742

072-0410-015
Current Resident
3291 Sunrise Blvd
Rancho Cordova, CA 95742

072-0410-016-0003
Current Resident
3250 Monier Cir
Rancho Cordova, CA 95742

072-0410-016-0004
Current Resident
3250 Monier Cir
Rancho Cordova, CA 95742

072-0410-016-0008
Current Resident
3250 Monier Cir
Rancho Cordova, CA 95742

072-0410-016-0009
Current Resident
3250 Monier Cir
Rancho Cordova, CA 95742

072-0410-016-0010
Current Resident
3250 Monier Cir
Rancho Cordova, CA 95742

072-0410-016-0016
Current Resident
3234 Monier Cir
Rancho Cordova, CA 95742

072-0410-017
Current Resident
3290 Monier Cir
Rancho Cordova, CA 95742

072-0410-018-0001
Current Resident
3298 Monier Cir
Rancho Cordova, CA 95742

072-0410-018-0002
Current Resident
3298 Monier Cir
Rancho Cordova, CA 95742

072-0410-018-0003
Current Resident
3298 Monier Cir
Rancho Cordova, CA 95742

072-0410-018-0004
Current Resident
3298 Monier Cir
Rancho Cordova, CA 95742

072-0410-018-0005
Current Resident
3298 Monier Cir
Rancho Cordova, CA 95742

072-0410-018-0006
Current Resident
3300 Monier Cir
Rancho Cordova, CA 95742

072-0410-018-0007
Current Resident
3300 Monier Cir
Rancho Cordova, CA 95742

072-0410-018-0008
Current Resident
3300 Monier Cir
Rancho Cordova, CA 95742

072-0410-018-0010
Current Resident
3300 Monier Cir
Rancho Cordova, CA 95742

072-0410-018-0011
Current Resident
3300 Monier Cir
Rancho Cordova, CA 95742

072-0410-018-0014
Current Resident
3306 Monier Cir
Rancho Cordova, CA 95742

072-0410-018-0015
Current Resident
3306 Monier Cir
Rancho Cordova, CA 95742

072-0410-019
Current Resident
3324 Monier Cir
Rancho Cordova, CA 95742

072-0410-023
Current Resident
3236 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0410-024
Current Resident
3286 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0410-028
Current Resident
3310 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0410-041
Current Resident
3358 Monier Cir
Rancho Cordova, CA 95742

072-0410-047
Current Resident
3311 Monier Cir
Rancho Cordova, CA 95742

072-0410-050
Current Resident
3333 Sunrise Blvd
Rancho Cordova, CA 95742

ATTACHMENT 4

072-0410-059
Current Resident
3239 Monier Cir
Rancho Cordova, CA 95742

072-0410-090
Current Resident
3326 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0410-091
Current Resident
3350 Monier Cir
Rancho Cordova, CA 95742

072-0410-096
Current Resident
3286 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0450-056
Current Resident
3191 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0450-058
Current Resident
3195 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0450-059
Current Resident
3197 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0450-060
Current Resident
3199 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0640-019
Current Resident
3201 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0640-029
Current Resident
3241 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0640-031
Current Resident
3229 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0640-032
Current Resident
3225 Fitzgerald Rd
Rancho Cordova, CA 95742

072-0640-033
Current Resident
3217 Fitzgerald Rd
Rancho Cordova, CA 95742

072-1010-001
Current Resident
11368 Monier Park Pl
Rancho Cordova, CA 95742

072-1010-002
Current Resident
11366 Monier Cir
Rancho Cordova, CA 95742

072-1010-003
Current Resident
11362 Monier Park Pl
Rancho Cordova, CA 95742

072-1010-005
Current Resident
11354 Monier Park Pl
Rancho Cordova, CA 95742

072-1010-028
Current Resident
11368 Monier Cir
Rancho Cordova, CA 95742

Current Resident
48 Labels Printed

SACRAMENTO SANITATION DISTRICT
10060 GOETHE ROAD
SACRAMENTO CA 95827

SACRAMENTO REGIONAL COUNTY
SANITATION DISTRICT
10060 GOETHE ROAD
SACRAMENTO CA 95827

SACRAMENTO COUNTY WATER
AGENCY
10151 FLORIN ROAD
SACRAMENTO CA 95829

PG&E
2730 GATEWAY OAKS DRIVE
SACRAMENTO CA 95833

PG&E
343 SACRAMENTO STREET
AUBURN CA 95603

SMUD
6301 S STREET MS B304
SACRAMENTO CA 95817

SMUD
6301 S STREET MS B304
SACRAMENTO CA 95817

SMUD
6301 S STREET MS B404
SACRAMENTO CA 95817

SACRAMENTO METROPOLITAN FIRE
10545 ARMSTRONG AVE STE 310
MATHER CA 95655

FOLSOM CORDOVA UNIFIED SCHOOL
DISTRICT
1965 BIRKMONT DRIVE
RANCHO CORDOVA CA 95742

SACRAMENTO COUNTY WATER
AGENCY
827 7TH STREET ROOM 301
SACRAMENTO CA 95814

3287 Monier Cir. Parcel Split DD9743 – February 20, 2018 Tentative Parcel Map

Nicholas Sosa, Assistant Planner



CityOfRanchoCordova.org

1

Project Request

The Applicant is requesting a Tentative Parcel Map to divide an existing 1.986+/- acre developed parcel into two new parcels:

- **Lot A:** 0.969 acres with an existing 9,472 square foot building and storage yard
- **Lot B:** 1.017 acres with an existing 9,472 square foot building and storage yard

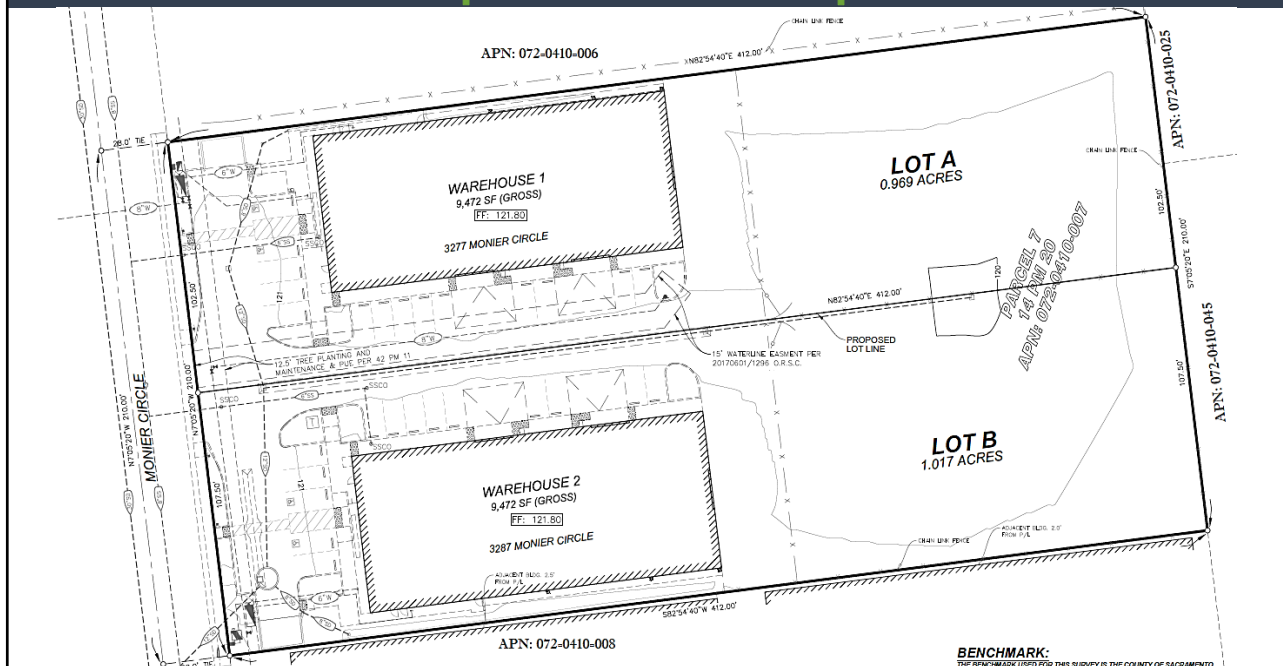
2

Project Site



3

Proposed Parcel Split



Project Aerial w/ division



Site Street View



Site Street View



QUESTIONS???

MEMORANDUM

DATE: February 20, 2018

TO: Honorable Mayor and Council Members

FROM: Darcy Goulart, Principal Planner

SUBJECT: RANCHO CORDOVA ZONING MAP AMENDMENT



PROPERTY OWNER: CSS Properties, LLC C/O Citadel Management 1508 Eureka Road, Suite 230 Roseville, CA 95661	APPLICANT: City of Ranch Cordova
PROJECT: 11650 Douglas Rezone FILE: City Initiated Zone Change LOCATION: 11650 Douglas Road APN: 067-0030-078-0000	

RECOMMENDATION

Introduce and waive first reading of Ordinance No. 3-2018 to rezone APN 067-0030-078-0000 to General Commercial (GC).

RESULT OF RECOMMENDED ACTION

The proposed zoning map amendment would change the existing zoning of M-1 (Light Industrial/Manufacturing) to GC (General Commercial) for consistency with the General Plan land use designation of Commercial Mixed Use (CMU).

ANALYSIS

The 4.38 acre site is currently zoned Light Industrial/Manufacturing (M-1) with a Commercial Mixed Use (CMU) General Plan designation. The M-1 zoning designation is not a compatible zone listed in the General Plan for the CMU land use designation. The problem this presents is that any proposal that comes forward requiring discretionary approval would have to be denied due to failure to meet a finding of consistency with the General Plan.

A representative for the property owner approached the City last year regarding the desire to potentially utilize the property for multi-family residential or commercial, which wouldn't be allowed under the M-1 zone. The request was discussed at a September 18, 2017 Council meeting. Other than a discussion regarding access to the property, the Council did not raise any concerns with a change in zone for the property.

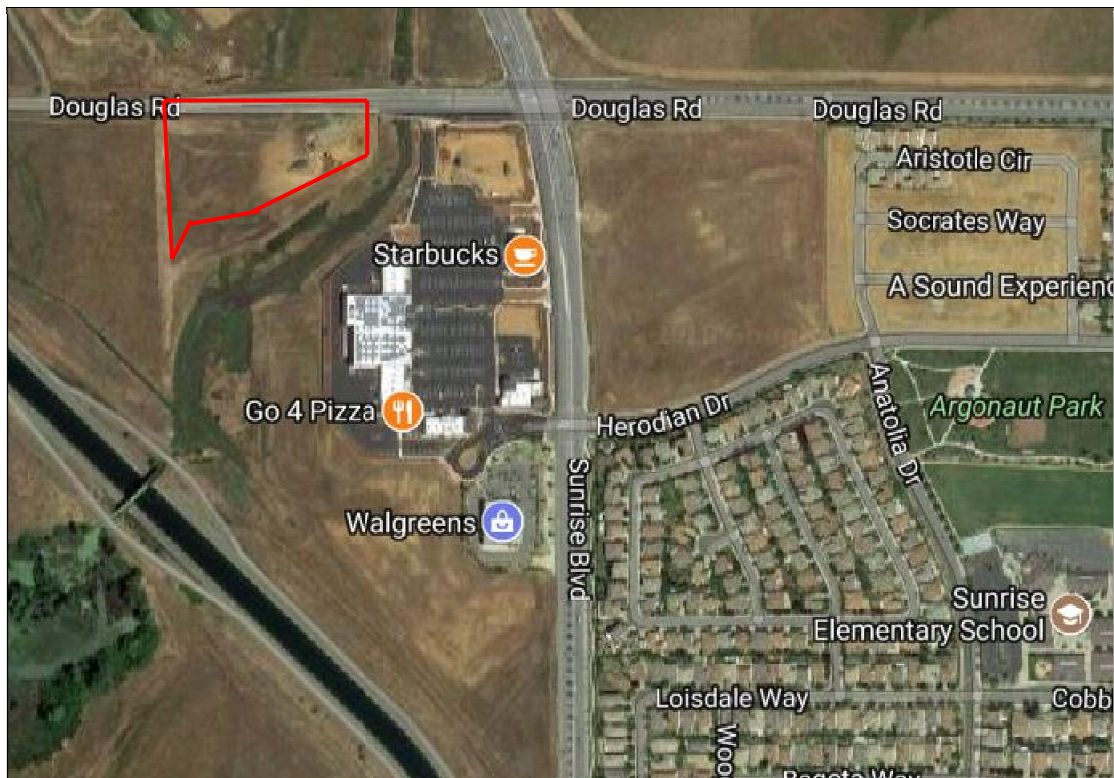
Figure 1: Location Map**Surrounding Land Use:**

Table 1 provides the current use, General Plan/Community Plan, and zoning of the project site and surrounding parcels. The proposed GC zoning designation is a compatible with surrounding development and zoning designations. Figure 2 and 3 depict the existing and proposed zoning.

Table 1: Surrounding Designations and Existing Uses

Location	Existing Use	General Plan Designation	Zoning Designation
11650 Douglas Road	Undeveloped Land	Commercial Mixed Use (CMU)	Light Industrial/Manufacturing (M-1)
North	CRPD land Outdoor Gun Range	Sunrise Blvd. South Planning Area	Park Open Space (POS/H)
East	Sunridge Shopping Center	Commercial Mixed Use (CMU)	General Commercial (GC)
South	Preservation stream corridor	Commercial Mixed Use (CMU)	Park Open Space Sunridge Specific Plan (POS SDSP)
West	Undeveloped land/wetlands	Public/Quasi Public (P/QP)	Light Industrial/Manufacturing (M-1)

Figure 2: Surrounding Zoning Map

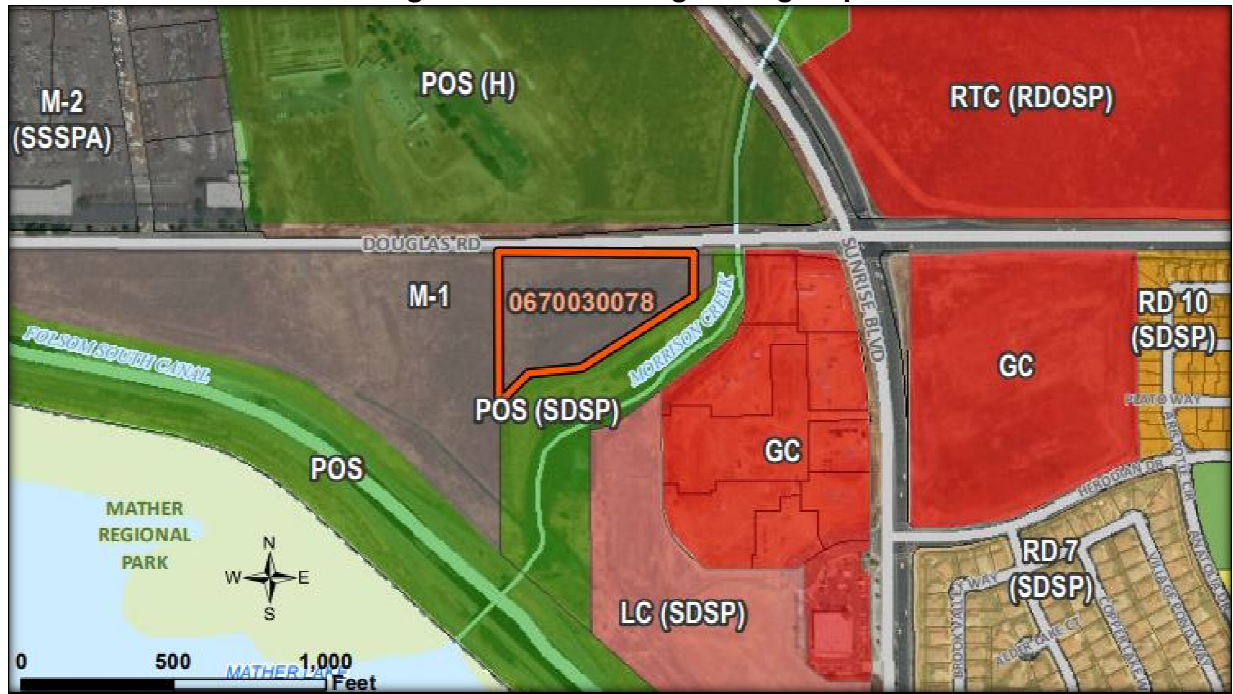
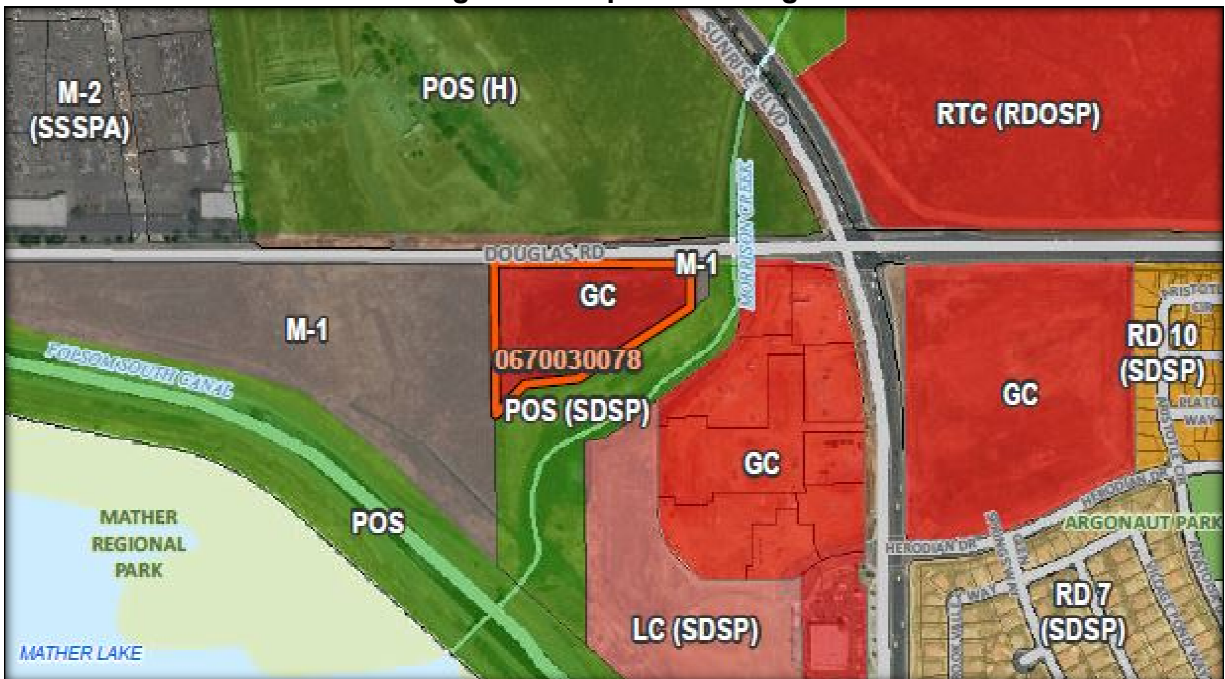


Figure 3: Proposed Zoning



FISCAL IMPACT

Staff anticipates that the rezone of the site for consistency with the General Plan will result in revenue created from a potential commercial or multifamily development.

ENVIRONMENTAL

The project is exempt from the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations, Chapter 3, Division 6 (State CEQA Guidelines) Section 15162 (Subsequent EIR). The subject property is designated as a commercial mixed use site in the adopted General Plan and analyzed as commercial in the General Plan EIR. A General Commercial zoning designation is a consistent zone listed in Table LU-2 General Plan/Zoning Consistency of the adopted General Plan. A change in zone would not result in any further environmental impacts on the site that weren't already contemplated in the General Plan EIR.

ATTACHMENTS

1. Ordinance 3-2018 amending the City's Zoning Map for the APN 067-0030-078-0000.
2. Exhibit A to the Ordinance – Zoning Map

ATTACHMENT 1**CITY OF RANCHO CORDOVA****ORDINANCE NO. 3-2018****AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA
AMENDING THE ZONING MAP FOR APN 067-0030-078-0000 TO GENERAL COMMERCIAL****THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA DOES ORDAIN AS FOLLOWS:****Section 1. Purpose and Declarations.**

WHEREAS, the project site is located on real property in the incorporated portions of the City of Rancho Cordova more particularly described as APN 067-0030-078; and

WHEREAS, the zoning of the property is M-1 (Light Industrial/Manufacturing) and has a General Plan land use designation of CMU (Commercial Mixed Use); and

WHEREAS, Table LU-2 in the General Plan does not list M-1 as a compatible zone for the CMU land use designation and therefore an amendment is necessary for consistency with the General Plan; and

WHEREAS, the certified Environmental Impact Report prepared for and adopted by City Council for the previously adopted General Plan, via City Council Resolution 116-2006, analyzed the project site as commercial and the rezone requires no further environmental review under State CEQA Guidelines Section 15161 as established in the staff report associated with this Ordinance; and

WHEREAS, on February 20, 2018, the City Council held a properly noticed public hearing for this Ordinance and considered all oral and written testimony.

Section 2: Findings. The City Council hereby finds:

A. **CEQA Compliance.** The project is exempt from the California Environmental Quality Act (CEQA) pursuant to Title 14 of the California Code of Regulations, Chapter 3, Division 6 (State CEQA Guidelines) Section 15162 (Subsequent EIR). The Rancho Cordova General Plan Final Environmental Impact Report (EIR) was certified in June 2006 by the Rancho Cordova City Council Resolution 116-2006. The General Plan EIR is a Program EIR (CEQA Guidelines section 15168). The subject property is designated as a commercial mixed use site in the adopted General Plan and analyzed as commercial in the General Plan EIR. A General Commercial zoning designation is a consistent zone listed in Table LU-2 General Plan/Zoning Consistency of the adopted General Plan. A change in zone would not result in any further environmental impacts on the site that weren't already contemplated in the General Plan EIR.

B. **The proposed amendment is consistent with the General Plan.** The proposed amendment to the Zoning Map from M-1 to GC is consistent with the General Plan land use designation of Commercial Mixed Use. Table LU-2 of the General Plan lists the compatible zones for each land use designation. A GC zone is a compatible zone listed in the table for a CMU land use designation. The existing M-1 zone is not listed as a compatible zone and therefore an amendment is necessary.

ATTACHMENT 1

C. **The proposed amendment would not be detrimental to the public interest, health, safety, convenience, or welfare of the City.** The amendment would not pose any risk to the public interest, health, safety, convenience or welfare of the City. The General Plan has contemplated the parcel as commercial since adoption of the plan in 2006. The amendment would result in consistency between the General Plan and zoning.

D. **The proposed amendment is internally consistent with other applicable provisions of this zoning code.** The amendment would rezone the parcel to a commercial zone. Any future development proposed on the site would need to adhere to the applicable zoning regulations for a GC zoned parcel, as listed in Title 23, Zoning Code.

Section 3. Amendments to the Zoning Map

The City Council hereby adopts an amendment to the Zoning Map as depicted in **Exhibit A**, attached and incorporated herein.

Section 4. Severability

If any provision of this Ordinance or the application thereof to any person or circumstance, is held invalid, the remainder of the Ordinance, including the application of such part or provision to other persons or circumstances shall not be affected thereby and shall continue in full force and effect. To this end, provisions of this Ordinance are severable. The City Council hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phrase hereof irrespective of the fact that any one or more sections, subsections, subdivisions, paragraphs, sentences, clauses, or phrases be held unconstitutional, invalid or unenforceable.

Section 5. Effective Date

Within fifteen (15) days after adoption, a Summary of this Ordinance shall be published once in the Grapevine Independent, or the Sacramento Bee, a newspaper of general circulation printed and published in Sacramento County and circulated in the City of Rancho Cordova, in accordance with Government Code Section 36933. This Ordinance shall take effect and be enforced thirty (30) days after its inception.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the ____ day of ____, 2018 by the following vote:

AYES:

NOES:

ABSENT:

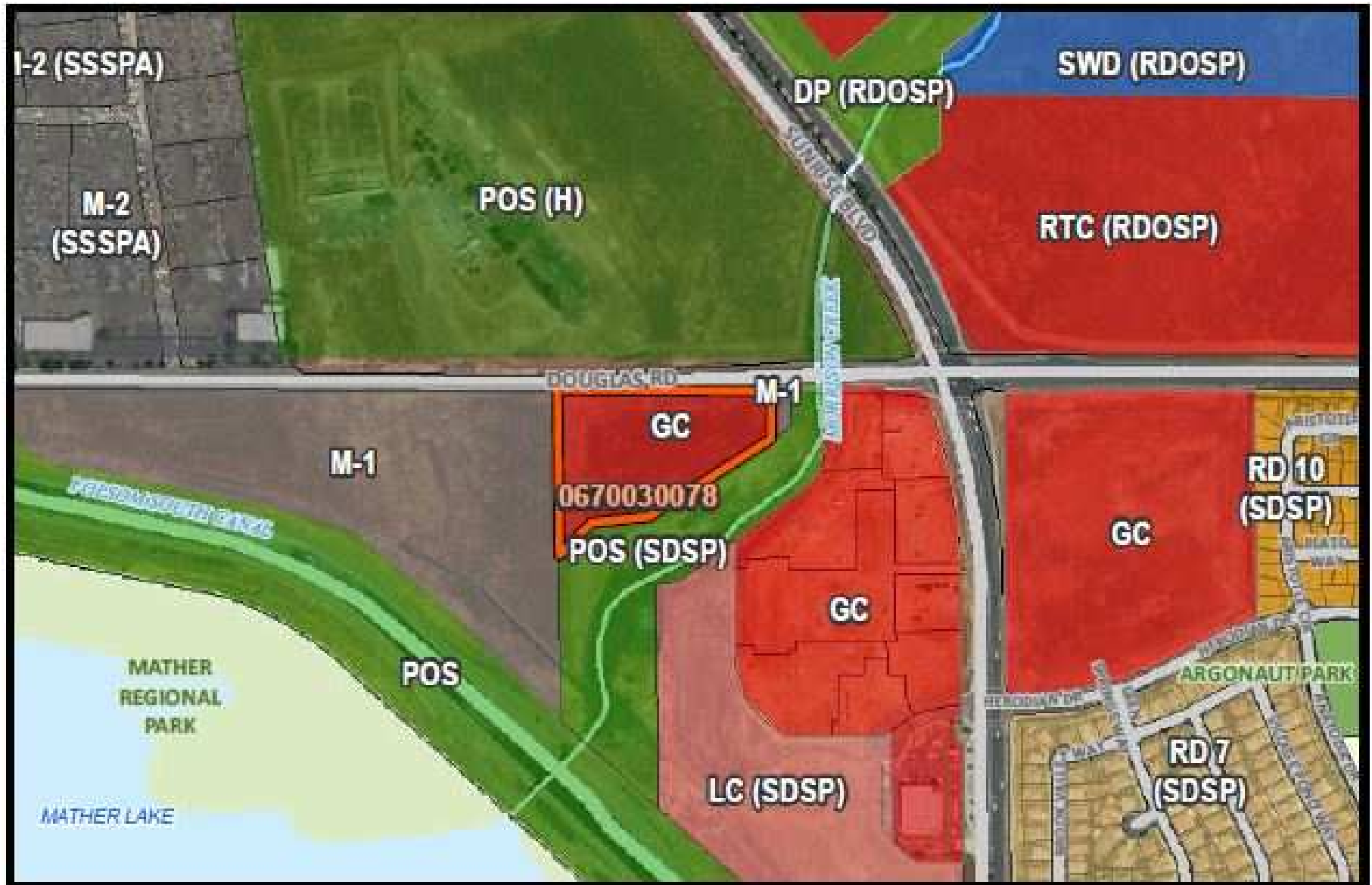
ABSTAIN:

Linda Budget, Mayor

ATTEST:

ATTACHMENT 1

Stacy Leitner, City Clerk



Ranch Cordova Zoning Map Amendment

Darcy Goulart,
Principal Planner
February 20, 2018



CityOfRanchoCordova.org

1

Project Request

Zoning Map Amendment:

- Rezone 11650 Douglas Road from M-1 (Light Industrial/Manufacturing) to GG (General Commercial) for consistency with the GP LU designation – Commercial Mixed Use.

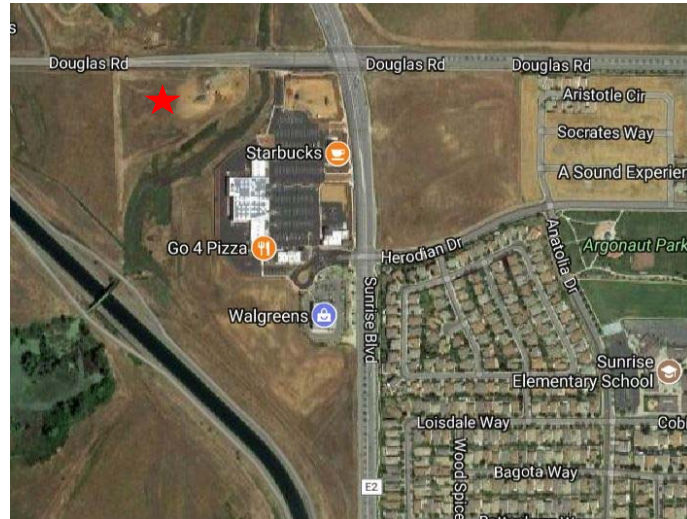
2

02-20-18 City Council Meeting Item 15.3 Supplemental PowerPoint Presentation

Project General Location

4.38 acres

South of Douglas Rd.,
west of Sunridge
Shopping Center



3

Existing Zoning



4

02-20-18 City Council Meeting
Item 15.3 Supplemental
PowerPoint Presentation

Proposed Zoning



5

Recommended Motions

“That City Council determine the project Categorically Exempt under Section 15162 and Introduce and waive first reading of Ordinance 3-2018 to rezone APN 067-0030-078-0000 to General Commercial.

6

02-20-18 City Council Meeting
Item 15.3 Supplemental
PowerPoint Presentation

THANK YOU

Questions???



CityOfRanchoCordova.org

7

MEMORANDUM

DATE: February 20, 2018
TO: Honorable Mayor and Council Members
FROM: Darcy Goulart, Principal Planner



SUBJECT: INTRODUCTION AND FIRST READING OF ORDINANCE 4-2018, AN ORDINANCE AMENDING TITLE 23 (ZONING CODE) OF THE RANCHO CORDOVA MUNICIPAL CODE REGARDING SPECIFIC ALLOWED USES, SELECT SITE PLANNING AND DEVELOPMENT STANDARDS, SPECIFIC USE PROVISIONS, PARKING, SIGNS AND UPDATED DEFINITIONS

RECOMMENDATION

Introduce and waive first reading of Ordinance 4-2018.

RESULT OF RECOMMENDED ACTION

The Ordinance would come back for second reading and adoption at the next regular City Council meeting. Approval of Ordinance 4-2018 would amend Title 23 (Zoning Code) of the City of Rancho Cordova Municipal Code. Specifically, the proposed amendments will clarify approval authority, update permit requirements, clarify minimum setback standards, address outdoor storage, create new development standards to ensure neighborhood compatibility, and clarify signage provisions.

BACKGROUND

In 2006, the City's first Zoning Code was adopted to replace the Sacramento County Code for local land use and development regulations. Since that time, there have been more than a dozen focused amendments to the Zoning Code as a result of legislative updates, to address specific issues/topics, and in response to applicant requests. These amendments included, but were not limited to, updated housing regulations and standards, creation of form based zoning provisions, adoption of new permits/entitlements or thresholds thereof, special use regulations (cardroom, check cashing, thrift store, hookah bars, medical marijuana dispensaries), and changes to reflect master plans or area planning efforts.

Late last year, staff began a new update of the Zoning Code which includes mostly minor clean ups and a few substantive amendments for the following purposes:

- To clarify ambiguities,
- To codify interpretations,
- To streamline procedures,
- To address local issues and concerns,
- To make sure that zoning is not an obstacle to economic development, and
- To make the document more user-friendly.

All of the proposed amendments are text changes only and do not propose any changes to the Zoning Map.

At the December 18, 2017 Council meeting, staff sought direction from Council on various sections of Title 23 that were in need of amendments. Some of these amendments were minor and more for clarification purposes. A few of the substantive items included new development standards for car washes, the re-use of cargo shipping containers for commercial purposes and RV/boat/trailer parking. Based on the input received from the Council at this meeting staff has prepared the attached Ordinance which incorporates amendments to various Articles of the Zoning Code.

The attached amendments do not include any amendments related to RV/boat/trailer parking. After the December Council meeting, various City staff began receiving calls and various forms of correspondence from residents voicing concerns over the parking of their RV, boat or trailer. Based upon the number of inquiries, staff felt it best that the item come back to the Council for a study session for further discussion and direction. It is anticipated that the item will be scheduled for the March 5th study session. At that time, staff will present the Council with some options for moving forward, based upon additional research.

Additionally, staff is continuing to work on appropriate design standards for the reuse of cargo shipping containers for commercial purposes. It is anticipated that amendments to the Design Guidelines to address appropriate site planning and design elements will be brought back to the City Council for consideration in early April.

ANALYSIS

Attachment 2, Exhibit A to the Ordinance includes all draft amendments to Title 23 Zoning Code. Draft amendments are shown with track changes with new draft language underlined and language proposed for removal with strike through. Only those chapters with proposed changes are included in the attached documents as excerpts from the Rancho Cordova Municipal Code. A summary of the changes is provided below.

Article 1 (Administration)

- Change Planning Director to Community Development Director

Article 3 (Zoning Districts, Allowable Uses, and General Development Standards)

- Delete Outdoor Commercial Recreation as a permitted use in the OIMU zone for consistency with previous amendments for this use in other mixed use office zones.
- Separate car wash and detailing into two uses on the allowable uses tables.
- Delete the 500-foot distance requirement from an intersection for a car wash and require car washes to obtain a conditional use permit instead of an administrative use permit.
- Reduce the interior side and rear setback for a General Commercial zone from 25 ft. to 0 ft. when abutting zones or uses other than agricultural and residential.

Article 7 (Site Planning and Development Standards)

- Provisions to allow a reduction of the rear and side yard setback for attached patio covers.
- Provided a graphic to clarify yard measurement area for maximum non-pervious surfaces on irregular shaped lots.
- Included parking provisions for tasting rooms.

- Cargo shipping container provisions for outdoor storage.
- Revisions to electronic reader board signs.

Article 9 (Special Uses Provisions)

- New development standards for car washes to ensure neighborhood compatibility.

Article 11 (Definitions)

- Revisions to definitions related to car washes, detailing and signs.

ENVIRONMENTAL ANALYSIS

The Rancho Cordova General Plan Final Environmental Impact Report (EIR) was certified in June 2006 by the Rancho Cordova City Council. The General Plan EIR is a Program EIR (CEQA Guidelines section 15168). The amendments to the City-Wide Zoning Code are activities within the scope of the General Plan Program EIR and no further environmental review is required. Further environmental review is not required because the proposed amendments do not meet the criteria for preparing a subsequent EIR under State CEQA Guidelines Section 15162, as detailed below.

First, the proposed amendments do not constitute substantial changes to the existing policies and actions in the General Plan. The proposed amendments are limited in nature and are not substantial changes to existing policies and actions contained in the General Plan. Overall, the project would not cause any new significant environmental impacts or substantially increase the severity of a previously identified significant impacts from the General Plan Final EIR (State CEQA Guidelines Section 15162[a][1]) that would require major revisions to the General Plan Final EIR. As these amendments simply reduce the number of allowable uses in the zone, all impacts would be nearly equivalent to or less than the impacts previously analyzed in the General Plan Final EIR.

Second, the City is not aware of any substantial changes in the circumstances that would cause any new significant impacts or substantially increase the severity of a previously identified significant impacts requiring major revisions to the General Plan EIR (State CEQA Guidelines Section 15162[a][2]). There have been no changes in the environmental conditions contemplated and analyzed in the General Plan EIR that would result in new or substantially more severe environmental impacts.

Third, there is no new information of substantial importance (which was not known or could not have been known at the time of the General Plan adoption in June 2006) that identifies: a new significant impact (condition “A” under State CEQA Guidelines Section 15162[a][3]); a substantial increase in the severity of a previously identified significant impact (condition “B” State CEQA Guidelines Section 15162[a][3]); mitigation measures or alternatives previously found infeasible that would now be feasible and would substantially reduce one or more significant effects of the General Plan; or mitigation measures or alternatives which are considerably different from those analyzed in the General Plan EIR which would substantially reduce one or more significant effects on the environment (conditions “C” and “D” State CEQA Guidelines Section 15162[a][3]). None of the “new information” conditions listed in the State CEQA Guidelines Section 15162[a][3] are present here to trigger the need for a subsequent EIR.

Further environmental review is not required because the proposed amendments do not meet the criteria for preparing a subsequent EIR or Negative Declaration under State CEQA Guidelines Section 15162.

FISCAL IMPACT

There is no anticipated fiscal impact of the proposed action on City finances.

ATTACHMENTS

1. Ordinance 4-2018
2. Exhibit A to the Ordinance - Amendments to Article 1 (Administration), Article 3 (Zoning Districts, Allowable Uses and General Development Standards), Article 7 (Site Planning and Development Standards) and Article 11 (Definitions) of the Municipal Code.
3. PowerPoint Presentation.

ATTACHMENT 1**CITY OF RANCHO CORDOVA****ORDINANCE NO. 4-2018**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA
AMENDING MUNICIPAL CODE TITLE 23 (ZONING) SPECIFIC ALLOWED USES, SELECT
SITE PLANNING AND DEVELOPMENT STANDARDS, SPECIFIC USE PROVISIONS,
PARKING, SIGNS AND UPDATED DEFINITIONS.**

THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA DOES ORDAIN AS FOLLOWS:**Section 1. Purpose and Declarations.**

WHEREAS, the City conducts periodic updates of the provisions of the Municipal Code to ensure compliance with current laws, changes in local policy, consistency with adopted plans and programs, clarify ambiguities, address changing market conditions, reflect best practices, and to address issues or concerns with current regulations; and

WHEREAS, certain amendments to the Title 23 (Zoning), Article 1 (Administration) are necessary to clarify approval authority for land use entitlements; and

WHEREAS, certain amendments to the Title 23 (Zoning), Article 3 (Zoning Districts, Allowable Uses and General Development Standards) are necessary to (1) update permit requirements relative to car washes and detailing; (2) address interior side setbacks for GC zoned parcels; and

WHEREAS, certain amendments to the Title 23 (Zoning), Article 7 (Site Planning and Development Standards) are necessary to (1) clarify setback measurements for parking surfaces; (2) address yard encroachments; (3) include parking standards for specific uses; (4) update vehicle parking surfaces in yard areas; (5) address outdoor storage provisions; (6) clarify signage provisions; and

WHEREAS, certain amendments to the Title 23 (Zoning), Article 9 (Specific Use Provisions) are necessary to create new development standards to ensure neighborhood compatibility; and

WHEREAS, certain amendments to the Title 23 (Zoning), Article 11 (Definitions) are necessary to provide clarification on specific uses; and

WHEREAS, the certified Environmental Impact Report prepared for and adopted by City Council for the previously adopted General Plan, via City Council Resolution 116-2006, was found to adequately address all potential environmental impacts associated with the adoption of the proposed Zoning Code amendments; and

WHEREAS, these amendments were analyzed and determined to be within the scope of the General Plan EIR and require no further environmental review under State CEQA Guidelines Section 15162 as established in the staff report associated with this Ordinance; and

WHEREAS, on February 20, 2018 the City Council held a properly noticed public hearing for this Ordinance and considered all oral and written testimony.

ATTACHMENT 1

Section 2: Findings. The City Council hereby finds:

A. **CEQA Compliance.** The Rancho Cordova General Plan Final Environmental Impact Report (EIR) was certified in June 2006 by the Rancho Cordova City Council City Council Resolution 116-2006. The General Plan EIR is a Program EIR (CEQA Guidelines section 15168). The amendments to the City-wide Zoning Code are activities within the scope of the General Plan Program EIR and no further environmental review is required. Further environmental review is not required because the proposed amendments do not meet the criteria for preparing a subsequent EIR under State CEQA Guidelines Section 15162.

B. **The proposed amendment is consistent with the General Plan.** The attached Municipal Code Amendment ("Amendment") is consistent with the General Plan, as required by Government Code Section 65454, because it advances numerous General Plan Policies and Goals, including: Goal LU.1 – Achieve a Balanced and Integrated Land Use Pattern Throughout the Community; Policies LU.1.2 and LU.1.3; Goal LU.6 – Ensure Development of the Planning Areas is Consistent with the City's Vision.

C. **The proposed amendment would not be detrimental to the public interest, health, safety, convenience, or welfare of the City.** The attached amendment is focused on reflecting best practices and new market conditions while ensuring land use compatibility. None of these proposed amendments will be detrimental to the public interest, health, safety, convenience, or welfare of the City as they implement state law, reflect best practices, streamline procedures, clear up ambiguities, and incorporate select new uses in a manner to ensure land use compatibility.

D. **The proposed amendments are internally consistent with other applicable provisions of this zoning code.** The attached Amendments have been reviewed for consistency with the entirety of the Municipal Code and is consistent with other applicable provisions of the Municipal Code.

Section 3. Amendments to Title 23

The City Council hereby adopts amended Municipal Code Title 23 (Zoning) as shown in **Exhibit A** and incorporated herein.

Section 4. Severability

If any provision of this Ordinance or the application thereof to any person or circumstance, is held invalid, the remainder of the Ordinance, including the application of such part or provision to other persons or circumstances shall not be affected thereby and shall continue in full force and effect. To this end, provisions of this Ordinance are severable. The City Council hereby declares that it would have passed each section, subsection, subdivision, paragraph, sentence, clause or phrase hereof irrespective of the fact that any one or more sections, subsections, subdivisions, paragraphs, sentences, clauses, or phrases be held unconstitutional, invalid or unenforceable.

Section 5. Effective Date

Within fifteen (15) days after adoption, a Summary of this Ordinance shall be published once in the Grapevine Independent, or the Sacramento Bee, a newspaper of general circulation printed and published in Sacramento County and circulated in the City of Rancho Cordova, in

ATTACHMENT 1

accordance with Government Code Section 36933. This Ordinance shall take effect and be enforced thirty (30) days after its inception.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the ____ day of _____, 2018 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Linda Budge, Mayor

ATTEST:

Stacy Leitner, City Clerk

Rancho Cordova

Zoning Code Amendments

February 2018

Article 1

Administration

ATTACHMENT 2
Exhibit A to the Ordinance

Note to Reader: Proposed changes are shown in track changes with proposed deletions shown with ~~strikeout~~ and additions shown with an underline and red text. Section placeholders to indicate the sections between changed subsections remain the same are indicated with three stars (***).

Chapter 23.107

INTERPRETATION OF CODE

23.107.020 Rules of interpretation.

The director shall have the authority and responsibility to interpret terms, provisions, and requirements of this code according to the following:

A. Abbreviations. The following phrases, personnel, and document titles are shortened in this code:

City of Rancho Cordova	=	City
Community Development Director	=	Director
City council	=	Council
Planning department	=	Department

Article 3

Zoning Districts, Allowable Uses, and General Development Standards

ATTACHMENT 2
Exhibit A to the Ordinance

Chapter 23.313

MIXED-USE ZONING DISTRICTS

Table 23.313-1: Allowed Use and Permit Requirements for Mixed-Use Districts

Land Use Category	RMU	CMU	OPMU	OIMU	LIBP	VC	LTC	RTC	Specific Use Regulations
Residential Uses									
Adult Day Care Home	P	N	N	N	N	N	N	N	
Caretaker Housing	P	P	P	P	P	P	P	P	RCMC 23.901.020
Dwelling, Multifamily	P ¹	P ^{1, 2}	P ^{1, 2}	N	N	P ¹	P ¹	P ¹	
Dwelling, Accessory Unit	P	N	N	N	N	N	N	N	RCMC 23.901.060
Dwelling, Single-Family	P ¹	P ^{1, 2}	P ^{1, 2}	N	N	P ¹	P ¹	P ¹	
Dwelling, Two-Family	P ¹	P ^{1, 2}	P ^{1, 2}	N	N	P ¹	P ¹	P ¹	
Emergency Shelter	C	C	C	C	N	N	N	N	
Family Day Care Home, Small	P	N	N	N	N	N	N	N	
Family Day Care Home, Large ¹⁷	AUP	N	N	N	N	N	N	N	RCMC 23.901.080
Group Residential	AUP	N	N	N	N	N	N	N	
Home Occupations	P	P	P	N	N	P	P	P	RCMC 23.901.030
Live-Work Facility	P ¹	P ¹	P ¹	N	N	P ¹	P ¹	P ¹	RCMC 23.901.040
Residential Care Home, Small	P	N	N	N	N	N	N	N	
Residential Care Home, Large ¹⁸	AUP	N	N	N	N	N	N	N	RCMC 23.901.090
Transitional Housing	P	N	N	N	N	N	N	N	
Agriculture, Resource, and Open Space Uses									
Beekeeping	N	N	N	N	N	N	N	N	Chapter 8.12 RCMC
Recreation, Education, and Public Assembly Uses									
Clubs, Lodges, and Private Meeting Halls	P	P	P	P	AUP	P	P	P	

ATTACHMENT 2
Exhibit A to the Ordinance

Land Use Category	RMU	CMU	OPMU	OIMU	LIBP	VC	LTC	RTC	Specific Use Regulations
Community Centers/Civic Uses	P	P	P	P	AUP	P	P	P	
Indoor Amusement/Entertainment Facility	AUP	P	P	P	AUP	AUP	P	P	
Indoor Fitness and Sports Facility	AUP	P	P	P	AUP	AUP	P	P	
Libraries and Museums	P	P	P	P	P	P	P	P	
Outdoor Commercial Recreation	N	C	N	N	P	C	C	C	
Parks and Public Plazas	P	P	P	P	C	P	P	P	
Public Safety Facility	P	P	P	P	P	P	P	P	
Religious Institutions	P	P	P	P	P	P	P	P	
Schools, Private and Special/Studios	P	P	P	P	C	P	P	P	
Schools, Public	P	P	P	P	P	P	P	P	
Theaters and Auditoriums	C	P	P	P	N	AUP	P	P	
Urban Agriculture									
Aquaculture	P ²⁴	P ²⁴	P ²⁴	P ²⁴	P ²⁴	P ²⁴	P ²⁴	P ²⁴	RCMC 23.904.030
Community Garden, Public	C	C	C	C	C	C	C	C	RCMC 23.904.030
Community Garden, Private	P ²⁴	P ²⁴	P ²⁴	P ²⁴	P ²⁴	P ²⁴	P ²⁴	P ²⁴	RCMC 23.904.030
Market Garden	P ²⁴	P ²⁴	P ²⁴	P ²⁴	P ²⁴	P ²⁴	P ²⁴	P ²⁴	RCMC 23.904.030
Private Garden	P	P	P	P	P	P	P	P	RCMC 23.904.030
Urban Ag Stand	P ²⁵	P ²⁵	P ²⁵	P ²⁵	P ²⁵	P ²⁵	P ²⁵	P ²⁵	RCMC 23.904.030
Utility, Transportation, and Communication Use Listings									
Broadcasting and Recording Studios	N	P	P	P	P	N	N	N	
Bus and Transit Shelters	P	P	P	P	P	P	P	P	
Freight Yard/Truck Terminal	N	N	N	C	C	N	N	N	
Fuel Storage and Distribution	N	N	N	N	C	N	N	N	

ATTACHMENT 2
Exhibit A to the Ordinance

Land Use Category	RMU	CMU	OPMU	OIMU	LIBP	VC	LTC	RTC	Specific Use Regulations
Heliports	N	AUP	AUP	AUP	AUP	N	N	N	
Park and Ride Facility	C	P	P	P	P	C	C	P	
Parking Facility	AUP	P	P	P	P	AUP	P	P	
Telecommunication Facility	C	AUP/ C ²¹	AUP/C ²¹	AUP/ C ²¹	AUP/C ²¹	AUP/C ²¹	AUP/ C ²¹	AUP/ C ²¹	RCMC 23.907.020
Transit Facilities	N	N	N	C	P	N	N	N	
Transit Stations and Terminals	C	P	P	P	P	P	P	P	
Utility Facility and Infrastructure	AUP	AUP	AUP	AUP	AUP	AUP	AUP	AUP	RCMC 23.907.030
Retail, Service, and Office Uses²²									
Adult Day Care Facility	N	AUP	AUP	AUP	AUP	AUP	AUP	AUP	
Alcoholic Beverage Sales, Off-Site ¹⁶	N	C	C ²	C ²	C ²	C	C	C	
Ambulance Service	N	AUP	AUP	P	P	N	N	N	
Animal Sales and Grooming	AUP	P	N	N	N	P	P	P	
Art, Antique, Collectable	P ²	P	P ²	P ²	N	P	P	P	
Artisan Shops	AUP	P	P ²	P ²	P ²	P	P	P	
Banks and Financial Services	P ²	P	P	P	P	P	P	P	
Bars and Nightclubs ²³	C ³	C ³	C ^{2, 3}	C ^{2, 3}	C ^{2, 3}	C ³	C ³	C ³	
Bed and Breakfast Inns	P	P	N	N	N	N	N	N	
Brew Pub ²³	N	P	P ²	P ²	P ²	P	P	P	
Building Materials Stores and Yards	N	P ⁴	N	C ⁴	N	N	C ⁴	C ⁴	
Business Support Services	AUP ^{2, 4, 5}	P	P	P	AUP	P ⁵	P	P	
Call Centers	N	N	P	P	AUP	N	N	N	
Commercial Marijuana Uses	N	N	N	N	N	N	N	N	
Child Day Care Facility	P	AUP	AUP ²	AUP ²	AUP ²	P	C	C	
Consignment Store	N	P	N	N	N	N	AUP	N	
Convenience Stores	AUP ^{2, 26}	AUP ²⁶	AUP ^{2, 26}	AUP ^{2, 26}	AUP ^{2, 26}	AUP ²⁶	AUP ²⁶	AUP ²⁶	RCMC 23.910.020
Drive-In and Drive-Through Sales and	N	C ^{20, 21}	N	N	C ^{6, 20, 21}	C ^{20, 21}	C ^{20, 21}	C ^{20, 21}	RCMC 23.910.030

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Land Use Category	RMU	CMU	OPMU	OIMU	LIBP	VC	LTC	RTC	Specific Use Regulations
Service									
Equipment Sales and Rental	N	N	N	P	P	N	N	N	
Furniture, Furnishings, and Appliance Stores	N	P	N	N	N	N	C	P	
Garden Center/Plant Nursery	N	P	N	AUP	N	N	C	C	
Grocery Stores/Supermarkets	AUP ²	P	P ²	AUP ²	N	AUP ⁸	P	P	
Home Improvement Supplies	N	P ⁹	N	P	P	N	P ⁹	P ⁹	
Hotels and Motels	C ²	P	P	C	N	C	P	P	
Hotels and Motels, Extended Stay	C ²	C	C	C	N	C	C	C	
Kennels, Commercial	C ^{2, 4}	N	N	N	AUP ⁴	N	N	N	
Maintenance and Repair, Small Equipment	N	P	N	P	P	AUP	P	P	
Medical Services, General	AUP ²	P	P	P	P	P	P	P	
Medical Services, Extended Care	P	C	C	C	N	N	N	N	
Medical Services, Hospitals	N	P	P	P	P	P	P	P	
Mortuaries and Funeral Homes ¹⁵	N	P	N	N	P ¹⁵	N	N	N	
Neighborhood Market	P ²	P	P ²	AUP ²	N	P	P	P	
Offices, Business and Professional	P ²	P ²	P	P	N	P ²	P ²	P ²	
Offices, Accessory	P	P	P	P	P	P	P	P	
Personal Services	P ^{2, 5}	P	P ²	P ²	P ²	P	P	P	
Residential Care Facility	AUP	C	C	N	N	N	N	N	
Restaurants	P ²	P	P ²	P ²	P ²	P	P	P	
Retail, Accessory	P ²	P	P ⁶	P ⁶	P ⁶	P	P	P	
Retail, General	P ^{2, 11}	P	N	N	N	P	P	P	
Retail, Warehouse Club	N	P	N	N	N	N	C	P	
Smokers' Lounge, Hookah Bar, E-	N	N	N	N	N	N	N	N	RCMC 23.919.100

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Land Use Category	RMU	CMU	OPMU	OIMU	LIBP	VC	LTC	RTC	Specific Use Regulations
Cigarette Lounge, and Vapor Lounge									
Tasting Room, Off-Site ²³	N	P	P ²	P ²	P ²	P	P	P	
Veterinary Facility	AUP ²	P	N	N	AUP	AUP	P	P	
Automobile and Vehicle Uses									
Auto and Vehicle Sales and Rental	N	P ¹⁹	N	N	P ¹⁹	N	N	N	RCMC 23.913.040
Auto and Vehicle Sales, Wholesale	N	N	N	C	P	N	N	N	
Auto and Vehicle Storage	N	N	N	C ¹²	P ¹²	N	N	N	
Auto Parts Sales	N	P ^{11, 12}	N	N	P ^{11, 12}	N	N	N	
Car Washing	N	C	C	C	C	N	C	C	RCMC 23.913.050
Detailing/Waterless Car Wash	N	AUP	AUP	AUP	N	N	N	N	
Service Stations	N	AUP	C	C	P	N	C	C	
Vehicle Services, Major	N	N	N	C ¹²	P ¹²	N	N	N	
Vehicle Services, Minor	N	AUP ^{12, 13}	N	AUP ¹²	P ¹²	N	N	N	
Industrial, Manufacturing, and Processing Uses									
Agricultural Products Processing	N	N	N	N	C	N	N	N	
Artisanal and Specialty Manufacture, Display, and Sales	N	P	P	P	P	P	P	P	
Brewery, Winery, Distillery	N	AUP	AUP	AUP	AUP	AUP	AUP	AUP	
Manufacturing, Major	N	N	N	N	C ¹⁴	N	N	N	
Manufacturing, Minor	N	N	N	P	P	N	N	N	
Manufacturing, Small Scale	N	P	P	P	P	P	N	N	
Printing and Publishing	N	C	C	P	P	N	N	N	
Recycling Facility, Processing	N	N	N	N	C	N	N	N	
Recycling Facility, Scrap and Dismantling Facility	N	N	N	N	C	N	N	N	

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Land Use Category	RMU	CMU	OPMU	OIMU	LIBP	VC	LTC	RTC	Specific Use Regulations
Research and Development	N	N	P	P	P	N	N	N	
Storage, Personal Storage Facility	N	N	N	C ²⁷	P ²⁷	N	N	N	Chapter 23.915 RCMC
Storage, Warehouse	N	N	N	P	P	N	N	N	
Storage, Yards	N	N	N	P ¹⁴	P ¹⁴	N	N	N	
Wholesaling and Distribution	N	N	N	P ¹⁴	P ¹⁴	N	N	N	
Special Regulated Uses									
Card Rooms	N	P	C	C	C	N	N	N	RCMC 23.919.020
Check Cashing Businesses	N	P	N	N	N	N	N	N	RCMC 23.919.030
Massage Parlors, Massage Establishments	N	P ²⁸	N	N	N	N	N	N	Chapter 4.33 RCMC
Pawnshops	N	P	N	N	N	N	N	N	RCMC 23.919.040
Recycling Facility, Collection Facility	N	C	C	C	P	C	C	C	RCMC 23.919.050
Sexually Oriented Businesses	N	N	N	N	P	N	N	N	RCMC 23.919.060
Smoke Shops	N	P	N	N	C	N	N	N	RCMC 23.919.070
Tattoo Parlors	N	P	N	N	N	N	N	N	RCMC 23.919.080
Thrift Stores	N	P	N	AUP	AUP	N	N	N	RCMC 23.919.090

ATTACHMENT 2 Exhibit A to the Ordinance

Chapter 23.316

GENERAL COMMERCIAL AND INDUSTRIAL ZONES

**Table 23.316-1: Allowed Use and Permit Requirements for
General Commercial and Industrial Zoning Districts**

Land Use Category	GC	M-1	M-2	Specific Use Regulations
Residential Uses				
Caretaker Housing	P	P	AUP	RCMC 23.901.020
Dwelling, Multifamily	P	C	N	RCMC 23.901.070 (if senior independent living)
Emergency Shelters	C	C	C	
Home Occupations	P	P	N	RCMC 23.901.030
Live-Work Facility	P	P	N	RCMC 23.901.040
Mobile Home Park	C	N	N	RCMC 23.901.050
Single-Room Occupancy (SRO)	C	C	N	
Transitional Housing	P	P	N	
Agriculture, Resource, and Open Space Uses				
Beekeeping	N	N	N	Chapter 8.12 RCMC
Recreation, Education, and Public Assembly Uses				
Cemeteries, Mausoleums	C	C	C	
Clubs, Lodges, and Private Meeting Halls	P	P	P	
Indoor Amusement/Entertainment Facility	P	AUP	AUP	
Indoor Fitness and Sports Facility	P	AUP	AUP	
Libraries and Museums	P	P	C	
Outdoor Commercial Recreation	C	C	C	
Public Safety Facility	P	P	P	
Recreational Vehicle Parks	P	C	C	
Religious Institutions	P	AUP	AUP	
Schools, Private and Special/Studios	P	AUP ¹	AUP ¹	
Schools, Public	P	P	P	
Theaters and Auditoriums	P	C	C	
Urban Agriculture				
Aquaculture	P	P	P	RCMC 23.904.030

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Land Use Category	GC	M-1	M-2	Specific Use Regulations
Community Garden, Public	C	C	C	RCMC 23.904.030
Community Garden, Private	P	P	P	RCMC 23.904.030
Market Garden	P	P	P	RCMC 23.904.030
Private Garden	P	P	P	RCMC 23.904.030
Urban Ag Stand	P ¹¹	P ¹¹	P ¹¹	RCMC 23.904.030
Utility, Transportation, and Communication Use Listings				
Broadcasting and Recording Studios	P	P	P	
Bus and Transit Shelters	P	P	P	
Freight Yard/Truck Terminal	N	P ²	P ²	
Fuel Storage and Distribution	N	P ²	P	
Heliports	C	C	C	
Park and Ride Facility	P	P	P	
Parking Facility	P	P	P	
Telecommunication Facility	AUP	AUP	AUP	RCMC 23.907.020
Transit Facilities	N	P	P	
Transit Stations and Terminals	P	P	P	
Utility Facilities and Infrastructure	AUP	P	P	RCMC 23.907.030
Retail, Service, and Office Use Listings				
Alcoholic Beverage Sales ¹⁰	C ⁴	C ³	C ³	
Ambulance Service	AUP	AUP	AUP	
Animal Sales and Grooming	P	AUP	AUP	
Art, Antique, Collectable	P	AUP	AUP	
Artisan Shops	P	AUP	AUP	
Banks and Financial Services	P	AUP	AUP	
Bars and Nightclubs ¹⁰	C	C	C	
Brew Pub ¹⁰	P	AUP	AUP	
Building Materials Stores and Yards	P	P ²	P ²	
Business Support Services	P	P ²	P ²	
Call Centers	AUP	AUP	AUP	
Child Day Care Facility	P	C	N	
Commercial Marijuana Uses	N	N	N	
Consignment Store	P	N	N	

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Land Use Category	GC	M-1	M-2	Specific Use Regulations
Convenience Stores	P ¹²	C ¹²	C ¹²	RCMC 23.910.020
Drive-In and Drive-Through Sales and Service	P	C	C	RCMC 23.910.030
Equipment Sales and Rental	P ^{2,8}	P ^{2,8}	P	
Furniture, Furnishings, and Appliance Stores	P	P ²	AUP	
Garden Center/Plant Nursery	P	P ²	AUP	
Grocery Stores/Supermarket	P	AUP	AUP	
Home Improvement Supplies	P ²	P ²	P	
Hotels and Motels	P	N	N	
Hotels and Motels, Extended Stay	P	N	N	
Kennels, Commercial	AUP	AUP	AUP	
Maintenance and Repair, Small Equipment	P ²	P	P	
Medical Services, General	P	AUP	AUP	
Medical Services, Extended Care	P	N	N	
Medical Services, Hospitals	P	AUP	P	
Mortuaries and Funeral Homes	P	C	C	
Neighborhood Market	P	AUP	AUP	
Offices, Business and Professional	P	AUP	AUP	
Offices, Accessory	P ⁶	P ⁶	P ⁷	
Personal Services	P	AUP	AUP	
Restaurants ¹⁰	P	AUP	AUP	
Retail, Accessory	P ⁶	P ⁶	P ⁷	
Retail, General	P	AUP	AUP	
Retail, Warehouse Club	P	AUP	AUP	
Smokers' Lounge, Hookah Bar, E-Cigarette Lounge, Vapor Lounge	P	P	N	RCMC 23.919.100; specific distance and other requirements
Tasting Room, Off-Site ¹⁰	P	AUP	AUP	
Veterinary Facility	P	P ²	P ²	
Automobile and Vehicle Uses				
Auto and Vehicle Dismantling	N	N	C	RCMC 23.913.020
Auto and Vehicle Sales	AUP	AUP ⁵	AUP ⁵	RCMC 23.913.040
Auto and Vehicle Rental	P ⁹	P ⁹	P ⁹	RCMC 23.913.040
Auto and Vehicle Sales, Wholesale	AUP ⁵	AUP	AUP	RCMC 23.913.040

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Land Use Category	GC	M-1	M-2	Specific Use Regulations
Auto and Vehicle Storage	P ²	P ²	P ²	
Auto Parts Sales	P ²	P ²	P ²	
Car Washing	C	P	P	RCMC 23.913.050
Detailing/Waterless Car Wash	AUP	P	P	
Service Stations	C	C	C	RCMC 23.913.030
Vehicle Services, Major	P ²	P ²	P ²	
Vehicle Services, Minor	P ²	P ²	P ²	
Industrial, Manufacturing, and Processing Uses				
Agricultural Products Processing	N	C	P	
Artisanal and Specialty Manufacture, Display and Sales	P	AUP	AUP	
Brewery, Winery, Distillery	N	P	P	
Junk Tire Facility	N	N	P	RCMC 23.916.020
Manufacturing, Major	N	AUP ²	P	
Manufacturing, Minor	N	P ²	P	
Manufacturing, Small Scale	P	P ²	P	
Printing and Publishing	N	P	P	
Recycling Facility, Processing	N	AUP	P	
Recycling Facility, Scrap and Dismantling Facility	N	N	C	
Research and Development	N	P	P	
Storage, Personal Storage Facility	N	P ^{2, 13}	P ¹³	Chapter 23.915 RCMC
Storage, Warehouse	AUP	P ²	P	
Storage, Yards	N	N	P ²	
Wholesaling and Distribution	P	P ²	P	
Special Regulated Uses				
Card Rooms	N	C	C	RCMC 23.919.020
Check Cashing Businesses	N	N	N	RCMC 23.919.030
Massage Parlor, Massage Establishment	N	N	C ¹⁴	Chapter 4.33 RCMC
Pawnshops	N	N	C	RCMC 23.919.040
Recycling Facility, Collection Facility	N	AUP	P	RCMC 23.919.050
Sexually Oriented Businesses	N	P	P	RCMC 23.919.060
Smoke Shops	N	N	C	RCMC 23.919.070
Tattoo Parlors	N	N	C	RCMC 23.919.080

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Land Use Category	GC	M-1	M-2	Specific Use Regulations
Thrift Store	N	AUP	C	RCMC 23.919.090

Table 23.316-2: General Commercial and Industrial Zoning Districts Development Standards

Development Standards	GC	M-1	M-2
Setbacks (minimum):			
Front and Street-Side/Corner	25 ft	25 ft	25 ft
Side and Rear	0 ft	0 ft	0 ft
Side and Rear, Abutting Agricultural or Residential Use or Zone	25 ft	15 ft	15 ft
Height (maximum):			
All Other Parcels	100 ft ¹	40 ft ¹	100 ft ¹

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Chapter 23.325

OVERLAY ZONING DISTRICTS

Table 23.325-1: Allowed Use Provisions in the Convention Overlay Zoning District

Land Use Category	Convention Overlay Zoning District	Special Use Regulations
Residential Uses		
Caretaker Housing	C	
Dwelling, Multifamily	P ¹	
Dwelling, Single-Family	C	
Dwelling, Two-Family	C	
Home Occupations	C	RCMC 23.901.030
Live-Work Facility	C	RCMC 23.901.040
Recreation, Education, and Public Assembly Uses		
Clubs, Lodges, and Private Meeting Halls	P	
Convention Center	P	
Indoor Amusement/Entertainment Facility	P	
Indoor Fitness and Sports Facility	C	
Libraries and Museums	P	
Outdoor Commercial Recreation	C	
Parks and Public Plazas	P	
Public Safety Facility	P	
Religious Institutions	C	
Schools, Private and Special/Studios	P	
Schools, Public	P	
Theaters and Auditoriums	P	
Utility, Transportation, and Communication Use Listings		
Heliports	C	
Park and Ride Facility	C	
Telecommunication Facility	C	RCMC 23.907.020
Transit Stations and Terminals	C	
Utility Facilities and Infrastructure	C	RCMC 23.907.030

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Land Use Category	Convention Overlay Zoning District	Special Use Regulations
Retail, Service, and Office Uses		
Alcoholic Beverage Sales	C	
Banks and Financial Services	P	
Bars and Nightclubs	C	
Bed and Breakfast Inns	C	
Building Materials Stores and Yards	AUP	
Business Support Services	AUP	
Child Day Care Facility	C	
Commercial Marijuana Uses	N	
Drive-In and Drive-Through Sales and Service	N	RCMC 23.910.030
Grocery Stores/Supermarket	P	
Home Improvement Supplies	AUP	
Hotels and Motels	P	
Hotels and Motels, Extended Stay	C	
Medical Services, General	C	
Medical Services, Extended Care	C	
Medical Services, Hospitals	C	
Offices, Business and Professional	P	
Offices, Accessory	P	
Personal Services	P	
Restaurants	P	
Retail, Accessory	P	
Retail, General	P	
Veterinary Facility	C	
Automobile and Vehicle Uses		
Auto and Vehicle Sales and Rental	AUP	
Car Washing and Detailing	C	RCMC 23.913.050
Service Stations	C	
Vehicle Services, Minor	AUP	
Industrial, Manufacturing, and Processing Uses		
Brewery, Winery, Distillery	P	
Manufacturing – Small Scale	AUP	

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Land Use Category	Convention Overlay Zoning District	Special Use Regulations
Printing and Publishing	AUP	
Research and Development	AUP	

ATTACHMENT 2
Exhibit A to the Ordinance

Article 7

Site Planning and Development Standards

ATTACHMENT 2 Exhibit A to the Ordinance

Chapter 23.704

YARD MEASUREMENT AND PROJECTIONS

23.704.030 Allowed encroachments/projections into required yards.

The following encroachments shall be permitted; provided, that all such features and structures maintain a minimum three-foot setback from all property lines and a minimum distance of six feet from any other structure. Detached accessory structure standards and setbacks are stated in Chapter 23.734 RCMC (Accessory Structures).

A. Cornices, sills, eaves, canopies, awnings, and similar features may encroach into any required yard area a distance not to exceed 24 inches.

B. Window bays, including roof overhangs, having a minimum surface area of 50 percent glass, may encroach 24 inches into the required yard area when the finished floor of the window bay is at least 15 inches above the finished floor of the room.

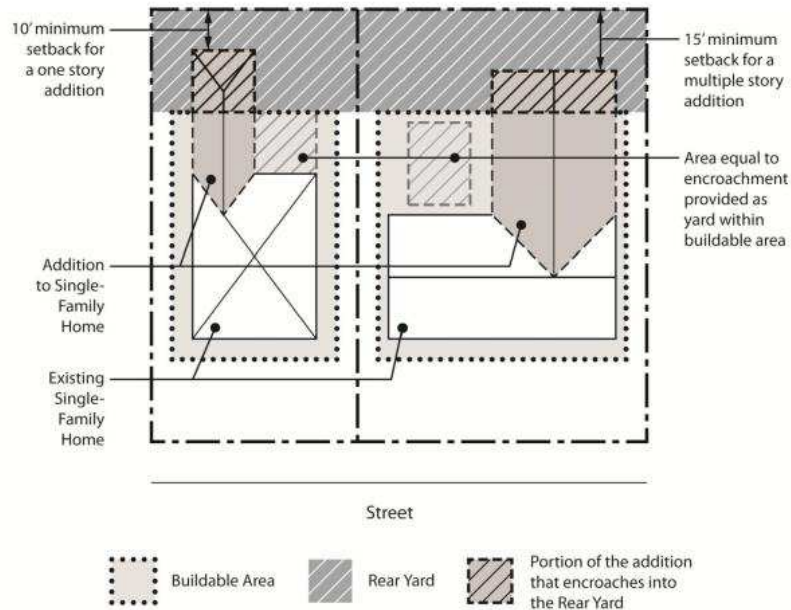
C. Fire escapes, outside stairways, balconies, and water heater enclosures projecting into a yard, court, or place not more than 36 inches and the ordinary projections of chimneys and flues may be permitted by the chief building official where the same are so placed as not to obstruct the light and ventilation of the subject property.

D. For single-family residential development, a portion of the main building may project into the required rear yard area; provided, that an equal area of the buildable portion of the lot (this area can be anywhere on the lot) is provided as a yard or court. See Figure 23.704-2 (Single-Family Encroachment). Minimum setbacks are required as follows:

1. One-story additions shall be set back a minimum of 10 feet from the rear property line.
2. Additions exceeding one story shall be set back a minimum of 15 feet from the rear property line.

ATTACHMENT 2 Exhibit A to the Ordinance

Figure 23.704-2: Single-Family Encroachment



E. Structures that are attached to the primary dwelling and that have limited or no enclosure (e.g., patio covers) are allowed to project into the required rear and interior side yard setback, provided they maintain a minimum five foot (5'0") setback from the rear and interior side property lines. This allowance shall not be subject to the requirements of subsection (D) of this section. Enclosing the attached structure would subject it to the requirements of subsection (D)(1) and (2).

[Ord. 4-2017 § 3 (Exh. B); Ord. 13-2013 § 4 (Exh. B); Ord. 12-2011 § 3 (Exh. A); Ord. 27-2008 § 1 (Exh. A § 4.2.040). Formerly 23.704.040].

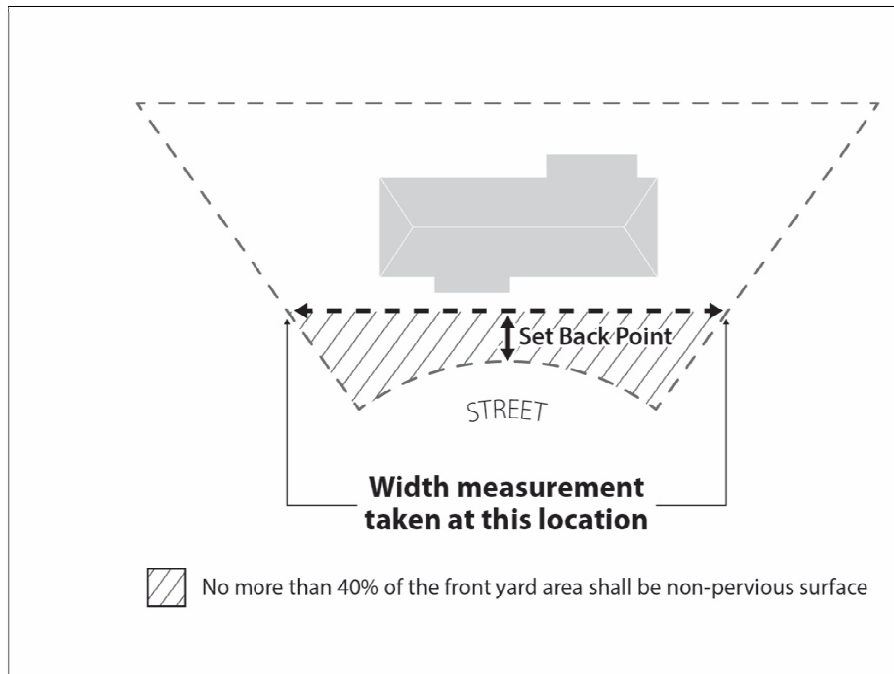
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Chapter 23.716

LANDSCAPING

**Figure 23.716-3: Non-pervious Surface Limits in Single-Family and Two-Family Residential Zones
– Irregular Shaped Lots**



ATTACHMENT 2 Exhibit A to the Ordinance

Chapter 23.719

PARKING AND LOADING

Table 23.719-1: Required Minimum Vehicle Ratios

Land Use Category	Vehicle Parking Spaces
Residential Uses	
Adult Day Care Home	None beyond single-family
Caretaker Housing	1/bedroom
Dwelling, Multifamily	
Studio and one-bedroom units	1.5/unit
Two- and three-bedroom units	2/unit
Four- or more bedroom units	2/unit
+ Guest parking	0.6/unit
Accessory Dwelling Unit ¹¹	1/unit
Junior Accessory Dwelling Unit	No minimum
Dwelling, Single-Family ^{1,2}	2/unit
Dwelling, Two-Family ^{1,2}	2/unit
Family Day Care Home, Large	1 additional
Family Day Care Home, Small	No minimum
Group Residential	None beyond single-family
Guest House	0 additional
Home Occupations ³	1 additional
Live-Work Facility	2/unit (plus 0.25/unit for guests)
Manufactured Home	2/unit
Mobile Home	2/unit
Mobile Home Park	2/unit
Residential Care Home	1 space per employee, plus 1 space/facility vehicle, plus 1 space/8 persons at facility capacity
Senior Independent Living Facility	0.5/unit (plus 0.1 per unit for guests)
Agriculture, Resource, and Open Space Uses	
Equestrian Facility	1/4 stables
Recreation, Education, and Public Assembly Uses	
Cemeteries, Mausoleums	1/4 seats ⁵

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Land Use Category	Vehicle Parking Spaces
Clubs, Lodges, and Private Meeting Halls	1/3 seats ⁵
Community Centers/Civic Uses	4/1,000 sf
Community Garden	1/5,000 sf lot area ⁴
Correctional Institution	Parking Study Required
Golf Courses ⁶	10/hole
Indoor Amusement/Entertainment Facility	4/1,000 sf
Indoor Fitness and Sports Facility	4/1,000 sf
Libraries and Museums	3/1,000 sf
Outdoor Commercial Recreation	2/1,000 sf ⁷ or 1/4 seats or person capacity, whichever is greater
Parks and Public Plazas (less than 10 acres)	No minimum
Parks (10 acres or larger)	5% of total site area ^{4,7}
Public Safety Facility	4/1,000 sf
Recreational Vehicle Parks	1.5/site
Religious Institutions	0.3/seat
Resource-Related Recreation	1/10,000 sf land area, minimum 4 spaces
Schools, Public	
Preschool facilities and kindergartens	1/employee plus 1 per classroom, or 1/3 seats in assembly area, whichever is greater
Elementary or middle schools	1/employee plus 1 per classroom, or 1/3 seats in assembly area, whichever is greater
High schools	1/employee plus 1/3 students in 11th and 12th grades; or 1/3 seats in main auditorium
Colleges	1 space/employee + 1 space/2 students; or 1/3 seats in largest assembly area
Commercial schools	1 space/employee + 1 space/2 students; or 1/3 seats in largest assembly area
Stadiums/Arenas	Special review of parking required
Theaters and Auditoriums	0.3/seat ¹⁰
Utility, Transportation, and Communication Use Listings	
Airport	Parking Study Required
Broadcasting and Recording Studios	3.2/1,000 sf
Heliports	1/landing pad
Park and Ride Facility	N/A
Parking Facility	N/A
Telecommunication Facility	0.5/1 employee
Utility Facilities and Infrastructure	0.5/1 employee
Retail, Service, and Office Uses	

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Land Use Category	Vehicle Parking Spaces
Adult Day Care Facility	1 space/employee, plus 1 space/facility vehicle, plus 1 space/8 persons at facility capacity
Alcoholic Beverage Sales	3.6/1,000 sf
Ambulance Service	3.2/1,000 sf
Animal Sales and Grooming	3.6/1,000 sf
Art, Antique, Collectable	3.6/1,000 sf
Artisan Shops	3.6/1,000 sf
Banks and Financial Services	3.2/1,000 sf
Bars and Nightclubs	1 per 3 fixed seats, or 1/50 sf of net floor area of assembly space
Bed and Breakfast Inns	1/room
Building Materials Stores and Yards	1/1,000 sf
Business Support Services	3.2/1,000 sf
Call Centers	6/1,000 sf
Child Day Care Facility	1 space/employee, plus 1 space/facility vehicle, plus 1 space/8 persons at facility capacity
Convenience Stores	3.6/1,000 sf
Drive-In and Drive-Through Sales and Service (not including restaurants)	1 space/2 employees during period of greatest employment
Equipment Sales and Rental ⁸	1/250 sf interior sales area, plus 1/1,000 sf exterior display area
Furniture, Furnishings, and Appliance Stores	1/1,000 sf
Garden Center/Plant Nursery	1/300 sf retail sales area, plus 1/1,000 sf exterior display area
Grocery Stores/Supermarket	3.5/1,000 sf
Home Improvement Supplies	2.5/1,000 sf
Hotels and Motels	1/room
Kennels, Commercial	3.2/1,000 sf
Maintenance and Repair, Small Equipment	3.2/1,000 sf
Medical Services, General	3.9/1,000 sf
Medical Services, Extended Care	1 space/employee, plus 1 space/facility vehicle, plus 1 space/8 persons at facility capacity
Medical Services, Hospitals ⁹	2/bed or 2/1,000 sf
Mortuaries and Funeral Homes ⁵	1/3 seats
Neighborhood Market	3/1,000 sf
Offices, Business and Professional	3/1,000 sf
Offices, Accessory	3/1,000 sf
Personal Services	3.2/1,000 sf
Residential Care Facility	1 space/employee, plus 1 space/facility vehicle, plus 1 space/8

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Land Use Category	Vehicle Parking Spaces
	persons at facility capacity
Restaurants	1/3 seats
Retail, Accessory	3.6/1,000 sf
Retail, General	3.6/1,000 sf
Retail, Warehouse Club	3.6/1,000 sf
Veterinary Facility	3.2/1,000 sf
Regional Shopping Center	5.5/1,000 sf
<u>Tasting Room</u>	<u>1 space/300 sf</u>
Automobile and Vehicle Uses	
Auto and Vehicle Dismantling	3 spaces, plus 1 space/employee
Auto and Vehicle Sales and Rental	2.5/1,000 sf, plus 1 space per rental vehicle
Auto and Vehicle Sales, Wholesale	1/1,000 sf, minimum 2 spaces
Auto and Vehicle Storage	1/2,000 sf, plus 1 space/company-operated vehicle
Auto Parts Sales	3.6/1,000 sf
Car Washing and Detailing	3 spaces minimum + 2 per bay
Service Stations	3 spaces minimum + 2 per bay
Vehicle Services	2 per service bay
Industrial, Manufacturing, and Processing Uses	
Agricultural Products Processing	1.6/1,000 sf, plus 1 space/company-operated vehicle
Manufacturing	1.6/1,000 sf, plus 1 space/company-operated vehicle
Office (as accessory to a use in this category)	2.7/1,000 sf
Printing and Publishing	1/1,000 sf, plus 1 space/company-operated vehicle
Recycling Facility, Processing	1/200 sf office space, plus 1 space/employee
Recycling Facility, Scrap and Dismantling Facility	1/1,000 sf, plus 1 space/company-operated vehicle
Research and Development	3/1,000 sf
Storage, Personal Storage Facility	1/2,000 sf, plus 1 space/company-operated vehicle
Storage, Warehouse	0.5/1,000 sf, plus 1 space/company-operated vehicle
Wholesaling and Distribution	0.5/1,000 sf, plus 1 space/company-operated vehicle
Special Regulated Uses	
Card Rooms	1/2 seats in play area
Check Cashing Businesses	3.6/1,000 sf
Massage Parlor	3.2/1,000 sf
Pawnshops	3.6/1,000 sf

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Land Use Category	Vehicle Parking Spaces
Recycling Facility, Collection Facility	3.2/1,000 sf
Sexually Oriented Businesses	1/3 fixed seats or 4/1,000 sf, whichever is greater
Smoke Shops	3.6/1,000 sf
Tattoo Parlors	3.6/1,000 sf
Thrift Store	3.6/1,000 sf

23.719.130 Standards for off-street parking for private residences.

Off-street parking and driveways for detached dwellings, manufactured homes, single-family attached dwellings, and two-unit attached dwellings shall meet the following requirements:

C. Parking in excess of the required parking (e.g., driveways) may be provided within the front and street side yard setback, as follows:

1. Vehicle parking (including driveways) within the front yard area or as seen by the public street in residential areas shall be provided on a lasting, durable surface (e.g., concrete, asphalt, ~~grasscrete~~, or similar material). Permeable paving materials, such as paver stones, pervious concrete, ~~paving strips~~ or interlocking grids with gravel, are permitted as an alternative to a standard asphalt or concrete surface. Use of ~~grasscrete~~, ribbon drive (Hollywood strips) or other acceptable alternatives as determined by the director may be allowed for purposes of a driving surface that leads to a legal parking area outside of the front yard area or as seen by the public street. ~~to meet the requirement. However, n~~No parking is allowed on these features within the front yard area or as seen by the public ~~adjoining~~-street.

Chapter 23.728

OUTDOOR DISPLAY, SALES, AND STORAGE

Sections:

23.728.010 Purpose.

23.728.020 Permit requirements and exemptions.

23.728.030 Development standards.

23.728.010 Purpose.

The purpose of this chapter is to regulate permanent and temporary outdoor display, sales, and storage uses. The intent of these regulations is to encourage outdoor displays and activities that are compatible with associated and nearby uses and do not obstruct pedestrian or vehicle circulation or create an unsightly appearance of unrestricted clutter. [Ord. 4-2017 § 3 (Exh. B); Ord. 12-2011 § 3 (Exh. A); Ord. 27-2008 § 1 (Exh. A § 4.10.010)].

23.728.020 Permit requirements and exemptions.

The following outdoor activities shall be subject to the permit requirements listed herein:

- A. Permanent Outdoor, Display, and Sales. Permanent outdoor display, and sales are permitted (consistent with the allowed use provisions of the underlying zoning district), subject to zoning

ATTACHMENT 2

Exhibit A to the Ordinance

certification, when all related activities are developed and operated consistent with the standards of this chapter.

- B. Permanent Outdoor Storage. Permanent outdoor storage is permitted as an incidental use to a principal use in all zoning designations, except for agricultural and residential zoning districts. If not part of the original development permit for the principal use, permanent outdoor storage may be permitted subject to a minor design review. In all cases, permanent outdoor storage shall be consistent with the development standards of this chapter.

C. Temporary Outdoor Storage, Display, and Sales. A temporary use permit is required for all temporary outdoor storage, displays, and sales, unless otherwise specified in Chapter 23.922 RCMC (Temporary Uses). Such uses shall be consistent with the development standards of this chapter and shall also be consistent with the standards for temporary uses (Chapter 23.922 RCMC, Temporary Uses). [Ord. 4-2017 § 3 (Exh. B); Ord. 12-2011 § 3 (Exh. A); Ord. 27-2008 § 1 (Exh. A § 4.10.020)].

23.728.030 Development standards.

A. General Development Standards for All Activities. The following development standards apply to all outdoor display, sales, and storage activities:

1. Location. Outdoor display, sales, and storage activities shall not be located within any public right-of-way (unless an encroachment permit has been issued), in required parking spaces or within designed vehicle drive aisles, or within required landscape planter areas. Outdoor display, sales, and storage activities may also not disrupt or impede required pedestrian circulation paths as required by Chapter 23.722 RCMC (Standards for Pedestrian-Oriented Spaces) or the building code.
2. Hours of Operation. Except as otherwise provided, hours of operation for outdoor display, sales, and storage activities shall be consistent for the hours of operation for the corresponding primary use.
3. Noise. Any noise generated by the outdoor display, sales, or storage activity shall be consistent with the city's noise ordinance (Chapter 6.68 RCMC, Noise Control).
4. Signs. No additional business identification or advertising signs for the outdoor display, sales, or storage activity may be permitted above the maximum allowable sign area for the corresponding primary use, except when the outdoor activity is the primary use, as determined by the director (e.g., Christmas tree lot).
5. Maintenance. Outdoor activity areas shall be kept free of garbage and other debris.

B. Standards for Outdoor Display and Sales. The following development standards shall apply to all permanent and temporary outdoor display and sales activities:

1. Associated with the Primary Use. All outdoor display and sales activities shall be associated with the primary use of the property. Only those goods and services associated with the primary use may be stored, sold, or displayed. All outdoor display and sales activities that are independent of the primary use shall be considered their own primary use and regulated as such (e.g., seasonal sales as a temporary use requiring a temporary use permit).
2. Maximum Area. Unless otherwise approved in conjunction with development permits, the area used for permanent outdoor display and sales of materials shall not exceed 10 percent of the gross floor area of the corresponding commercial building. The following uses and activities are specifically exempt from this requirement, provided all other development standards are satisfied:
 - a. Vehicle and equipment sales and rentals (e.g., automobile, boat, RV, construction equipment, etc.), provided storage and display is limited to vehicles offered for sale or rental only.
3. Time Limit for Temporary Activities. See the provisions of Chapter 23.922 RCMC (Temporary Uses) for duration and permit requirements for temporary promotional sales.

C. Standards for Outdoor Storage. The following development standards shall apply to all permanent and temporary outdoor storage activities:

ATTACHMENT 2

Exhibit A to the Ordinance

1. Location. Outdoor storage may not be located within any required front or street side yard for the underlying zoning district within which the activity is located.
2. Height Limitation. The height of stacked materials and goods shall be no greater than that of any building, wall, fence, or gate enclosing the storage area. For additional height limitations for recycling and junk tire facilities, see RCMC 23.916.020 (Junk tire facility). For additional height limitations for automotive dismantling, see RCMC 23.913.020 (Automobile dismantling).
3. Screening. Screening of outdoor storage shall be consistent with RCMC 23.731.080(A)(7) (Outdoor Equipment, Storage, and Work Areas).
4. Cargo Shipping Containers. Cargo Shipping Containers may be utilized for outdoor storage of goods and materials in all zoning districts, except agricultural and residential zoning districts and subject to the development standards of this Chapter.[Ord. 4-2017 § 3 (Exh. B); Ord. 12-2011 § 3 (Exh. A); Ord. 27-2008 § 1 (Exh. A § 4.10.030)].

ATTACHMENT 2 Exhibit A to the Ordinance

Chapter 23.743

SIGNS

23.743.050 Prohibited signs.

The signs listed in this section are inconsistent with the purposes and standards of this chapter as described below and as such are prohibited in all zoning districts, unless specifically authorized by another provision of this chapter:

Q. Reserved

S. Electronic message and graphic display sign, except as provided for in RCMC 23.743.065 (Standards for electronic message and graphic display signs).

T. Signs with fluctuating illumination, including any changes in light intensity or use of intermittent, strobe, or moving light that does not fall under the definition of another sign type (e.g., video display sign), unless approved under Section 23.743.065

23.743.065 Standards for electronic message signs.

B. Development Standards. The following provisions apply to electronic message signs:

7. Signs are not permitted as fixed attachments to or as part of the building façade unless they are not visible in the public right of way. Temporary projection onto a building façade is permitted and does not violate this code.

ATTACHMENT 2
Exhibit A to the Ordinance

Article 9

Special Use Provisions

ATTACHMENT 2 Exhibit A to the Ordinance

Article 9. Specific Use Provisions

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ATTACHMENT 2 Exhibit A to the Ordinance

Chapter 23.913

AUTOMOTIVE AND VEHICLE USES

23.913.050 Car Washes

A. Purpose. The purpose of this section is to regulate car washes with development standards that address the mitigation of traffic, congestion, and noise.

B. Applicability. Development standards herein shall apply to all new primary or accessory car wash facilities and will be reviewed in conjunction with the required conditional use permit and design review application.

C. Development and Design Standards. The following standards shall be the minimum requirements for all car wash facilities. Deviations from these standards may be considered as part of a conditional use permit.

1. Drive Aisles. The minimum standard for drive aisles are as follows:
 - a. Aisles shall have a 12-foot minimum width on curves and an 11-foot minimum width on straight sections.
 - b. Aisles shall provide a minimum of 60 feet reservoir space.
 - c. Aisle entrances and exits shall be at least 25 feet from an intersection of public rights-of-way, measured at the closest intersecting curbs and at least 25 feet from the curb-cut on an adjacent property.
 - d. Aisles shall be separated from the site's ingress and egress routes or access to a parking space.
 - e. Landscaping of aisles shall be consistent with the requirements of RCMC 23.716.060 (C) (Screening of Drive-through aisles).
2. Site Layout. The building shall be oriented on the site to minimize visibility of the car wash entrance from public rights-of-way.
3. Hours of Operation. Car wash facilities shall not be allowed to operate 24 hours per day.
4. Noise. Vacuums shall be equipped with automatic shut off timers to prevent use when the facility is closed. Vacuums shall be located a minimum of twenty five (25) feet from any residentially zoned property or use

ATTACHMENT 2
Exhibit A to the Ordinance

Article 11

Definitions

ATTACHMENT 2 Exhibit A to the Ordinance

Chapter 23.1104

GENERAL DEFINITIONS

23.1104.040 Land use definitions.

“Car washing” means permanent, drive-through, self-service, and/or attended car washing establishments, including fully mechanized facilities. May include detailing services. Temporary car washes (e.g., fundraising activities generally conducted at a service station or other automotive-related business, where volunteers wash vehicles by hand, and the duration of the event is limited to one day) are not part of this use classification.

“Detailing or waterless car wash” means a facility that offers interior or exterior cleaning of chrome trim, windows, wheels and other visible components on a vehicle’s exterior. Cleaning typically includes the use of pre-mixed cleaners that are sprayed on and wiped off and very little use of water.

23.1104.050 Sign definitions.

“Changeable copy sign” means a sign or portion of a sign with characters, letters, or illustrations that can be changed or rearranged without altering the face or the surface of the sign. A sign on which the message changes more than once per day shall be considered an animated sign and not a changeable copy sign. “Examples include, but are not limited to gas station pricing, theater marquis signs,

“Electronic message or graphic display sign” means a sign or portion of a sign that displays still, scrolling, moving or flashing text or graphic images with text, electronic, static images, static graphics or static pictures, with or without text information, generated by a number of small matrix elements using different combinations of light emitting diodes (LEDs), fiber optics, light bulbs or other illumination devices within the display area where the message change sequence is accomplished immediately or by means of fade, re-pixelization or dissolve modes. Electronic graphic display signs include computer programmable, microprocessor-controlled electronic or digital displays. An electronic message or graphic display sign could be used as a message delivery method for a monument sign or other freestanding sign, or billboard, subject to all applicable provisions and limitations in the Code. Electronic message or graphic display signs may project text or images onto buildings or other objects. Digital freeway signs utilizing electronic messaging technology are subject to the standards and permit requirements in RCMC 23.743.150.

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Title 23 – Zoning Code Amendments

Darcy Goulart,
Principal Planner
February 20, 2018

MEETING GOALS

- Review various Zoning Code Amendments
- Introduce and waive first reading for Ordinance 4-2018

Article 1 - Administration

23.107.020 Rules of Interpretation

Changed Planning Director to Community Development Director

Article 3 Zoning Districts, Allowable Uses, and General Development Standards

ATTACHMENT 3

Table 23.313-1 Allowed Use and Permit Requirements for Mixed-use Districts

- *Removed Outdoor Commercial Recreation as a permitted use in the OIMU zone.*
- *Modify required entitlement for Car Washes*

Land Use Category	RMU	CMU	OPMU	OIMU	LIBP	VC	LTC	RTC	Specific Use Regulations
Recreation, Education, and Public Assembly Uses									
Outdoor Commercial Recreation	N	C	N	P <u>N</u>	P	C	C	C	
Automobile and Vehicle Uses									
Car Washing and Detailing	N	<u>C</u> AUP ¹³	C ¹³	C ¹³	<u>C</u> AUP	N	C	C	<u>RCMC 23.913.050</u>
<u>Detailing/Waterless Car Wash</u>	<u>N</u>	<u>AUP</u>	<u>AUP</u>	<u>AUP</u>	<u>N</u>	<u>N</u>	<u>N</u>	<u>N</u>	4

Article 3 Zoning Districts, Allowable Uses, and General Development Standards

ATTACHMENT 3

Table 23.316-1 Allowed Use and Permit Requirements for General Commercial & Industrial Zoning Districts

➤ *Reduce interior boundary setback for GC zone*

Development Standard	GC	M-1	M-2
Setbacks (minimum)			
Front and Street-Side/Corner	25 ft	25 ft	25 ft
Side and Rear	25 ft <u>0 ft</u>	0 ft	0 ft
Side and rear, Abutting Agricultural and Residential	25 ft	15 ft	15 ft
Height (maximum)			
All Other Parcels	100 ft ¹	40 ft ¹	100 ft ¹

Article 3 Zoning Districts, Allowable Uses, and General Development Standards

Table 23.316-2 General Commercial and Industrial Zoning Districts Development Standards

➤ *Modify required entitlement for Car Washes*

Land Use Category	GC	M-1	M-2	Specific Use Regulations
Automobile and Vehicle Uses				
Car Washing and Detailing	C	P	P	<u>RCMC 23.913.050</u>
<u>Detailing/Waterless Car Wash</u>	<u>AUP</u>	<u>P</u>	<u>P</u>	

Article 3 Zoning Districts, Allowable Uses, and General Development Standards

Table 23.325-1 Allowed Use Provisions in the Convention Overlay Zoning District

➤ *Add reference to Section 23.913.050*

Land Use Category	Convention Overlay Zoning District	Specific Use Regulations
Automobile and Vehicle Uses		
Car Washing and Detailing	CUP	<u>RCMC 23.913.050</u>

Article 7 Site Planning and Development Standards

Chapter 23.704 Yard Measurements and Projections

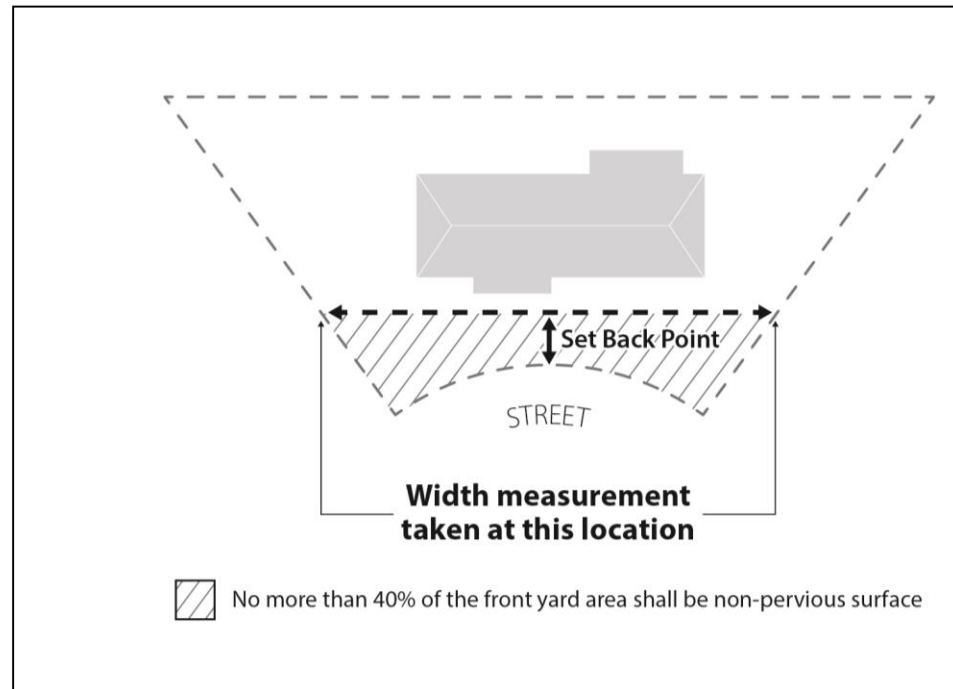
- *Section 23.704.030 Allowed encroachments/projections into required yards – added language to allow encroachment into the rear and side yard setback for attached structures with limited or no enclosure (patio cover).*

E. Structures that are attached to the primary dwelling and that have limited or no enclosure (e.g., patio covers) are allowed to project into the required rear and interior side yard setback, provided they maintain a minimum five foot (5'0"0 setback from the rear and interior side property lines. This allowance shall not be subject to the requirements of subsection (D). of this section. Enclosing the attached structure would be subject to the requirements of subsection (D)(1) and (2).

Article 7 Site Planning and Development Standards

Chapter 23.716 Landscaping

- *Added Figure 23.716-3 to address how the width measurement is taken on irregular shaped lots when calculating the maximum nonpervious surface.*



Article 7 Site Planning and Development Standards

Chapter 23.719 Parking and Loading

- *Table 23.719-1 Required Minimum Vehicle Ratios - added parking standards for tasting rooms.*

Land Use Category	Vehicle Parking Spaces
Retail, Service, and Office Uses	
<u>Tasting Room</u>	<u>1 space/300 sq. ft.</u>

Article 7 Site Planning and Development Standards

Chapter 23.719 Parking and Loading

- *23.719-130 C. 1. Standards for off-street parking for private residences – clarify what type of surface is acceptable for parking vs. of a driving surface that leads to an acceptable parking surface.*

1. Vehicle parking (including driveways) within the front yard area or as seen by the public street in residential areas shall be provided on a lasting, durable surface (e.g., concrete, asphalt, ~~grasscrete~~, or similar material). Permeable paving materials, such as paver stones, pervious concrete, ~~paving strips~~ or interlocking grids with gravel, are permitted as an alternative to a standard asphalt or concrete surface. Use of grasscrete, ribbon drive (Hollywood strips) or other acceptable alternatives as determined by the director may be allowed for purposes of a driving surface that leads to a parking area outside of the front yard area or as seen by the public street. ~~to meet the requirement. However, nNo~~ parking is allowed on these features within the front yard area or as seen by the public ~~adjoining~~ street.

Article 7 Site Planning and Development Standards

Chapter 23.728 Outdoor Display, Sales, and Storage

- *23.728.020 B. Permit requirements and exemptions – new standard to allow outdoor storage as an incidental use to a principal use.*

B. Permanent Outdoor Storage. Permanent outdoor storage is permitted as an incidental use to a principal use in all zoning designations, except for agricultural and residential zoning districts. If not part of the original development permit for the principal use, permanent outdoor storage may be permitted subject to a minor design review. In all cases, permanent outdoor storage shall be consistent with the development standards of this chapter.

Article 7 Site Planning and Development Standards

Chapter 23.728 Outdoor Display, Sales, and Storage

- ***23.728.030 C.4. Development Standards – allow cargo shipping containers to be used for outdoor storage, subject to development standards.***

4. Cargo Shipping Containers. Cargo Shipping Containers may be utilized for outdoor storage of good and materials in all zoning districts, except agricultural and residential zoning districts and subject to the development standards of this Chapter. ~~Parking. Parking for permanent outdoor storage shall be provided as required in Chapter 23.719 RCMC (Parking and Loading).~~

Article 7 Site Planning and Development Standards

Chapter 23.743 Signs

➤ **23.743.050 Prohibited signs.**

Q. ~~Electronic changeable copy signs, except as provided for in RCMC 23.743.065 (Standards for electronic message signs).~~Reserved

S. Electronic message and graphic display sign, except as provided for in RCMC 23.743.065 (Standards for electronic message and graphic display signs).

T. Signs with fluctuating illumination, including any changes in light intensity or use of intermittent, strobe, or moving light that does not fall under the definition of another sign type (e.g., video display sign), unless approved under Section 23.743.065.

➤ **23.743.065 Standards for electronic message signs.**

B. Development Standards. The following provisions apply to electronic message signs:

7. Signs are not permitted as fixed attachments to or as part of the building façade. Temporary projection onto a building façade is permitted and does not violate this code.

Chapter 23.913 Automotive and Vehicle Uses

➤ 23.916.050 Car Washes – new section that includes development standards for car washes.

- ❖ Drive aisle standards – width, stacking, distance from entrances and separation from parking spaces.*
- ❖ Hours of operation limitations*
- ❖ Noise reduction measures – automatic timers to shut off vacuums and 25 ft separation to residential zone or use.*

Chapter 23.1104 General Definitions

- *23.1104.040 Land use definitions – new definition for detailing or waterless car wash.*
- *23.1104.050 Sign definitions – deleted definitions that are reparative of others and expanded the definition of an electronic message or graphic display sign.*

Recommended Motions

“That City Council determine the project Categorically Exempt under Section 15162 and introduce and waive first reading of Ordinance 4-2018, and ordinance amending Title 23 (Zoning Code).

THANK YOU

QUESTIONS & DISCUSSION

MEMORANDUM



DATE: February 20, 2018

TO: Honorable Mayor and Council Members

FROM: Elizabeth Sparkman, Interim Community Development Director
Albert Stricker, Public Works Director

SUBJECT: **COOPERATIVE AGREEMENT WITH DOUGLAS ROAD 105, LLC RELATED TO TEMPORARY CLOSURE OF DOUGLAS ROAD, FEE CREDIT AGREEMENT, AND ORDINANCE TO AMEND THE DEVELOPMENT AGREEMENT.**

RECOMMENDATION

1. Adopt Resolution No. 26-2018; and
2. Introduce and Waive the First Reading of Ordinance No. 2-2018.

RESULT OF RECOMMENDED ACTION

Adoption of Resolution No. 26-2018 would authorize the City Manager to execute a Cooperative Agreement with Developers with stipulations that would allow the closure of Douglas Road east of Americanos Boulevard to Grant Line Road for a period of up to six months during construction of utility and roadway infrastructure, and also authorize the City Manager to execute an impact fee credit agreement with Developers for a portion of the improvements. Adoption of Ordinance No. 2-2018 would approve the Second Amendment to the Development Agreement related to the fee credits and road improvements.

BACKGROUND

Douglas 98 is a 528-lot subdivision in the Sunridge Specific Plan located near the southwest corner of Douglas Road and Grant Line Road. The property originally received a tentative map in 2006, along with three other projects commonly referred to as the Eastside Properties. The Douglas 98 tentative map was amended in 2013. The property is also subject to a development agreement with the City. This property and the remaining undeveloped Eastside Properties are not yet connected to sufficient utility or roadway infrastructure to begin residential development.

The Douglas 98 property, Douglas Road 105, LLC, and interested building partners (collectively "Developer") desire to promptly begin development of Douglas 98. Their proposal, initially presented to Council on January 16, 2018, includes Developer investment to extend roadway and applicable utility infrastructure from the current terminus at Americanos Boulevard to Grant Line Road. The Developer proposes to break ground on infrastructure improvements and model homes in 2018.

The Developer requested assistance from the City in the form of two cost-saving measures. The first measure is closure of Douglas Road between Americanos Boulevard and Grant Line Road

for up to six months in 2018 to decrease the overall construction timeline and costs, and increase safety for the traveling public. Road closure would save approximately \$1 million by reducing the length of time for construction and costs for maintaining through traffic during construction. The second measure, initially requested as a fee reduction, has been modified to a requested fee credit towards the Supplemental Transportation Impact Fee in the amount of \$975 per unit for each of the 528 housing units, for an overall reduction of \$514,800 in costs for the project.

As discussed on January 16, 2018, the proposal has the potential for significant community benefits, but there may be accompanying challenges. These are summarized below.

Potential benefits include:

1. Commencement of construction of the Douglas 98 project would open up an additional 528 home lots of buildable inventory in the City of Rancho Cordova.
2. Construction of the utility and road infrastructure increases the viability of the adjacent undeveloped Eastside Properties, including Douglas 103, Grant Line 208, and Arista Del Sol, increasing the buildable home inventory in that area by an additional 1,440 lots.
3. The overall increase in buildable lots and new homes in the Specific Plan Area will make the community more attractive for future commercial and retail investment, and will act as a catalyst to build the necessary residential units for a future middle school/high school.
4. The addition of lanes to this section of Douglas Road, including a section that fronts a neighboring development, will lessen traffic impacts from the development and improve access to Highway 50 from the Douglas 98 project which advances the goals of the Supplemental Traffic Impact Fee.
5. The improvements will add to the safety and aesthetics of this important east-west connection.
6. Closure of Douglas Road would expedite total construction time, thus reducing the time that road construction delays are experienced by the public.

Potential challenges include:

1. Closure of Douglas Road between Americanos Boulevard and Grant Line Road would be an inconvenience to residents wanting to access Grant Line Road during construction by requiring detours. Drivers traveling to or from Grant Line Road would detour using Sunrise Boulevard to White Rock Road or Jackson Highway to Grant Line Road, adding time and distance to their commutes.
2. Signage and traffic calming measures would be installed to minimize traffic cutting through the new community of North Douglas. However, there could be additional traffic through Americanos, Edington and Raymer that is not currently experienced by the neighborhood.
3. The fee credit for offsite frontage improvements would result in reduced funding dedicated solely to the future Rancho Cordova Parkway Interchange.

Developer commits to:

1. Submit construction documents/mass grading – January 22, 2018.
2. Submit construction documents/Douglas Road Improvements – February 1, 2018.
3. Commence Mass Grading of Douglas 98 – April 16, 2018.
4. Commence Road Closure of Douglas Road – May 1, 2018.
5. Commence In-Track Improvements to Douglas 98 – June 1, 2018.
6. Commencement of model homes construction – September 1, 2018.
7. Open Douglas Road – October 31, 2018.

8. Commence production of homes – February 1, 2019.

Tonight's actions include approval of Resolution No. 26-2018 (**Attachment 1**) that would authorize the City Manager to execute a Cooperative Agreement with Developers for the temporary closure of Douglas Road that includes the following stipulations:

1. Roadway Improvements on Douglas Road generally east of Americanos Boulevard to Grant Line Road shall include full sidewalk and landscape frontage improvements on the south side of the road, two eastbound lanes, a landscaped median, one westbound lane, sewer, water, drainage, and other associated improvements per City and County Standards.
2. Douglas Road shall be constructed in an expeditious manner and closed for no longer than six months.
3. Developer shall be responsible for all outreach and traffic control as necessary to inform and minimize impact to residents and travelers.
4. Impact fee credits are contingent on Developer completing infrastructure improvements in a timely manner. The amount of the credit is reduced by \$50 for every week the deadline is not met.
5. Developer must establish a Homeowners' Association, or equivalent mechanism as approved by the City, to manage the residential portion of the property and enforce the recorded CC&Rs.

The Resolution also authorizes the City Manager to execute a Fee Credit Agreement that provides credits towards the Supplemental Transportation Impact Fee for construction of off roadway frontage improvements on Douglas Road as follows:

1. An amount not to exceed \$514,800, or
2. An amount less than \$514,800 if the closure of Douglas Road extends beyond the agreed upon six months;
3. The credits would be applied at a rate of \$975 per building permit for each of the 528 building permits, at the time the building permit is pulled.

Also included in tonight's actions include the introduction of Ordinance No. 2-2018 (**Attachment 2**) which approves a Second Amendment to the Development Agreement to reflect the available credit towards the Supplemental Transportation Impact Fee for construction of offsite frontage improvements on Douglas Road and requires the landowners form a Homeowners' Association (HOA) to enforce CC&Rs recorded on the residential portions of the project. The purpose of the HOA will be to enforce the rules and regulations adopted by its Board of Directors, enhance and protect the value, desirability, and attractiveness of the community, and discharge such other lawful duties and responsibilities as may be required by its bylaws and CC&Rs with respect to the residential planned development. The Ordinance, if introduced tonight, will return for a second reading and final adoption at the next regular Council meeting.

FISCAL IMPACT

The approval of a fee credit of \$975 per unit for each of the 528 units in Douglas 98 would result in an overall reduction of \$514,800 of impact fees collected that may be dedicated towards construction of the future Rancho Cordova Parkway Interchange and other improvements to improve access from the development area to Highway 50. There would be no impact to the general fund.

ATTACHMENTS

1. Resolution No. 26-2018.
 - a. Exhibit A to the Resolution: Cooperative Agreement No. 14-2018 including Figure 1 Map.
 - b. Credit Agreement No. 13-2018 including Figure 1 Map (and Exhibit A).
2. Ordinance No. 2-2018, including Exhibit A Second Amendment to the Development Agreement.
3. PowerPoint Presentation.

ATTACHMENT 1**CITY OF RANCHO CORDOVA****RESOLUTION NO. 26-2018**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA,
STATE OF CALIFORNIA, AUTHORIZING THE CITY MANAGER TO EXECUTE A
COOPERATIVE AGREEMENT FOR TEMPORARY CLOSURE OF DOUGLAS ROAD AND
EXECUTE AN IMPACT FEE CREDIT AGREEMENT FOR IMPROVEMENTS TO
DOUGLAS ROAD WITH DOUGLAS ROAD 105, LLC**

WHEREAS, on February 21, 2006, the City Council held a public hearing to approve tentative maps and Development Agreements on parcels known as Douglas 98, Douglas 103, Grant Line 208, and Arista Del Sol, commonly referred to as the Eastside projects in the Sunridge Specific Plan ("SRSP"); and

WHEREAS, on February 21, 2006, the City Council adopted Resolution 13-2006 approving a tentative map for Douglas 98 (the "Project") with conditions of approval, including transportation improvement thresholds, and introduced Ordinance 07-2006 approving a Development Agreement for the Project; and

WHEREAS, on August 19, 2013, the City Council held a public hearing on Ordinance 26-2013 related to approval of zoning amendments for the conversion of 3.1 acres of open space to RD-5 zoning, Single Family Residential, and a First Amendment to the Development Agreement ("First Amendment") adding Section 6.4.6 to the Development Agreement for the Project and such Ordinance was adopted on September 3, 2013; and

WHEREAS, on August 19, 2013, the City Council adopted Resolution 103-2013 approving an amended Tentative Subdivision Map for 528 single family lots with conditions of approval; and

WHEREAS, The approvals referenced in Resolution 103-2013 included approval of a California Environmental Quality Act ("CEQA") Addendum and an exception to the requirements of Mitigation Measure 37a for the Project based on evidence in the record that the traffic generated by the currently approved lots in the SRSP area with the addition of the 528 Project lots would not result in unacceptable traffic conditions without the completion of construction of all the improvements listed in the Mitigation Measure prior to the traffic generated by the development of the lots. The Project developer, in Section 6.4.6 of the Development Agreement added via the First Amendment, agreed to pay a "Supplemental Traffic Impact Fee," which will be used by City to fund the traffic improvements in Mitigation Measure 37a and other traffic improvements needed to serve the Project; and

WHEREAS, the Douglas 98 property owner and interested building partners (collectively, "Developer") desire to promptly begin development of the Project, but need to construct utility and roadway infrastructure to begin residential development. Developer has requested: the closure of Douglas Road from Americanos Boulevard to Grant Line Road for up to six months to ensure safety during construction, reduce construction duration and construction costs, Developer also requested a reduction in impact fees in the amount of \$975 for each of the 528 housing units in the Project; and

WHEREAS, in response to Developer's request for a fee reduction, City has evaluated and determined that the establishment of a credit towards the Supplemental Traffic Impact Fee

ATTACHMENT 1

for improvements constructed is appropriate. The off-site improvements to Douglas Road to be constructed by Developer, including the addition of three lanes, will improve vehicular access from the Project to Highway 50 and other major thoroughfares. These improvements serve the project and help ensure that traffic impacts from the project will remain less than significant and therefore advance the purpose of the Supplemental Traffic Impact Fee as established in the August 2013 CEQA Addendum for this Project; and

WHEREAS, the City and Developer desire to enter into the Agreements to set forth a clear understanding of each Party's obligations associated with the closure of Douglas Road and for the credit of \$975 per unit towards the Supplemental Traffic Impact Fee for the construction of offsite frontage improvements; and

WHEREAS, no further CEQA review is required for these approvals, as the Cooperative Agreement and Fee Credit Agreement approved via this Resolution do not result in any physical changes to the environment which have not already been reviewed by the City through prior CEQA approvals for the Project and therefore come under the exemption within CEQA Regulation 15183 for projects consistent with a community plan, general plan, or zoning.

NOW, THEREFORE, BE IT HEREBY RESOLVED THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA that the City Manager is authorized to execute the following agreements in a form as approved by the City Attorney:

1. Cooperative Agreement No. 14-2018 for Temporary Closure of Douglas Road between the City of Rancho Cordova and Douglas Road 105, LLC. (**EXHIBIT A**)
2. Credit Agreement No. 13-2018 with Douglas Road 105, LLC for Construction of Offsite Frontage Improvements on Douglas Road. (**EXHIBIT B**)

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 20th day of February, 2018 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Linda Budge, Mayor

ATTEST:

ATTACHMENT 1

Stacy Leitner, City Clerk

ATTACHMENT 1
Exhibit A to the Resolution
CONTRACT 14-2018

**COOPERATIVE AGREEMENT FOR TEMPORARY CLOSURE OF DOUGLAS ROAD
 BETWEEN THE CITY OF RANCHO CORDOVA AND DOUGLAS ROAD 105, LLC.**

This Cooperative Agreement ("Agreement") is entered into as of _____, 2018, by and between the City of Rancho Cordova (the "City") and Douglas Road 105, LLC (the "Developer").

RECITALS

A. On February 21, 2006, the City Council held a public hearing to approve tentative maps and Development Agreements on parcels known as Douglas 98, Douglas 103, Grant Line 208, and Arista Del Sol, commonly referred to as the Eastside projects in the Sunridge Specific Plan ("SRSP").

B. On February 21, 2006, the City Council adopted Resolution 13-2006 approving a tentative map for Douglas 98 (the "Project") with conditions of approval, including transportation improvement thresholds, and introduced Ordinance 07-2006 approving a Development Agreement for the Project.

C. On August 19, 2013, the City Council held a public hearing and adopted Ordinance 26-2013 approving zoning amendments for the conversion of 3.1 acres of open space to RD-5 zoning, Single Family Residential, and a First Amendment to the Development Agreement ("First Amendment") for the Project, and adopted Resolution 103-2013 approving an amended Tentative Subdivision Map for 528 single family lots with conditions of approval.

D. The approvals referenced in Resolution 103-2013 included approval of a California Environmental Quality Act ("CEQA") Addendum and an exception to the requirements of Mitigation Measure 37a for the Project based on evidence in the record that the traffic generated by the currently approved lots in the SRSP area with the addition of the 528 Project lots would not result in unacceptable traffic conditions without the completion of construction of all the improvements listed in the Mitigation Measure prior to the traffic generated by the development of the lots. The Project developer, in Section 6.4.6 of the Development Agreement added via the First Amendment, agreed to pay a "Supplemental Traffic Impact Fee", which will be used by City to fund the traffic improvements in Mitigation Measure 37a and other traffic improvements needed to serve the Project.

E. The Douglas 98 property owner and interested building partners (collectively, "Developer") desire to promptly begin development of the Project, but need to construct utility and roadway infrastructure to begin residential development. Developer has requested: the closure of Douglas Road from Americanos Boulevard to Grant Line Road for up to six months to ensure safety during construction, reduce construction duration and construction costs, Developer also requested a reduction in impact fees in the amount of \$975 for each of the 528 housing units in the Project.

F. In response to Developer's request for a fee reduction, City has evaluated and determined that the establishment of a credit towards the Supplemental Traffic Impact Fee for improvements constructed is appropriate. The off-site improvements to Douglas Road to be constructed by Developer, including the addition of three lanes, will improve vehicular access from the Project to Highway 50 and other major thoroughfares. These improvements serve the project and help ensure that traffic impacts from the project will remain less than significant and therefore advance the purpose of the Supplemental Traffic Impact Fee as established in the

ATTACHMENT 1
Exhibit A to the Resolution
CONTRACT 14-2018

August 2013 CEQA Addendum for this Project.

G. The City and Developer desire to enter into this Agreement to set forth a clear understanding of each Party's obligations associated with the closure of Douglas Road pursuant to Developers request.

H. City and Developer are entering into a Second Amendment to the Development Agreement for the Project that will incorporate this Agreement and will specifically amend Section 6.4.6 of the Development Agreement related to the Supplemental Traffic Impact Fee requirements, among other amendments. City and Developer will also enter into a Fee Credit agreement to establish specific obligations related to the fee credit.

AGREEMENT

1. Purpose. The purpose of this Agreement is to set forth the obligations of Developer and City relating to the issuance of building permits for the Douglas 98 Project and the timing of construction of certain utility and roadway improvements, as set forth in this Agreement. Recitals A through H inclusive, above, are true and correct and are hereby incorporated into this Agreement and made a part hereof.

2. Obligations of Developer and City for Douglas Road Phase 3 Improvements.

2.1. Developer Obligations for Douglas Road Phase 3 Improvements. Douglas Road Phase 3 (**Figure 1** attached) Improvements generally include, but are not limited to, the following improvements on Douglas Road and associated adjacent property and easements between the intersections of Americanos Boulevard and Grant Line Road: roadway improvement with full sidewalk and landscape frontage improvements on the south side of the road, two eastbound lanes, a landscaped median, one westbound lane, sewer, water, drainage, and other associated improvements per City and County Standards. In order to satisfy the Douglas Road Phase 3 improvements and request for closure of Douglas Road, the Developer shall:

2.1.1. Construct the Douglas Road Phase 3 roadway and utility improvements in an expeditious manner with the road closure lasting no longer than six months. Road closure shall mean a full closure of all eastbound and westbound lanes of Douglas Road between Americanos Boulevard and Grant Line Road.

2.1.2. Construct the full frontage improvements on Douglas Road adjacent to the Douglas 103 property including west of Americanos Boulevard and receive a credit pursuant to the terms outlined below in Section 2.2.2 .

2.1.3. Developer shall not request nor receive any further impact fee credits for these improvements as may be negotiated and implemented by the City in other development areas.

2.1.4. Conduct extensive outreach to the community prior to and during construction based on an Outreach Plan to be approved by the City prior to approval of the improvement plans. Such plan shall, at a minimum, include outreach and communication prior to and during the road closure including, but not limited to, mailings, electronic and published information, electronic message

ATTACHMENT 1
Exhibit A to the Resolution
CONTRACT 14-2018

signs, and public meetings as necessary.

2.1.5. Prepare a Traffic Management Plan prior to approval of improvement plans and implement traffic control measures during construction to manage potential cut-through traffic through the North Douglas subdivision, maintain adequate detours, and adequately inform the public.

2.1.6. As set forth in the Second Amendment to the Development Agreement, establish a Homeowners Association (HOA), or other equivalent mechanism as approved by the City, to manage the residential portions of the property. The purpose of the HOA will be to enforce the rules and regulations adopted from time to time by its board of directors, enhance and protect the value, desirability, and attractiveness of the community, and discharge such other lawful duties and responsibilities as may be required pursuant to its bylaws.

2.1.7. Adhere as closely as possible to the following intended schedule:

- 2.1.7.1.1. Submit construction documents/mass grading to City on or before February 20, 2018
- 2.1.7.1.2. Submit construction documents/Douglas Road Improvements to City on or before February 20, 2018
- 2.1.7.1.3. Commence mass grading of Douglas 105 on or before April 16, 2018
- 2.1.7.1.4. Commence full road closure of Douglas Road between Americanos Boulevard and Grant Line Road on or before May 1, 2018
- 2.1.7.1.5. Commence in-tract improvements on or before June 1, 2018
- 2.1.7.1.6. Commence construction of model homes no later than September 1, 2018
- 2.1.7.1.7. Open all lanes of Douglas Road no later than October 31, 2018
- 2.1.7.1.8. Commence construction of Project homes on or before February 1, 2019

2.2. City Obligations for Douglas Road Phase 3 Improvements.

2.2.1. City shall take the actions necessary to allow the closure of Douglas Road between Americanos Boulevard and Grant Line Road for up to six months.

2.2.2. City shall provide a maximum credit of \$975 per lot for the 528 lots in the Project against the Supplemental Traffic Impact Fee for the Developer obligations outlined in this Agreement, including construction of frontage improvements outlined in this Agreement, construction of model homes, and commencement of home production by the dates specified.

2.2.3. If the closure of Douglas Road exceeds the six months agreed upon, the above fee credit on all remaining unbuilt lots shall be reduced by \$50 per lot for each week beyond the agreed to six months.

2.2.4. City staff shall cooperate with Developer in the development, approval, and implementation of the Outreach Plan and Traffic Management Plan. Developer shall reimburse City for any staff and City consultant time and materials expended related to the outreach.

ATTACHMENT 1
Exhibit A to the Resolution
CONTRACT 14-2018

3. Disclosure of Conditions. If the Developer chooses to enter into a purchase agreement with any third party for any portion of Douglas 98 Project prior to satisfaction of the terms of this Agreement, the Developer shall disclose to the potential purchaser the requirement to satisfy these conditions to improve Douglas Road. Such disclosure shall be in writing and specify that the issuance of building permits is subject to the satisfaction of completion of Douglas Road Improvements by the Developer. The disclosure shall be signed by the Developer and potential purchasers prior to entering into the purchase agreement. The Developer shall provide a copy of the signed disclosure to the City prior to entering into any purchase agreement.
4. Effect of Agreement. The Developer and the City acknowledge that additional binding documents (amendment to development agreement, construction contracts, credit agreement, outreach and traffic management plans, etc.) are necessary to implement the terms of this Agreement, and that such additional documents may be subject to substantive review and approval by the Developer and the City. Nevertheless, all Parties intend that this Agreement creates enforceable obligations, and each party understands that the other parties will be undertaking certain actions in reliance on the enforceability of this Agreement.
5. Term. If the Douglas Road improvements referenced in Section 2.1.7 have commenced by April 2018, this Agreement shall continue until all of the actions required by all parties have been completed, at which time this Agreement shall terminate. The Parties agree that time is of the essence. If no improvements to Douglas Road have commenced by June 1, 2018, at the discretion of the City Manager this agreement shall become null and void, including the credits for Douglas Road frontage improvements.
6. Not Entire Agreement. The Parties hereto have endeavored in this Agreement to set forth their understanding and intent with respect to the matters addressed herein. This Agreement is not, however, intended to set forth in full detail the terms and conditions under which the Parties are to proceed in regard to the overall Douglas 98 project. The Development Agreement, amendments thereto and related Project entitlements ("Project Entitlements") remain in full force and effect. In the event of a direct conflict between this Agreement and the Project Entitlements, the Project Entitlements shall control.
7. Notices. Any notices to be delivered on matters pertaining to this Agreement shall be addressed as follows:

If to the Developer:
DOUGLAS ROAD 105, LLC
c/o name
street address
City, State
Attention: Constantino Galaxidas

With a copy to:
Watt Communities
2408 Professional Drive
Roseville, CA 95661
Attention: Kevin Webb

With a copy to:
Woodside Homes
111 Woodmere Road, Suite 190
Folsom, CA 95630
Attention: Brian Cutting

If to the City:
City of Rancho Cordova
2729 Prospect Park Drive

With a copy to:
City of Rancho Cordova
2729 Prospect Park Drive

ATTACHMENT 1
Exhibit A to the Resolution
CONTRACT 14-2018

Rancho Cordova, CA 95670
 Attention: Public Works Director

Rancho Cordova, CA 95670
 Attention: Community Development Director

8. Amendment to Agreement. This Agreement may be amended only by a written instrument signed by all the Parties. The Developer shall bear all costs of amendments to this Agreement that are requested by the Developer.
9. Indemnification. The Developer shall indemnify, defend and hold harmless the City, its officers, agents, employees and representatives from and against any and all claims, losses, liabilities or damages, demands and actions, including payment of reasonable attorney's fees, arising out of or resulting from the performance of this Agreement, caused by any negligent or willful act or omission of the Developer, agents, employees, or anyone directly or indirectly acting on behalf of the Developer except any claims, losses demands, damages or actions arising from the sole, active negligence of City or its officers, employees or agents.
10. Waiver. The waiver by either party of a breach by the other of any provision of this Agreement shall not constitute a continuing waiver or a waiver of any subsequent breach of either the same or a different provision of this Agreement.
11. Attorney's Fees. In the event any legal action is brought to enforce or interpret this MOU, the prevailing party shall be entitled to an award of reasonable attorney fees, in addition to any other relief to which it may be entitled.
12. Construction and Interpretation. It is agreed and acknowledged by the Developer that the provisions of this Agreement have been arrived at through negotiation, and that the Developer has had a full and fair opportunity to revise the provisions of this Agreement and to have such provisions reviewed by legal counsel. Therefore, the normal rule of construction that any ambiguities are to be resolved against the drafting party shall not apply in construing or interpreting this Agreement.
13. Severability. The provisions of this Agreement are severable. If any portion of this Agreement is held invalid by a court of competent jurisdiction, the remainder of the Agreement shall remain in full force and effect unless amended or modified by mutual written consent of the Parties.
14. Venue. In the event that either party brings any action against the other under this Agreement, the Parties agree that trial of such action shall be vested exclusively in the State Court of California in the County of Sacramento, or in the United States District Court for the Eastern District of California. The law governing this Agreement is the law of the State of California.

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement as of the date first referenced above.

CITY OF RANCHO CORDOVA:

DOUGLAS ROAD 105, LLC

Cyrus Abhar, City Manager

Constantino Galaxidas
 Managing Member

ATTACHMENT 1
Exhibit A to the Resolution
CONTRACT 14-2018

Date: _____

Date: _____

Attest:

Stacy Leitner, City Clerk

Date: _____

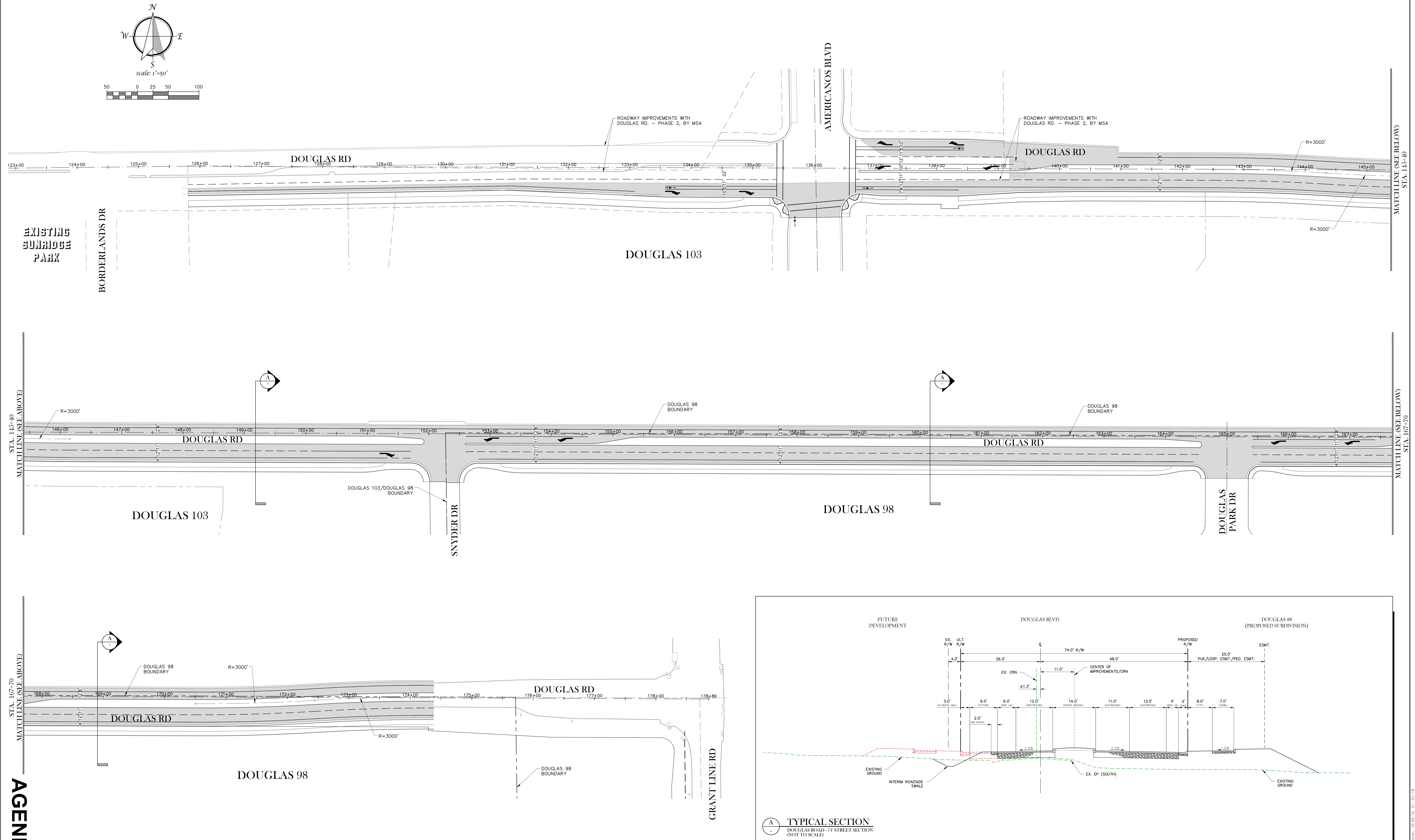
Approved as to form:

Adam Lindgren, City Attorney

Date: _____

2919894.1

DOUGLAS ROAD GEOMETRIC LAYOUT
DOUGLAS 98
CITY OF RANCHO CORDOVA, CA



ATTACHMENT 1
EXHIBIT B to the Resolution
 CONTRACT 13-2018

CITY OF RANCHO CORDOVA

**IMPACT FEE CREDIT AGREEMENT WITH DOUGLAS ROAD 105, LLC
 FOR PRIVATELY CONSTRUCTED PUBLIC FACILITIES**

This Fee Credit Agreement, dated as of the _____ day of _____, 2018, by and between the **City of Rancho Cordova**, a municipal corporation (the "City") and **Douglas Road 105, LLC.**, (the "Developer" or "Landowner"),

RECITALS:

WHEREAS, in 2006 the City Council approved entitlements for the Douglas 98 subdivision project ("the Project") and in 2013 approved amendments to such entitlements, including an amended tentative subdivision map for 528 single family lots at the southwest corner of Douglas and Grant Line Roads; and

WHEREAS, on February 20, 2018 the City and Developer entered into a Cooperative Agreement related to the obligations of Developer to fund and construct certain traffic improvements to serve the Project and on this date the City Council approved the first reading of Ordinance No. 2-2018, approving the Second Amendment to the Development Agreement Relative to Douglas 98 (the "Second Amendment"); and

WHEREAS, pursuant to the terms of Section 6.4.6 of the Development Agreement, added via the First Amendment to the Development Agreement, Developer is obligated to pay a Supplemental Traffic Impact Fee in the amount of \$5060.00 at the time of the issuance of a building permit for each residential unit; and

WHEREAS, pursuant to the terms of the Cooperative Agreement and the Second Amendment, Developer shall be eligible for a credit of up to \$975.00 per unit toward the Supplemental Traffic Impact Fee if all obligations of the Cooperative Agreement, Development Agreement as amended, and this Fee Credit Agreement are met by Developer ; and

WHEREAS, pursuant to the terms of Section 6.4.6 of the Development Agreement and the terms of the Cooperative Agreement incorporated therein, Developer agrees to construct offsite complete streets frontage improvements on the adjacent property known as Douglas 103 by a date certain , to begin model home construction by a date certain, and begin home production by a date certain; and

WHEREAS, failure by Developer to meet its obligations will result in a lesser per unit fee credit, per the terms of the Cooperative Agreement and Development Agreement related to Douglas 98.

NOW, THEREFORE, in consideration of the mutual promises contained herein, the City and the Developer hereby agree as follows:

Section 1. Project Scope

Subject to the terms of this Agreement, the City agrees to provide credits of funds to the Developer for the Supplemental Traffic Impact Fee in an amount not to exceed Nine Hundred and Seventy-Five Dollars per unit, or **Five Hundred Fourteen Thousand Eight Hundred Dollars (\$514,800)** total for the construction of complete streets frontage improvements as shown on **Figure 1** within **Exhibit A, attached** hereto and incorporated herein (the "Improvements") and upon satisfaction of obligations related to model home and home Credit/Reimbursement Agreement

February 2018

City of Rancho Cordova and Douglas Road 105 LLC – Exhibit B

AGENDA ITEM 16.2

ATTACHMENT 1 EXHIBIT B to the Resolution

CONTRACT 13-2018

construction in compliance with the terms of the Cooperative Agreement related to this Project, incorporated herein and attached hereto as **Exhibit B**.

Section 2. Credit Amount

The City agrees to provide credits to Developer for the construction of the Improvements within the required time period by the Developer in the following amount:

- (a) an amount not to exceed \$975.00 per unit or \$514,800 total, or
- (b) an amount less than \$975.00 per unit or \$514,800 total due to Developer not meeting the requirements of the Cooperative Agreement, Contract No. 13-2018, attached hereto as Exhibit D. Any reduction in the fee credit amount shall be pursuant to the terms of the Cooperative Agreement.

Section 3. Credit/Reimbursement Timing

- (a) **Credit Priority.** The credit toward Developer's Supplemental Traffic Impact Fees shall be equal to the credit allocation as authorized by the Public Works Director as specified in Section 2. Such fee credits shall be applied on as \$975 per building permit upon issuance of such permits, up to 528 permits total within the Douglas 98 Project. Upon acceptance of the improvements and after reconciliation of the final improvement costs, credit balance may be adjusted to reduce the total allowable amount per Section 2.2.3 of Exhibit D.

Fee credits granted to Developer pursuant to this Agreement may be transferred to other owners, builders, or developers who are subject to the payment of a Supplemental Traffic Impact Fee. To effect such a transfer, Developer shall submit a completed form to the City in substantially the same format as set forth in **Exhibit C** that will (i) reference this Agreement; (ii) identify the Developer and assignee if credits are being assigned to a builder or other party; (iii) identify the number of lots against which the credits will be applied; (iv) identify the fee credit balance before and after the transfer; and (v) include a map or other method that is acceptable to the City that identifies the lots or parcels against which the fee credits will be applied. The form must be signed by the Developer and the City, and an executed copy of the form shall be kept on file at the City.

Section 4. Process and Procedures

The Developer's construction contracts, construction work, and requests for credit relating to the Improvements shall be performed in conformance with the City's most current "Reimbursement Policies and Procedures for Privately Constructed Public Facilities" document, which is available from the City Engineer. The Developer shall be responsible for complying with all applicable laws, codes, and regulations relating to contracting and construction procedures.

Section 5. Limited City Obligation

The obligations arising from this Agreement are neither a debt of the City nor a legal or equitable pledge, charge, lien, or encumbrance upon any of its property or upon any of its income, receipts, or revenues, except the fees collected for the Improvements. Neither the General Fund nor any other fund of the City, except the applicable fund(s) associated with the Supplemental Traffic Impact Fee, shall be liable for the payment of any obligations arising from this Agreement. The credit or taxing power of the City is not pledged for the payment of any

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obligation arising from this Agreement. No Developer shall compel the forfeiture of any of the City's property to satisfy any obligations arising from this Agreement.

Section 6. Conveyance of the Improvements

Once Improvements are accepted and deemed satisfactory by the City, the Improvements automatically become the property of the City. The Developer shall take any and all actions necessary to convey to the City and vest in the City full, complete and clear title to the Improvements that the Developer has constructed.

Section 7. Delivery of Plans and Specifications

Prior to final acceptance of Improvements by the City, the constructing Developer shall deliver to the City copies of all plans, specifications, shop drawings, as-built plans, operating manuals, service manuals, warranties and other documents relating to the design, construction, installation, and operation of the Improvements.

Section 8. Liens, Claims, and Encumbrances

Prior to final acceptance of Improvements by the City, the constructing Developer shall provide a written guarantee and assurance to the City that there are no liens, claims, or encumbrances on those Improvements, together with unconditional final releases from all contractors and material suppliers, and with copies of invoices and corresponding checks issued by the Developer for all items for which reimbursement is requested under this Agreement for the Improvements. Notwithstanding any other provision or term of this Agreement, the City shall have no obligation to make any reimbursement payments until the constructing Developer has cleared any and all liens, claims and encumbrances from the Improvements and provided the required documentation, guarantee and assurance in writing, to the satisfaction of the City.

Section 9. Warranty and Repair

- (a) Warranty. Each Developer hereby warrants the Improvements that it constructs as to materials and workmanship and, should any failure of those Improvements occur within a period of one (1) year after final acceptance thereof by the City, the Developer shall promptly cause the needed repairs to be made without cost to the City.
- (b) Repair. The City is hereby authorized to make such repairs if the constructing Developer fails to make or undertake with due diligence the aforesaid repairs within twenty (20) days after the City has given written notice of such failure. In case of emergency where, in the sole opinion of the City Engineer, delay would cause serious hazard to the public, the necessary repairs may be made or lights, signs and barricades erected, without prior notice to the Developer. In all cases of failure of Improvements within the warranty period where the City has taken action in accordance with this paragraph, the constructing Developer shall reimburse the City as appropriate for all costs, direct and indirect, incurred by the City.

Section 10. Indemnity

The Developer, by execution of this Agreement, specifically agrees to assume the defense of, indemnify, and hold harmless the City and its officers, employees, consultants, and agents (the "Indemnitees" from and against all liabilities, actions, damages, claims, losses or expenses of every type and description, including attorneys' and consultants' fees and expenses (collectively "Liabilities"), to which they may be subjected or put, by reason of, or resulting from, the acquisition or installation of the Improvements constructed by the Developer, except Liabilities

ATTACHMENT 1 EXHIBIT B to the Resolution

CONTRACT 13-2018

arising from the sole negligence or willful misconduct of the City and/or the Indemnitees. This indemnification shall extend to Liabilities occurring after this Agreement is terminated as well as while it is in force.

Section 11. No Third Party Beneficiary

City does not assume any liability, duty or obligation to Developer's contractors, subcontractors or agents by execution or performance of this Agreement and no contractors, subcontractors, agents or any parties are third party beneficiaries of this Agreement.

Section 12. Attorney's Fee

If any suit, action or proceeding in law or equity is brought to enforce the provisions of this Agreement, the prevailing party shall be entitled to reasonable costs and attorneys' fees.

Section 13. Notices

Any notices, requests, demands or other communications required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been duly given on the date of service if served personally (FedEx and similar services, each of which is hereinafter called an "Express Courier," shall be considered to be personal service) or by telephone facsimile or other electronic transmission (provided that the sender of a telephone facsimile or other electronic transmission has received confirmation of successful transmission by the sending fax machine), and upon receipt, if mailed to the party to whom notice is to be given, by first-class mail, registered or certified, postage prepaid, return receipt requested, and properly addressed as follows:

City:

City of Rancho Cordova
Community Development Department
2729 Prospect Park Drive
Rancho Cordova, CA 95670
Attn: Director

With a copy to:

City of Rancho Cordova
Finance Department
2729 Prospect Park Drive
Rancho Cordova, CA 95670
Attn: Finance Administrator

Developer:

Douglas Road 105, LLC
Insert Street Address
Insert City, State
Attn: Constantino Galaxidas

With a copy to:

Watt Communities
2408 Professional Drive
Roseville, CA 95661
Attention: Kevin Webb

Woodside Homes
111 Woodmere Road, Suite 190
Folsom, CA 95630
Attention: Brian Cutting

Either party may change its mailing address at any time by giving written notice of such changes to the other party in the manner provided herein.

Section 14. Term

The term of this Agreement shall start on the day and year duly executed by all parties and shall remain in effect until all the terms and conditions contained in this Agreement have been

Credit/Reimbursement Agreement

February 2018

City of Rancho Cordova and Douglas Road 105 LLC – Exhibit B

AGENDA ITEM 16.2

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satisfied. However, this Agreement shall become null and void upon the termination of the Cooperative Agreement.

Section 15. Severability

If any portion of this Agreement is declared by a court of competent jurisdiction to be invalid or unenforceable, such portion shall be deemed severed from this Agreement and the remaining parts shall remain in full effect as though such invalid or unenforceable provision had not been a part of this Agreement.

Section 16. Binding on Successors and Assigns

Each and every provision of this Agreement shall be binding upon and shall inure to the benefit of the respective successors and assigns of the parties hereto, in the same manner as if such parties had been expressly named herein.

Section 17. Governing Law; Venue

This Agreement is made under, and shall in all respects be interpreted, enforced, and governed by, the laws of the State of California. In the event of a dispute concerning the terms of this Agreement, the venue for any legal action shall be with the appropriate court in the County of Sacramento, State of California.

Section 18. Exhibits

The Exhibits attached hereto are hereby incorporated herein by this reference.

Section 19. Entire Agreement

This Agreement contains the entire agreement between the parties with respect to the matters contained herein and may be amended only by subsequent written agreement signed by all parties.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the day and the year first written above.

CITY OF RANCHO CORDOVA, A
California municipal corporation

DOUGLAS ROAD 105, LLC,
a California limited liability company

By: _____
Cyrus Abhar
 City Manager

By: _____
 Constantino Galaxidas
 Managing Member

Date: _____

Date: _____

ATTEST:

 Stacy Leitner, City Clerk

ATTACHMENT 1
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CONTRACT 13-2018

Date: _____

APPROVED AS TO FORM:

Adam U. Lindgren, City Attorney

Date: _____

2923838.1

CITY OF RANCHO CORDOVA, CA

FIGURE 1

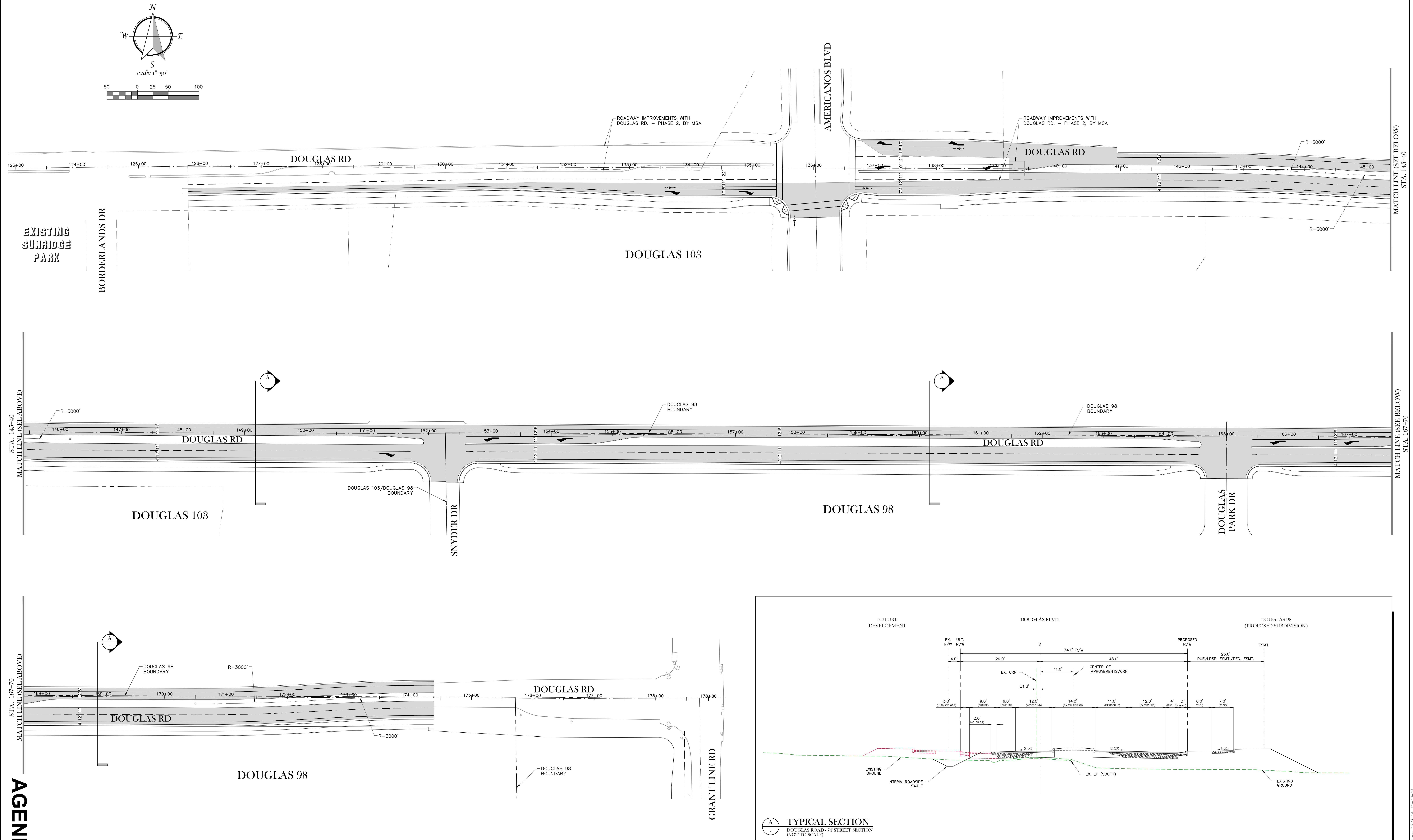
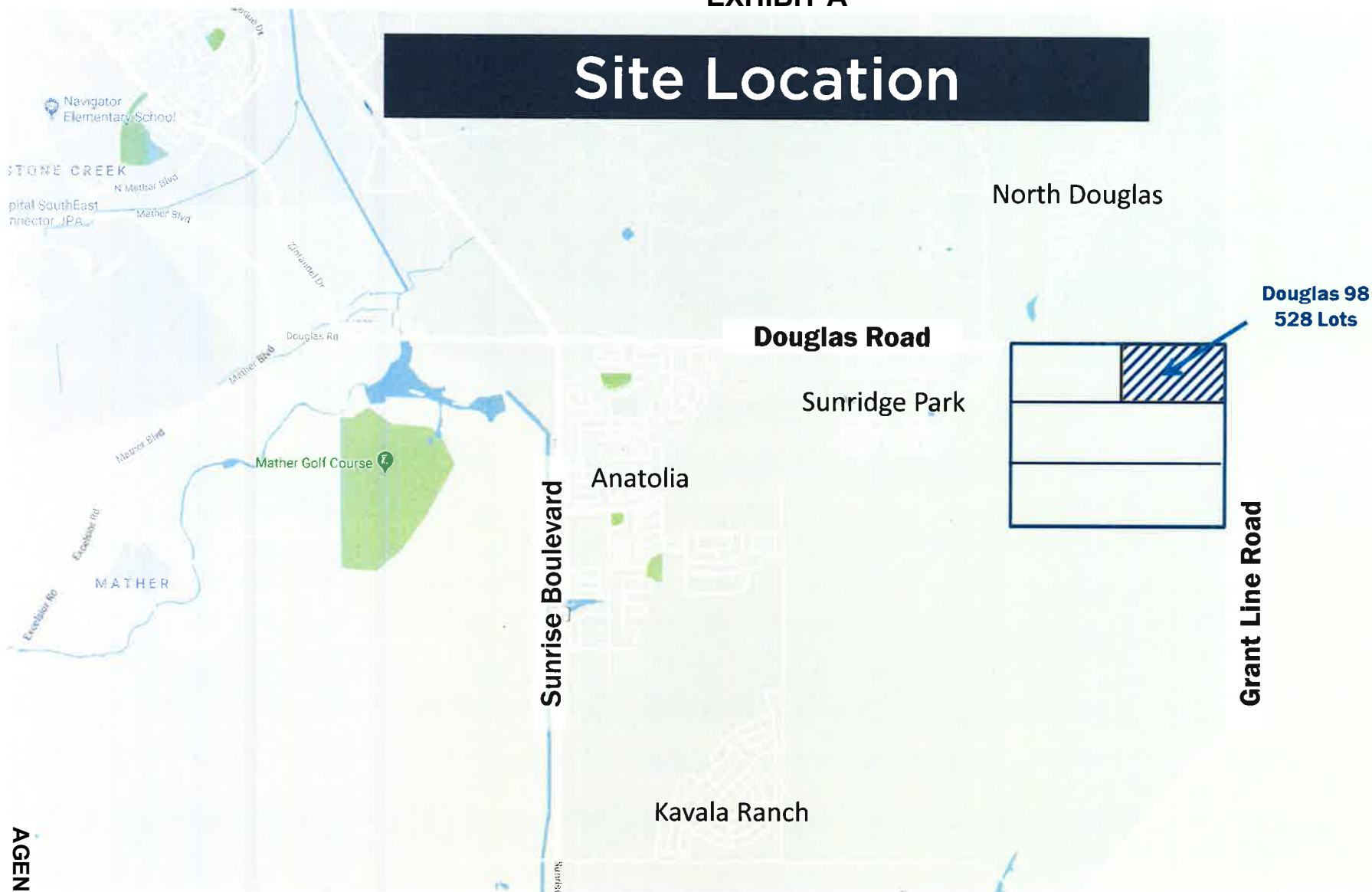


EXHIBIT A

Site Location



ATTACHMENT 1
Exhibit B to the Resolution

EXHIBIT B

Insert Cooperative Agreement
(Same as Attachment 1, EXHIBIT A)

ATTACHMENT 1

Exhibit C to the Resolution

For Official Use Only:

Case # _____
Fund: _____

Lot # _____
Credit Amount/Lot \$975

EXHIBIT C

SUPPLEMENTAL TRAFFIC IMPACT FEE

ASSIGNMENT AND TRANSFER OF FEE CREDIT CERTIFICATE

The undersigned Developer as the holder of certain Supplemental Traffic Impact fee credits related to the credit agreement referenced herein, hereby assigns, transfers and conveys to the undersigned Assignee a credit amount for certain property as indicated below:

Developer's Legal Name: **DOUGLAS ROAD 105, LLC**

Reference Credit/Reimbursement Agreement: **"Credit Agreement for Privately Constructed Public Facilities, Contract No. 13-2018"**

Reference Contract No. 13-2018

Transfer No. 13-2018-X

Assignee's Legal Name: _____

Assignee's Name of Subdivision or Development Project: Douglas 98, Village X

Number of lots assigned credits (Attach a list of lots and copy of final map): lots

Final Map Name: _____

Final Map Lot #: (Insert your new lots here)

Total Credit Allocation before fee credit transfer: _____

Total dollar amount of fee credit transfer: _____

Credit Allocation remaining after transfer: _____

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For Public Works Department Use Only:

Lot # _____	Case # _____	Lot # _____	Case # _____
Lot # _____	Case # _____	Lot # _____	Case # _____
Lot # _____	Case # _____	Lot # _____	Case # _____
Lot # _____	Case # _____	Lot # _____	Case # _____
Lot # _____	Case # _____	Lot # _____	Case # _____

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DEVELOPER

By: _____
Name: _____
Title: _____
Date: _____
Phone: _____
E-mail: _____

CITY Concurrence

By: _____
Name: _____
Title: _____
Date: _____

HOME BUILDER

Phone: _____
E-mail: _____

ATTACHMENT 1
Exhibit C to the Resolution

Please Submit **THE ORIGINAL ONLY** to the City of Rancho Cordova, Department of Public Works

ATTACHMENT 2**CITY OF RANCHO CORDOVA****ORDINANCE NO. 2-2018**

**AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA
ADOPTING A SECOND AMENDMENT TO THE DEVELOPMENT AGREEMENT
FOR THE DOUGLAS 98 PROJECT**

THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA DOES ORDAIN AS FOLLOWS:

Section 1. Recitals.

A. In order to strengthen the public planning process, encourage private participation in comprehensive planning and reduce the economic risk of development, the Legislature of the State of California adopted Section 65864, *et seq.*, of the Government Code (the "Development Agreement Statute"), authorizing the City, and any person having a legal or equitable interest in the real property, to enter into a development agreement and establish certain development rights in the property, which is the subject of the development project application. Pursuant to Government Code section 65868, Development Agreements may be amended by mutual assent of the parties.

B. The City and Douglas Road 98, LP, a California limited partnership, entered into a Development Agreement effective April 6, 2006 and recorded on May 5, 2006 in the Official Records of Sacramento County at Book 20060505, Page 0951 (the "Development Agreement") establishing certain development rights for real property located in the City of Rancho Cordova, California, as more particularly described in Exhibit A-1 and Exhibit A-2 of the Development Agreement (the "Property").

C. The Property has changed ownership since the City and Douglas 98, LP entered into the Development Agreement. Douglas Road 105, LLC, a California limited liability company, ("Landowner" or "Developer") currently owns the Property and has assumed all of the interests and obligations of Douglas Road, LP in the Development Agreement by virtue of that certain "Assumption Agreement Relative to Douglas 98" dated August 12, 2013. Landowner has provided the City with a title report indicating their ownership of the Property.

D. The Douglas 98 Project is within the Sunrise Douglas Community Plan and the SunRidge Specific Plan ("SDCP/SRSP") area. The SDCP/SRSP was approved by the County of Sacramento ("County") in July 2002. The County also prepared and certified an Environmental Impact Report ("EIR") (State Clearinghouse Number 97022055) for the SDCP/SRSP. In July 2003, the City of Rancho Cordova incorporated an area that included the SDCP and SRSP. In response to litigation involving the SDCP/SRSP EIR, the City subsequently rescinded approval of the SDCP/SRSP. On November 7, 2012, the City certified a Partially Revised Draft Environmental Impact Report (Revised DEIR) to the SDCP/SRSP EIR addressing long-term water supply plan and other water supply related issues (State Clearinghouse Number 97022055). The City determined to carry out the projects within the SDCP/SRSP area without re-approving the SDCP/SRSP.

ATTACHMENT 2

E. The City Council originally approved a General Plan Amendment, Specific Plan Amendment, Rezone, Development Agreement, and Tentative Subdivision Map for the Douglas 98 Project in February and March of 2006 as part of its approval for the Sunridge East Projects ("Existing Project"). The City adopted a Mitigated Negative Declaration as the California EQA environmental review for these approvals ("Sunridge MND"), which relied upon the SDCP/SRSP EIR that was incorporated by reference into the Sunridge MND.

F. On April 19, 2006, the City Council approved an Addendum pursuant to the California Environmental Quality Act, "CEQA," ("2006 Addendum") to the SDCP/SRSP EIR that analyzed the impact of revisions to Mitigation Measures in the Master Mitigation Monitoring and Reporting Program for the SDCP/SRSP EIR relating to phasing of certain transportation improvements (City Council Resolution No. 31-2006). The mitigation measures establish limits on the total number of residential dwelling units that are allowed to be recorded in final maps until construction commences on certain transportation improvements (the "Transportation Improvements Thresholds"). The City Council approved amendments to the Transportation Improvement Thresholds as set forth in City Council Resolution No. 31-2006. Those Transportation Improvement Thresholds remain applicable to the Douglas 98 Project.

G. The 2006 Addendum found that the amendments to the Transportation Improvement Thresholds would not create a new, or substantially more severe, significant environmental impact than those previously identified in the SDCP/SRSP EIR. Therefore, no supplement to the SDCP/SRSP EIR and no further environmental review was required under CEQA.

H. The City adopted its General Plan and certified the General Plan EIR in June 2006 which included the SRSP and the Existing Project.

I. On August 19, 2013 the City Council approved Resolution No. 103-2013, approving a CEQA Addendum and an exception to the requirements of Mitigation Measure 37a for the Project based on evidence in the record that the traffic generated by the currently approved lots in the SRSP area with the addition of the 528 Project lots would not result in unacceptable traffic conditions without the completion of construction of all the improvements listed in the Mitigation Measure prior to the traffic generated by the development of the lots.

J. On September 3, 2013, The City Council adopted Ordinance No. 26-2013 approving the First Amendment to the Development Agreement ("First Amendment"), adding Section 6.4.6 to the Agreement related to the payment of a Supplemental Traffic Impact Fee to be used by the City to fund traffic improvements necessary to serve the project and amending the City's Zoning Map. The Project developer, in Section 6.4.6 of the Development Agreement added via the First Amendment, agreed to pay a "Supplemental Traffic Impact Fee," which will be used by City to fund the traffic improvements in Mitigation Measure 37a and other traffic improvements needed to serve the Project.

K. On February 20, 2018, City Council approved Resolution No. 26-2018 authorizing the execution of a Cooperative Agreement between City and Landowner, which requires Landowner to fund and construct certain traffic improvements to serve the Project in return for a partial credit toward the Supplemental Traffic Impact Fee established by Section 6.4.6 of the Development Agreement.

L. Pursuant to Government Code section 65868, City and Landowner now desire to modify and revise the Development Agreement to reflect and incorporate the terms of the fee credit agreement, all as more fully set forth below in this Second Amendment.

ATTACHMENT 2

M. The City prepared an Addendum in 2013 to analyze whether supplemental environmental review to the SDCP/SRSP EIR, Sunridge East MND, the 2006 Addendum and General Plan EIR were required for the Project under CEQA ("2013 Addendum"). The analysis in the 2013 Addendum showed that none of the standards under CEQA for preparation of subsequent or supplement environmental review (either a Negative Declaration or EIR) have occurred or are met for the Project. The Project impacts are identified in the SDCP/SRSP EIR, Sunridge East MND and 2006 Addendum and no further environmental review is required under CEQA. Approval of the 2013 Addendum and the appropriate CEQA findings are found in Resolution No. 103-2013.

N. The changes to the Development Agreement via this Second Amendment are exempt from further CEQA review as they do not change any impacts of the Project and only relate to fee credits for infrastructure improvements previously analyzed as part of the 2006 and 2013 CEQA approvals come within the exemption in CEQA Regulation 15183 for projects consistent with a community plan, general plan, or zoning.

M. On February 20, 2018, the City Council, as the legislative body for purposes of Development Agreement approval, held a properly noticed public hearing pursuant to Government Code section 65867 and considered all comments received in writing and all testimony received at the public hearing.

Section 2: Findings.

Therefore, on the basis of: (a) the foregoing recitals, which are hereby incorporated herein; (b) the City of Rancho Cordova's General Plan, the General Plan EIR and the Zoning Code at the time the Douglas 98 Development Agreement was approved; (c) the SDCP/SRSP EIR; (d) Revised DEIR for the SDCP/SRSP (e) 2006 Sunridge MND; and (f) the 2013 Addendum prepared for the First Amendment to the Development Agreement, Zoning Code Amendment and Amended Tentative Subdivision Map the City Council finds and determines that:

A. The Second Amendment to the Development Agreement is consistent with the objectives, policies, general land uses and programs specified and contained in the City's General Plan at the time the Douglas 98 Development Agreement was approved in that: (a) The Project remains predominantly residential and consistent with the SRSP; (b) the Project is consistent with the fiscal policies of the General Plan at the time the Douglas 98 Development Agreement was approved with respect to provisions of infrastructure and public services; and, (c) the Second Amendment and Amended Development Agreement include provisions relating to a fee credit agreement between City and Developer.

B. The Second Amendment and Amended Development Agreement are compatible with the uses authorized in, and the regulations prescribed at the time the Douglas 98 Development Agreement was approved for the land use area in which the real property is located.

C. The Second Amendment to the Development Agreement is in conformity with public convenience, general welfare and good land use policies in that the Second Amendment and Amended Development Agreement will continue to implement land use guidelines set forth in the General Plan and SRSP at the time the Douglas 98 Development Agreement was approved

ATTACHMENT 2

and at the time of the 2013 Project approvals, and this Second Amendment will help ensure the construction of infrastructure needed to serve new development.

D. The Second Amendment will not be detrimental to the health, safety and general welfare in that the Project will proceed in accordance with the programs and policies of the General Plan and SRSP at the time the Douglas 98 Development Agreement was approved and at the time of the 2013 Project approvals.

E. The Second Amendment will not adversely affect the orderly development of property, or the preservation of property values, in that the amendment is consistent with the General Plan at the time the Douglas 98 Development Agreement was approved and at the time of the 2013 Project approvals.

F. The Second Amendment is consistent with and includes the substantive elements of Government Code sections 65864 through 65869.5, and has been processed consistent with all the procedural requirements thereof.

Section 3: Approval of Second Amendment to Development Agreement.

The City Council hereby approves the Second Amendment to the Development Agreement, attached to this Ordinance and incorporated herein by reference as **Exhibit A**, and authorizes the City Manager to sign the Second Amendment to the Development Agreement after the effective date of this Ordinance.

Section 4: Recordation

Within ten (10) days after the Second Amendment to the Development Agreement is executed by the City Manager, the City Clerk shall submit the amendment to the County Recorder for recordation.

Section 5: Severability.

If any section, subsection, clause or phrase of this Ordinance is for any reason held to be invalid or unconstitutional by the decision of a court of competent jurisdiction, it shall not affect the remaining portions of this Ordinance that can be given effect without the invalid provision and, to this end, the provisions of this Ordinance are severable. This City Council hereby declares that it would have adopted this Ordinance irrespective of the invalidity of any particular portion thereof and intends that the invalid portions should be severed and the balance of the Ordinance be enforced.

Section 6: Publication and Effective Date.

Within fifteen (15) days after adoption, a summary of this Ordinance shall be published once in the Grapevine Independent or the Sacramento Bee, a newspaper of general circulation printed and published in Sacramento County and circulated in the City of Rancho Cordova, in accordance with Government Code section 36933. This Ordinance shall take effect and be enforced thirty (30) days after its adoption.

ATTACHMENT 2

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova this ____ day of _____ 2018, by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Linda Budge, Mayor

ATTEST:

Stacy Leitner, City Clerk

2925649.1

OFFICIAL BUSINESS
Document entitled to free recording
Government Code §6103

ATTACHMENT 2
Exhibit A to
Ordinance 2-2018

423

**Recording requested by, and
when recorded return to:**

City of Rancho Cordova
2719 Prospect Park Drive
Rancho Cordova, CA 95670
Attn: City Clerk

SPACE ABOVE THIS LINE FOR RECORDER'S USE ONLY

**SECOND AMENDMENT TO DEVELOPMENT AGREEMENT
RELATIVE TO DOUGLAS 98
BY AND BETWEEN
THE CITY OF RANCHO CORDOVA AND DOUGLAS ROAD 105, LLC**

DRAFT

**SECOND AMENDMENT TO DEVELOPMENT AGREEMENT
RELATIVE TO DOUGLAS 98
BY AND BETWEEN
THE CITY OF RANCHO CORDOVA AND DOUGLAS ROAD 105, LLC**

This Second Amendment (the "Second Amendment") to the Development Agreement is dated _____, 2018, for references purposes only, is made by and between the **CITY OF RANCHO CORDOVA**, a California municipal corporation ("City"); and **DOUGLAS ROAD 105, LLC**, a California limited liability company (the "Landowner"). City and Landowner are hereinafter collectively referred to as the "Parties" and singularly as a "Party."

RECITALS

A. The City and Douglas Road 98, LP, a California limited partnership, entered into a Development Agreement effective April 6, 2006 and was recorded on May 5, 2006 in the Official Records of Sacramento County at Book 20060505, Page 0951 (the "Agreement") establishing certain development rights for real property located in the City of Rancho Cordova, California, as more particularly described in Exhibit A-1 and Exhibit A-2 of the Agreement (the "Property").

B. The Property has changed ownership since the City and Douglas 98, LP entered into the Development Agreement. Douglas Road 105, LLC, a California limited liability company, ("Landowner") currently owns the Property and has assumed all of the interests and obligations of Douglas Road, LP in the Agreement by virtue of that certain "Assumption Agreement Relative to Douglas 98" dated August 12, 2013.

C. On September 3, 2013, The City Council adopted Ordinance No. 26-2013 approving the First Amendment to the Agreement ("First Amendment"), adding Section 6.4.6 to the Agreement related to the payment of a Supplemental Traffic Impact Fee to be used by the City to fund traffic improvements necessary to serve the project.

D. Landowner desires to fund and construct some of the traffic improvements intended to be funded in part with the Supplemental Traffic Impact Fee established by Section 6.4.6 of the Agreement and therefore City has determined that a partial fee credit toward Landowner's Supplemental Traffic Impact Fee obligation, in return for the construction of traffic improvements that will serve the project, is appropriate.

E. Pursuant to Government Code section 65868, City and Landowner now desire to modify and revise the Development Agreement to reflect certain further changes and modifications to the obligations of the Landowner to pay the Supplemental Traffic Impact Fee and to reflect the incorporation of the Cooperative Agreement, all as more fully set forth below in this Second Amendment.

F. This Second Amendment amending certain provisions of the Development Agreement applicable to the entire Property was adopted by City Ordinance No. ____-2018 on _____,

2018.

AGREEMENT

1. Incorporation of Recitals. Recitals A through F are hereby incorporated herein, including the documents referred to in the Recitals.

2. Restatement of Section 6 of the Recitals concerning “Project Approvals.” City and Landowner agree that Section 6 of the Recitals of the Agreement is hereby deleted and replaced with the following:

“**6.1** The General Plan amendment adopted by the City on February 21, 2006 by Resolution No. 16-2006;

6.2 The Sunridge Specific Plan adopted by the County of Sacramento, as adopted by the City on July 1, 2003, by City Resolution No. 06-2003 (the ‘Specific Plan’);

6.3 The Mitigation Measures in both the Environmental Impact Report (‘EIR’) certified in July 2002 by the County of Sacramento (State Clearinghouse No. 97022055), as revised by the City on November 7, 2011, the Mitigated Negative Declaration adopted on February 21, 2006, as further analyzed in the Addenda dated April 19, 2006 and August 2013;

6.4 The Rezoning of the Property approved on March 6, 2006 by City Ordinance No. 08-2006 as further amended on September 3, 2013 by City Ordinance No. 26-2013;

6.5 The Large Lot / Small Lot Tentative Subdivision Map approved on August 19, 2013 by City Resolution No. 103-2013;

6.6 The Development Agreement adopted on March 6, 2006 by City Ordinance No. 07-2006 as amended on September 3, 2013 by City Ordinance No. 26-2013 adopting the First Amendment to the Development Agreement and as amended on _____, 2018 by City Ordinance No. ____-2018 adopting the Second Amendment to the Development Agreement.”

3. Addition of Section 6.4.6.1 concerning the “Credit Toward New Supplemental Traffic Impact Fee.” City and Landowner agree that Section 6.4.6.1 is hereby added to the Agreement to immediately follow Section 6.4.6 and to read as follows:

“**6.4.6.1 Credit for New Supplemental Traffic Impact Fee.** City and Landowner agree that Landowner shall be credited up to Nine Hundred and Seventy-Five Dollars (\$975.00) toward the \$4,195.00 portion of the Supplemental Traffic Impact Fee due at the time of issuance of a building permit (referenced above in Section 6.4.6) for a residential lot if all of Landowner obligations within the Cooperative Agreement, attached hereto and incorporated herein as **Exhibit H**, are fully met to the satisfaction of

City. This fee credit is applicable only toward the Supplemental Traffic Impact Fee, as the street and frontage improvements to Douglas Road that will serve the Project and improve access to Highway 50 from the Project, including improvements to the portion of Douglas Road adjacent to the Douglas 103 property (which is not part of Landowner's Project), advance the purpose of the supplemental fee. City agrees that Landowner and Property will have fully satisfied its obligation under the Conditions of Approval and Mitigation and Monitoring Reporting Program for offsite traffic improvements (as to each lot credited) when the fee credit required under this section is implemented. This Section 6.4.6.1 shall become null and void upon the termination of the Cooperative Agreement."

4. Addition of Section 6.4.7 related to a Homeowner Association. City and Landowner agree to add a new Section 6.4.7 to the Development Agreement as follows regarding the formation of a Homeowner Association:

"6.4.7 Homeowner Association. Landowner hereby agrees to form a Homeowner Association, or other equivalent mechanism as approved by the City, to manage the residential portions of the Property as a common interest development under the Davis-Stirling Common Interest Development Act or other applicable law. "Homeowner Association" means an association of owners within the portions of the Property zoned for single family use that is formed and operated, in part, to provide enforcement of covenants, conditions and restrictions ("CC&Rs") that are recorded against the properties to protect, preserve, and maintain the appearance, condition, function, and operation of the single family home development. The purpose of the Homeowner Association will be to enforce the rules and regulations adopted from time to time by its board of directors, enhance and protect the value, desirability, and attractiveness of the community, and discharge such other lawful duties and responsibilities as may be required pursuant to its bylaws and the declaration of CC&Rs to be recorded in the Office of the Recorder of Sacramento County, State of California, with respect to the residential planned development."

5. Amendment of Section 29. City and Landowner agree to delete and replace the last sentence of Section 29 of the Agreement to read as follows:

"This Agreement consists of 18 pages and 10 Exhibits, which constitute the entire understanding and agreement of the parties."

6. Amendment of Exhibit List. City and Landowner agree that the Exhibit List to the Agreement is amended to include Exhibit H, the Cooperative Agreement.

7. Definition of Terms. All capitalized terms used in this Second Amendment shall have the same definition as provided in the Agreement, except where a different definition has been supplied in this Second Amendment.

8. All Other Terms Remain in Force. Except as amended by Sections 1 through 10 above, all terms and conditions of the Agreement remain in full force and effect.

9. Recording. Within ten (10) days after the Effective Date, City shall record this Second Amendment with the Sacramento County Recorder's Office.

10. Counterparts. The Parties may execute this Second Amendment in counterparts, each of which will be considered an original, but all of which will constitute the same instrument.

11. Entire Agreement. This Second Amendment sets forth the Parties' entire understanding regarding the matters set forth above. It supersedes all prior or contemporaneous agreements, representations, and negotiations regarding those matters (whether written, oral, express, or implied) and may be modified only by another written agreement signed by all Parties. This Second Amendment will control if any conflict arises between it and the First Amendment or the Agreement.

Signatures to Follow on Next Page

IN WITNESS WHEREOF, the City of Rancho Cordova, a municipal corporation, has authorized the execution of this Second Amendment in duplicate by its City Manager and attested to by its City Clerk under the authority of Ordinance No. __-2018, adopted by the Council of the City on this ____ day of _____ 2018, and Landowner has caused this Second Amendment to be executed.

City of Rancho Cordova

DOUGLAS 105, LLC

By: _____

By: _____

Name: Cyrus Abhar

Name: _____

Title: City Manager

Title: _____

Date: _____, 2018

Date: _____, 2018

Attest:

Stacy Leitner, City Clerk

Approved as to Form:

Adam U. Lindgren
City Attorney

Date: _____, 2018

[Attach Certificate of Acknowledgment – Civil Code § 1189]

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
) ss.
COUNTY OF SACRAMENTO)

On _____ before me, _____, (here insert name and title of the officer), personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

STATE OF CALIFORNIA)
) ss.
COUNTY OF SACRAMENTO)

On _____ before me, _____, (here insert name and title of the officer), personally appeared _____, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____ (Seal)

2921807.1

Douglas Road

February 20, 2018

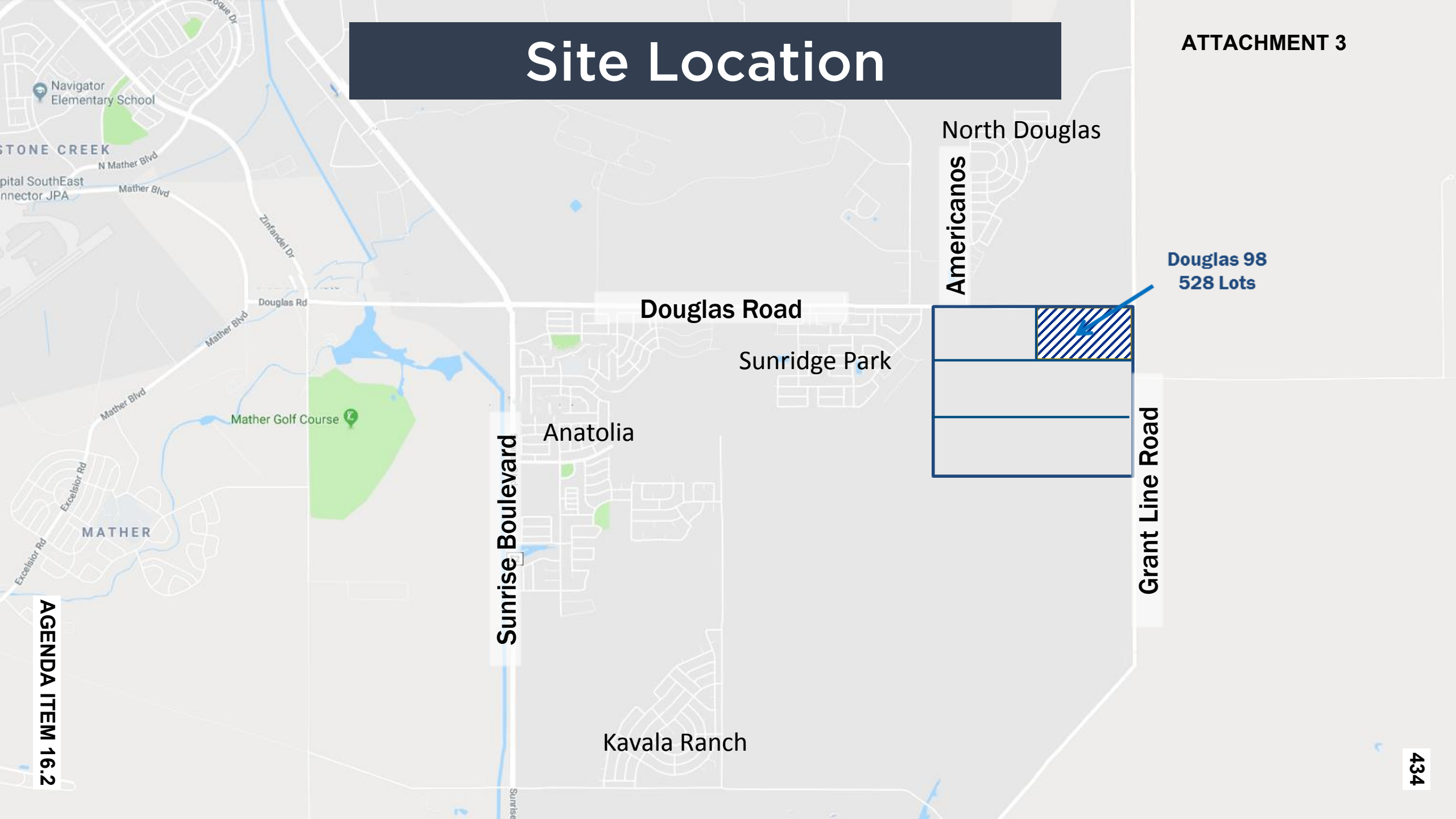
Presentation Goals

- Update Council regarding work to date
- Summarize Developer requested closure of Douglas Rd.
- Provide summary of agreement stipulations and staff recommendation

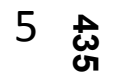
Work to Date

- Council meeting January 16, 2018
- Developer conducted public outreach
- Drafted agreements

Site Location



ATTACHMENT 3



Site Conditions

ATTACHMENT 3

Douglas 98

AGENDA ITEM 16.2

Douglas 98 Proposal

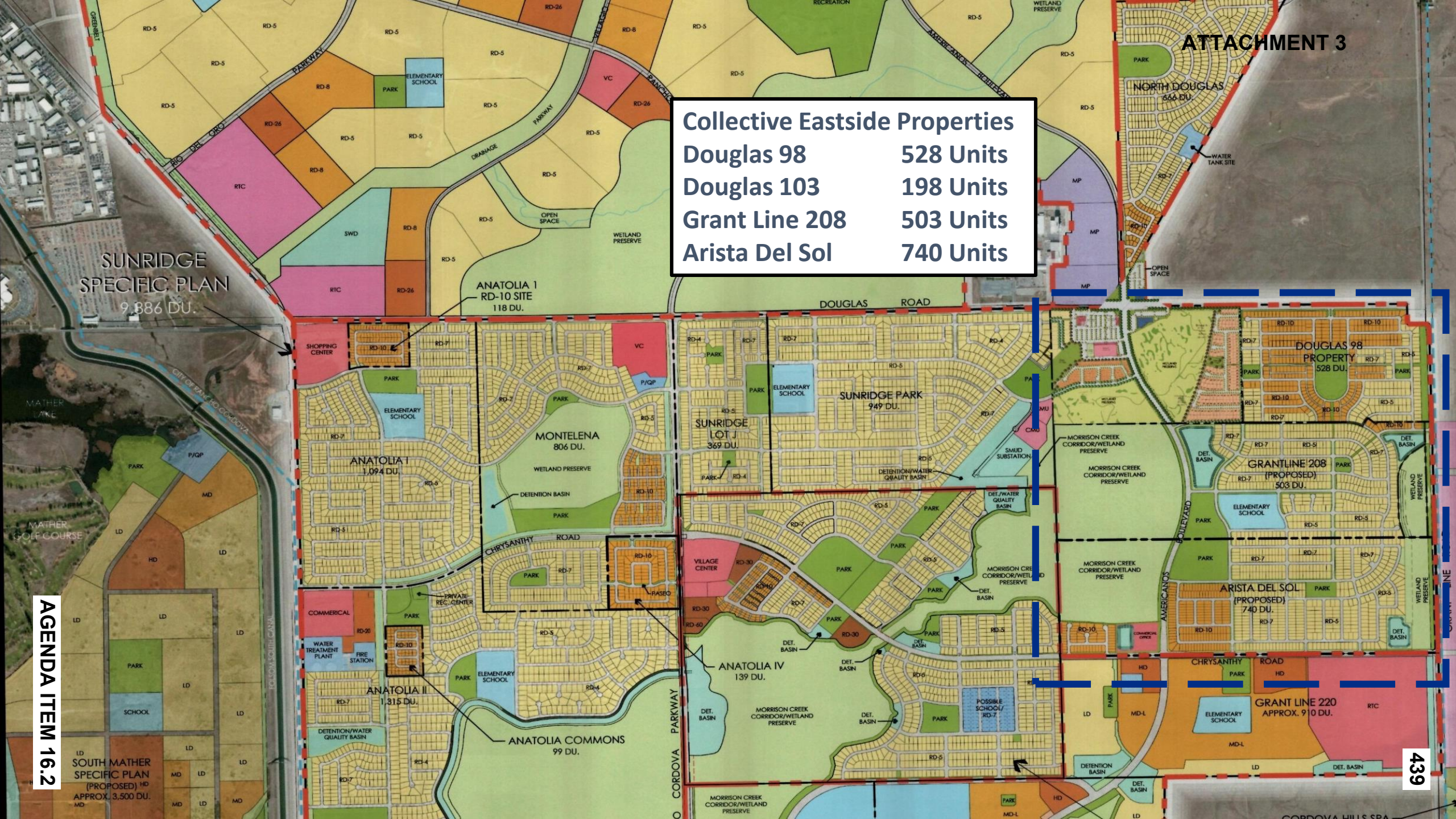
- Infrastructure investment
 - Douglas Road improvements and onsite improvements
- Break ground 2018
- Production home construction in early 2019

Potential Benefits

- Significant infrastructure investment
 - Safety upgrades and aesthetics
 - Closing road shortens construction time
- Commence construction on the 528 residential units in Douglas 98
- Opens up the remaining undeveloped units in the Eastside Properties

Collective Eastside Properties	
Douglas 98	528 Units
Douglas 103	198 Units
Grant Line 208	503 Units
Arista Del Sol	740 Units

SUNRIDGE
SPECIFIC PLAN
9,886 DU.

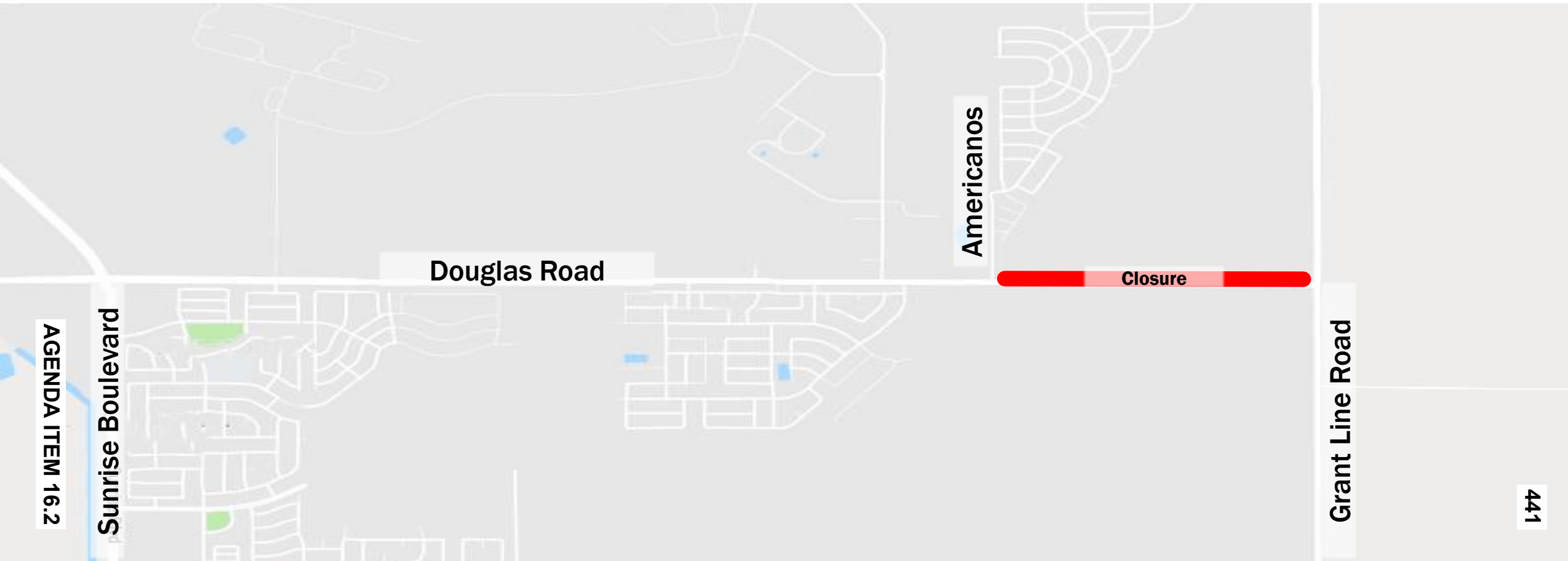


Potential Benefits

- More residential units in the areas south of Douglas Road generates opportunities for
 - Additional commercial and retail growth in the community
 - Additional residential encourages future construction of the middle school/high school

Douglas 98 Request and Considerations

- Close Douglas Road between Americanos and Grant Line Road for up to six months



Potential Considerations

- Detours and delays to residents wanting to access Grant Line Road
- Cut through traffic in North Douglas neighborhood
- Additional Douglas Road improvements west of Americanos scheduled for same time period

Road Closure

Detour:

- Sunrise to White Rock, +3 miles
- Sunrise to Jackson, no increase

Mitigate Cut Through Traffic

Americanos

Raymer

Existing 5 lanes

Widening 2-4 lanes

Closure

Douglas Road

Douglas 98
528 Lots

Sunrise Boulevard

Grant Line Road

Stipulated Agreement

- Close Douglas Road no longer than 6 months
- Douglas Road improvements, including utilities to serve the project, 2 eastbound lanes and 1 westbound lane and a landscaped median generally from Americans Road to Grant Line Road. Also constructs entire Douglas 103 eastbound frontage lane including sidewalk improvements.
- Extensive outreach to the community before and during construction
- Implement traffic management measures to minimize cut through traffic for the North Douglas development
- Impact Fee credits for construction of offsite frontage improvements
- Establishment of an HOA, or equivalent mechanism as approved by the City, for residential portion of the subdivision

Credit Agreement & DA Amendment

- Credit Agreement for \$975 per unit against the Supplemental Traffic Impact Fee for 528 units for construction of offsite frontage improvements
- Second Amendment to the Development Agreement
 - Addition of Section 6.4.6.1 to reflect the credit of \$975 per unit towards the Supplemental Traffic Impact Fee due at building permit.
 - Addition of Section 6.4.7 requiring the formation of a Homeowners Association for the residential portion of the subdivision.

Developer Intended Timeline

1. Submit Construction Documents/Mass Grading – February 20, 2018
2. Submit Construction documents/Douglas Road Improvements – February 20, 2018
3. Commence Mass Grading of Douglas 98– April 16, 2018
4. Commence Road Closure of Douglas Road – May 1, 2018
5. Commence In-Tract Improvements to Douglas 98 – June 1, 2018
6. Commence construction of model homes – September 1, 2018
7. Open all lanes of Douglas Road – October 31, 2018
8. Commence construction of production homes – February 1, 2019

Staff Recommendation

- Approve Resolution No. 26-2018 authorizing the City Manager to execute the following agreements
 - Contract No. 14-2018 Cooperative Agreement with Douglas Road 105, LLC for Temporary Closure of Douglas Road
 - Contract No. 13-2018 Impact Fee Credit Agreement with Douglas Road 105, LLC for construction of off-site frontage improvements on Douglas Road
- Introduce and waive first reading of Ordinance No. 02-2018 which approves a Second Amendment to the Development Agreement

THANK YOU



MEMORANDUM

DATE: February 20, 2018

TO: Honorable Mayor and Council Members

FROM: Kim Juran-Karageorgiou,
Administrative Services Director
Stacy Delaney,
Community Enhancement Analyst

SUBJECT: Community Enhancement Fund Citizen Oversight Board Appointments



RECOMMENDATION

The City Council interview, discuss, and select, by a majority vote of the full City Council, five two-year term Board members and two one-year term at-large student appointees to fill the new Community Enhancement Fund Citizen Oversight Board.

RESULT OF RECOMMENDED ACTION

The five Oversight Board members and up to two at-large student appointees will be appointed to provide a review and audit of how tax revenues from Measure H are spent by the City.

BACKGROUND

With the passage of Measure H in 2014, the City Council expressed interest in establishing an oversight board that would review the manner in which Community Enhancement Funds were spent. While not required by the voter approved sales tax measure, this oversight board would provide an additional layer of transparency to the community.

At the City Council meeting on August 21, 2017, Council provided direction to staff on the parameters for establishing an Oversight Board, which are summarized as follows:

- **Size of the board** – The Oversight Board will consist of five members appointed by a majority vote of the full City Council. In addition, two at large appointees shall be made by a majority of the City Council. It is intended that the at-large appointments be youth representatives, including high school and college students from the City.
- **Oversight Board Eligibility** – With the exception of the at-large appointees, Oversight Board members shall be at least 18 years old and a full-time resident of Rancho Cordova. Oversight Board members shall not be a direct recipient of Community Enhancement Fund monies.
- **Criteria for selection** – The City requested applications from interested community members beginning December 11, 2017 through January 15, 2018. The City received applications from 14 qualified candidates and final appointment to the board determined by the City Council.

- **Term limits** – Oversight Board members shall serve a two-year term to align with the City’s budget cycle. Oversight Board members may apply for additional terms.
- **Roles and Responsibilities** – It is recommended that the oversight board perform the following functions:
 - Review the accomplishments achieved with Community Enhancement Fund dollars for each fiscal year to be highlighted in the Community Enhancement Fund Annual Report and provide feedback to staff.
 - Confirm the amount of revenues received in the prior fiscal year in comparison to the budget.
 - Review actual expenditures to ensure that they were in alignment with the Community Enhancement Fund grant awards and budget allocation approved by the City Council.
 - Review each Community Enhancement Fund grantee’s compliance with the City’s reporting requirements and make recommendations to exclude non-complying organizations from future award cycles to the City Council for consideration.
 - Any amended or additional responsibilities as determined by a majority vote of the full City Council.

At the City Council meeting on October 16, 2017, the City Council adopted Resolution 129-2017 establishing a Community Enhancement Fund Citizen Oversight Board with the goal of having the Board members appointed in early 2018. An application process was opened on December 11, 2017 through January 15, 2018, with 14 applications meeting the criteria for consideration. City staff verified that the address of each applicant is within the jurisdiction of Rancho Cordova. The voter registration status was checked and verified for all but one Oversight Board applicant. The one applicant that is not registered to vote in Rancho Cordova is not recommended to move forward as a Board member candidate since that was a condition specified in the application.

Per City Council direction, City staff coordinated with Folsom Cordova Unifired School District and Folsom Lake College to receive recommendations for student representation on the Oversight Board. One student recommended by Cordova High School submitted their application to serve a one-year term as an at-large appointee. No current Promise Program student attending Folsom Lake College submitted an application to serve as an at-large appointee. The high school representative will rotate among the three primary school districts serving Rancho Cordova with Sacramento City Unified School District next, then followed by Elk Grove Unified School District.

FISCAL IMPACT

The only fiscal impact would be the cost of staff time to prepare for and participate in Oversight Board meetings. The amount of time can not be determined at this time but will be funded by the Community Enhancement Fund administrative allocation.

ATTACHMENT

1. Community Enhancement Fund Citizen Oversight Board Application Submittals

Time Stamp	12/19/2017 15:35
What is your full name?	Andrew Carhart
How many years have you been a Rancho Cordova resident?	6
If employed, what is the name of your employer?	State of California, Employment Development Department
Yes/No Do you own property or have business interests in the City of Rancho Cordova?	Yes
List any days or evenings that you would not be available.	None.
List your past experience serving within the community of Rancho Cordova.	I have no formal experience serving the city. However, I am interested in taking a more active role in my community.
I believe I will bring the following strengths, skills, knowledge and assets to service on the Community Enhancement Fund Citizen Oversight Board.	I am currently employed as a manager in a public service position that provides oversight and develops policy for the California unemployment insurance program. I also have a master's degree in public policy and administration and a certificate in collaborative governance, which required extensive course work in different academic areas. My work experience includes balancing the needs of the state's workers and employers in the operation of a multi-billion dollar tax collection and benefit program. My academic background also provides me with the tools to understand complex issues in public policy and provide solutions to meet citizens needs.
State why you want to serve on the Community Enhancement Fund Citizen Oversight Board.	I want to take a more active role and represent the interests and voices in my community. I enjoy working on behalf of the public and would like to help make the city better in whatever way that I can.
Yes/No Have you ever been a direct recipient of a Community Enhancement Fund grant?	No
Yes/No Are you a current direct recipient of a Community Enhancement Fund grant?	No
Yes/No Do you know of any reason such as a conflict of interest (financial or otherwise), which would adversely affect your ability to serve on the Community Enhancement Fund Citizen Oversight Board?	No
Use this space to provide any additional information or comments.	
Upload any additional documentation below.	
Yes, I declare, under penalty of perjury, that all statements in this application are true and complete to the best of my knowledge and belief. I legally reside in the city limits of Rancho Cordova, am at least 18 years of age, and a registered voter of Rancho Cordova.	Yes

Notes:

Home address is within the City limits of Rancho Cordova.
 Voter registration status was verified with Sacramento County Office of Elections.

Time Stamp	12/22/2017 20:09
What is your full name?	Steven Kite
How many years have you been a Rancho Cordova resident?	39
If employed, what is the name of your employer?	NAMI California
Yes/No Do you own property or have business interests in the City of Rancho Cordova?	Yes
List any days or evenings that you would not be available.	With enough I can make myself available at most times. My job is fairly flexible
List your past experience serving within the community of Rancho Cordova.	I've been a resident of Rancho Cordova most of my life and have worked in the nonprofit industry serving residents of Rancho Cordova and Sacramento for the last 20+ years.
I believe I will bring the following strengths, skills, knowledge and assets to service on the Community Enhancement Fund Citizen Oversight Board.	I have extensive background in oversight of community service at the local, regional and statewide level. This includes budgets, logistics, legal/regulatory issues and community involvement amongst other areas of focus. I started my non profit career working with children in a group home setting. From there, I joined a small non profit that served individuals living breast cancer or HIV with issues ranging from housing to activities of daily living, I did that for a decade. From there I moved to a statewide organization that provided social services to individuals in low income housing. I am currently employed at a statewide advocacy organization focusing on Mental Illness and helping families and individuals change their communities through partnerships with their local boards of supervisors, behavioral health directors as well as with state legislators. We also provide classes and support groups run by volunteers. We have 62 affiliates across the state.
State why you want to serve on the Community Enhancement Fund Citizen Oversight Board.	My family has lived in Rancho Cordova for over 50 years and I'm really proud of our city. I'd love to be able to use my experience and skills in community development to help my a place that's been so important to me.
Yes/No Have you ever been a direct recipient of a Community Enhancement Fund grant?	No
Yes/No Are you a current direct recipient of a Community Enhancement Fund grant?	No
Yes/No Do you know of any reason such as a conflict of interest (financial or otherwise), which would adversely affect your ability to serve on the Community Enhancement Fund Citizen Oversight Board?	No
Use this space to provide any additional information or comments.	
Upload any additional documentation below.	
Yes, I declare, under penalty of perjury, that all statements in this application are true and complete to the best of my knowledge and belief. I legally reside in the city limits of Rancho Cordova, am at least 18 years of age, and a registered voter of Rancho Cordova.	Yes

Notes:

Home address is within the City limits of Rancho Cordova.

Voter registration status was verified with Sacramento County Office of Elections.

Time Stamp	1/5/2018 15:27	
What is your full name?	Erick Watkins	
How many years have you been a Rancho Cordova resident?	7	
If employed, what is the name of your employer?	Erick Watkins	
Yes/No Do you own property or have business interests in the City of Rancho Cordova?	Yes	
List any days or evenings that you would not be available.	Tuesday nights from 7-8:30. Bi-monthly	
List your past experience serving within the community of Rancho Cordova.	I am an assistant scoutmaster with Troop 363 in Rancho Cordova. Through this organization we support the American River Grange, the VA hospital, VFW and the city. We have participated in parades, clean-ups and tree planting activities.	
I believe I will bring the following strengths, skills, knowledge and assets to service on the Community Enhancement Fund Citizen Oversight Board.	I am a Director of Risk Management for a large food company. I directly engage with dozens of state and local agencies throughout California. I regularly audit financial documents, insurance portfolios and other official documents. I believe I can bring strong auditing and communication skills to this process.	
State why you want to serve on the Community Enhancement Fund Citizen Oversight Board.	This fund has been incredibly important to numerous organizations throughout Rancho Cordova. Maintaining the credibility and utility of the funds is very important to me. Beneficial organizations that help all the residents of the city with profit for none should be supported.	
Yes/No Have you ever been a direct recipient of a Community Enhancement Fund grant?	No. I was not a recipient but the Boy Scout Troop was (2016). I received no part of those funds directly.	
Yes/No Are you a current direct recipient of a Community Enhancement Fund grant?	No	
Yes/No Do you know of any reason such as a conflict of interest (financial or otherwise), which would adversely affect your ability to serve on the Community Enhancement Fund Citizen Oversight Board?	No	
Use this space to provide any additional information or comments.		
Upload any additional documentation below.		
Yes, I declare, under penalty of perjury, that all statements in this application are true and complete to the best of my knowledge and belief. I legally reside in the city limits of Rancho Cordova, am at least 18 years of age, and a registered voter of Rancho Cordova.	Yes	

Notes:

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Voter registration status was verified with Sacramento County Office of Elections.

Time Stamp	1/5/2018 15:41
What is your full name?	Joseph Smith
How many years have you been a Rancho Cordova resident?	6
If employed, what is the name of your employer?	Loaves and Fishes
Yes/No Do you own property or have business interests in the City of Rancho Cordova?	No
List any days or evenings that you would not be available.	I am available as needed.
List your past experience serving within the community of Rancho Cordova.	Volunteered at California Capital Airshow
I believe I will bring the following strengths, skills, knowledge and assets to service on the Community Enhancement Fund Citizen Oversight Board.	I can bring a fresh perspective on matters as I have never served in this capacity before.
State why you want to serve on the Community Enhancement Fund Citizen Oversight Board.	To become more involved with my community.
Yes/No Have you ever been a direct recipient of a Community Enhancement Fund grant?	No
Yes/No Are you a current direct recipient of a Community Enhancement Fund grant?	No
Yes/No Do you know of any reason such as a conflict of interest (financial or otherwise), which would adversely affect your ability to serve on the Community Enhancement Fund Citizen Oversight Board?	No
Use this space to provide any additional information or comments.	
Upload any additional documentation below.	
Yes, I declare, under penalty of perjury, that all statements in this application are true and complete to the best of my knowledge and belief. I legally reside in the city limits of Rancho Cordova, am at least 18 years of age, and a registered voter of Rancho Cordova.	Yes

Notes:

Home address is within the City limits of Rancho Cordova.
Voter registration status was verified with Sacramento County Office of Elections.

Community Enhancement Fund Citizen Oversight Board Application Submittal

ATTACHMENT 1

Time Stamp	1/5/2018 15:58
What is your full name?	Kristopher Ross
How many years have you been a Rancho Cordova resident?	7
If employed, what is the name of your employer?	UC Davis Health System
Yes/No Do you own property or have business interests in the City of Rancho Cordova?	Yes
List any days or evenings that you would not be available.	None
List your past experience serving within the community of Rancho Cordova.	I have not done much as far as community involvement. I have coached Tball here in Rancho Cordova, this will be my second year as coach.
I believe I will bring the following strengths, skills, knowledge and assets to service on the Community Enhancement Fund Citizen Oversight Board.	I've been a professional in many industries over the years (auto, home/mortgage, IT, business) and believe I have many strengths and skills to serve on the board. I have a strong business acumen and a fair approach to decision making.
State why you want to serve on the Community Enhancement Fund Citizen Oversight Board.	I'd like to be more engaged in my community and serve.
Yes/No Have you ever been a direct recipient of a Community Enhancement Fund grant?	No
Yes/No Are you a current direct recipient of a Community Enhancement Fund grant?	No
Yes/No Do you know of any reason such as a conflict of interest (financial or otherwise), which would adversely affect your ability to serve on the Community Enhancement Fund Citizen Oversight Board?	No
Use this space to provide any additional information or comments.	
Upload any additional documentation below.	
Yes, I declare, under penalty of perjury, that all statements in this application are true and complete to the best of my knowledge and belief. I legally reside in the city limits of Rancho Cordova, am at least 18 years of age, and a registered voter of Rancho Cordova.	Yes

Notes:

Home address is within the City limits of Rancho Cordova.
Voter registration status was verified with Sacramento County Office of Elections.

Time Stamp	1/5/2018 16:53	
What is your full name?	Kathleen M Cruz	
How many years have you been a Rancho Cordova resident?	4+	
If employed, what is the name of your employer?	State of California - Office of Information Security	
Yes/No Do you own property or have business interests in the City of Rancho Cordova?	Yes	
List any days or evenings that you would not be available.	Although I work full-time, I generally can arrange my schedule to align with the meeting schedule. As you note, however, it is impossible to predict a conflict until a meeting schedule is published.	
List your past experience serving within the community of Rancho Cordova.	I moved to Rancho Cordova from Folsom in January 2014 and I do not have any recent experience volunteering within the Rancho Cordova community. However, I did volunteer with the Sacramento SPCA for over 2 years.	
I believe I will bring the following strengths, skills, knowledge and assets to service on the Community Enhancement Fund Citizen Oversight Board.	I would bring the following strengths, skills and knowledge to the Oversight Board. - As a state of California civil servant, and a former Chief Executive Officer of the California Victim Compensation Board I am very familiar with reviewing and understanding staff work and recommendations, Board procedures, processes and protocols. In my current position I work closely with the Governor's Department of Finance (DOF) and have successfully written a Budget Change Proposal (BCP) for the upcoming fiscal year. - As an executive with over 30 years of work experience I am knowledgeable and experienced in budgeting (in both the private and public sector), working collaboratively in a team, and the functions and responsibilities of an oversight Board. - In my current position I am required to file an annual Form 700.	
State why you want to serve on the Community Enhancement Fund Citizen Oversight Board.	As a resident of Rancho Cordova, I would like to contribute to my community.	
Yes/No Have you ever been a direct recipient of a Community Enhancement Fund grant?	No	
Yes/No Are you a current direct recipient of a Community Enhancement Fund grant?	No	
Yes/No Do you know of any reason such as a conflict of interest (financial or otherwise), which would adversely affect your ability to serve on the Community Enhancement Fund Citizen Oversight Board?	No	
Use this space to provide any additional information or comments.		
Upload any additional documentation below.	Kathy Cruz Resume	
Yes, I declare, under penalty of perjury, that all statements in this application are true and complete to the best of my knowledge and belief. I legally reside in the city limits of Rancho Cordova, am at least 18 years of age, and a registered voter of Rancho Cordova.	Yes	

Notes:

Home address is within the City limits of Rancho Cordova.
Voter registration status was verified with Sacramento County Office of Elections.

KATHY CRUZ

ACCOMPLISHED EXECUTIVE, BUSINESS INNOVATOR AND INFORMATION TECHNOLOGY LEADER with 20+ years of experience in the public and private sector. Broad industry and government experience implementing processes, systems, and reporting that deliver scalability and reliability across all business functions. Innovative leader with a successful track record of communicating goals, mitigating risks, and delivering results. Proven business acumen to represent an organization with skill, integrity and political sensitivity.

KEY LEADERSHIP CONTRIBUTIONS

- Completed complex system architecture redesign and implementation, completing project on schedule, and successfully implementing business processes across regional and county needs.
- Attained significant cost and time savings with a system implementation by recommending strategic change management improvements to better accommodate high volume of processing of 52,000 applications and \$60 million in payments from the State of California to victims of violent crime.
- Led organization-wide changes as Chief Deputy Executive Officer to positively impact development and formulation of Board policies, executive decisions and program effectiveness.
- Consistently resolved key business process issues by working with diverse groups to implement best practices, process improvements, and standardization.
- Resolved core system issues for an IT infrastructure by stabilizing routine processes and delivering consistent, predictable, quality services while improving overall security and strengthening remote access authentication.
- Acting Information Security Officer (ISO) for 18 months.
- Secured \$5 million in implementation funding after creating comprehensive business requirements and Request for Proposal (RFP) for a new Customer Relationship Management (CRM) strategy.
- Project Portfolio Program Manager for statewide information security projects and initiatives.
- Completely transitioned a downward turn of an Oracle implementation project with a \$4 million overrun into a successful implementation with a new budget running on schedule experiencing no user issues while managing new office infrastructures in Seattle, Atlanta, Costa Mesa, Sydney, Tokyo, London and Frankfurt.
- Planned and managed a global operating budget of \$45 million and oversaw 121 staff as well as 30 contractors in 8 locations to support an IT organization comprised of 2,500 users worldwide.
- Recipient of YWCA Tribute to Women and Industry (TWIN) Award (1999).
- Recipient of CIO 100 Award from CIO Magazine (1996).

GOVERNMENT EXPERIENCE

STATE OF CALIFORNIA

SACRAMENTO, CA

2008-PRESENT

Special Advisor to the State Chief Information Security Officer, Office of Information Security (2016-Present)

Project Portfolio Program Manager for Office of Information Security (OIS) high priority projects and initiatives.

- Project Manager for the implementation of statewide Governance, Risk and Compliance (GRC) software enabling a more comprehensive view of the State's security posture and risk.
- Project manager for the development and implementation of a new program for CDT and OIS. Advisory Services provides pre and post audit workshops for state entities who are undergoing OIS security audits; conducts information security workshops on security standards, risk management, privacy and other security related topics; develops and delivers standard templates and tools for the ISO community; and performs information security program consulting.
- Project Manager for a project to evaluate and enhance the statewide information security program. The result of the project is a security Foundational Framework and comprehensive information security cost reporting.
- Project manager for a project to enhance and revise the current OIS security audit program.
- Developed a Budget Change Proposal for the CDT Office of Information Security for FY 18-19.

IT Project Manager, Victim Compensation & Government Claims Board (2014-2016)

Aligned internal resources with organizational technical goals through collaboration with key stakeholders, user base and project sponsor. Ensure timely and quality project deliverables by planning, developing and managing comprehensive project budgets, costs, schedules as well as business and technical requirements. Recommended to executive management new change management processes to better meet demand and usability. Partnered with technical resources to develop system architecture, infrastructure requirements, coding standards and documentation.

Chief Deputy Executive Officer, Victim Compensation & Government Claims Board (2011-2014)

- Led the implementation of resolutions for major issues impacting the Board and advised Executive Officer of both strategic planning and operational plan processes. Acted as Executive Officer (EO) in the absence of EO.
- Oversaw broad scope development, sustainability and launch of new processes within Victim Compensation, Government Claims, Fiscal and Administration, Information Technology, Legislation and Public Affairs.
- Represented the Board at State Legislative meetings and served as key liaison to external advocates and stakeholders.

Chief Information Officer, Victim Compensation & Government Claims Board (2010-2011)

Managed operations of the Board's IT organization and secured project approval and funding to perform extensive modifications to core application and database. Restored credibility and reliability to reporting functions by managing performance and deliverables from a cross-functional team to create a Board glossary of business terms.

- Led development and implementation of a more responsive and functional claims management system by strategically eliminating 245 defects, improved performance, restored data integrity and improved services.
- Reduced infrastructure footprint and energy usage through consolidation and virtualization of servers and server clusters.

Senior EDP Acquisition Specialist, Department of General Services (2008-2010)

Oversaw procurements to ensure compliance with government code, regulations and processes as part of a control agency.

- Acted as Procurement Official for enterprise Franchise Tax Board Project.

CORPORATE EXPERIENCE**OPENWAVE SYSTEMS****REDWOOD CITY, CA****2000-2003****Chief Information Officer/Vice President of Information Technology**

Led a global IT organization supporting 1,500 users worldwide across 6 countries. Fostered organizational changes to provide a common computing environment by managing a large-scale \$25 million budget to spearhead a merger of two diverse IT organizations and cultures into one cohesive organization.

- Developed and implemented company-wide software, hardware and operational standards that provided more intuitive solutions based on current business and client needs.
- Developed architecture for management of product development technical environment.
- Established a new Project Management Office and IT Governance Council, improving prioritization process for IT projects and alignment with corporate goals and objectives.
- Led the reimplementation of Oracle financials to meet new business requirements of the newly merged company.

WINE.COM**NAPA, CA****2000****Chief Information Officer/Senior Vice President of Engineering**

Directed company technical and engineering capacities to better meet growing consumer base as well as industry trends by devising new development and support initiatives for the e-commerce website and back office technology. Built strategic alliances with external resources to launch a new web design and improve user experiences.

- Drove key European acquisitions and alliances after conducting comprehensive technical due diligence.
- Established and supported a new distribution center by completing major modifications to distribution software.

ADDITIONAL EXPERIENCE:

Independent Technical Consultant-Startup Companies, Folsom, CA (2003-2007)

Independent Technical Consultant-Startup Companies, San Ramon, CA (1999-2000)

Chief Information Officer/Senior Vice President of Information Technology, Aspect Communications, San Jose, CA (1996-1999)

Chief Information Officer/Vice President of Information Technology, VeriFone, Inc., Redwood City, CA (1994-1996)

Director, Information Systems, Textainer Management Company, San Francisco, CA (1992-1993)

Director, Information Systems, Intel Container and Intel Rail Division, San Francisco, CA (1990-1991)

Manager, Information Systems, University of California at Berkeley, Berkeley, CA (1989-1990)

Manager, MIS, The Gap, Inc., San Bruno, CA (1985-1988)

EDUCATION

University of San Francisco

AEA/Stanford University-Executive Institute for Management of Technology Companies

PROFESSIONAL AFFILIATIONS

Past Board Member, Career Action Center, San Jose, CA.

Past Member, Golden Gate University School of Technology and Industry Executive Advisory B **AGENDA ITEM 17.1**

Past Chair, MIS Committee, International Institute of Lessors (IICL)

Community Enhancement Fund Citizen Oversight Board Application Submittal

ATTACHMENT 1

Time Stamp	1/6/2018 6:44
What is your full name?	Laurie C Oliver
How many years have you been a Rancho Cordova resident?	2 currently also 1997-2007
If employed, what is the name of your employer?	Currently unemployed
Yes/No Do you own property or have business interests in the City of Rancho Cordova?	No
List any days or evenings that you would not be available.	Currently available all days and hours
List your past experience serving within the community of Rancho Cordova.	I served on the Cityhood project (to make Rancho Cordova a city) , and the Rosemont High School, and Mather Head Start projects.
I believe I will bring the following strengths, skills, knowledge and assets to service on the Community Enhancement Fund Citizen Oversight Board.	I have served on many boards and understand the complexities of serving the community.
State why you want to serve on the Community Enhancement Fund Citizen Oversight Board.	I would like to get back involved in the workings of the city now that I am living back in the city.
Yes/No Have you ever been a direct recipient of a Community Enhancement Fund grant?	No
Yes/No Are you a current direct recipient of a Community Enhancement Fund grant?	No
Yes/No Do you know of any reason such as a conflict of interest (financial or otherwise), which would adversely affect your ability to serve on the Community Enhancement Fund Citizen Oversight Board?	No
Use this space to provide any additional information or comments.	
Upload any additional documentation below.	
Yes, I declare, under penalty of perjury, that all statements in this application are true and complete to the best of my knowledge and belief. I legally reside in the city limits of Rancho Cordova, am at least 18 years of age, and a registered voter of Rancho Cordova.	Yes

Notes:

Home address is within the City limits of Rancho Cordova.
Voter registration status was verified with Sacramento County Office of Elections.

Time Stamp	1/9/2018 19:46
What is your full name?	Robert Thomas Grabowski
How many years have you been a Rancho Cordova resident?	29 years
If employed, what is the name of your employer?	Sacramento County
Yes/No Do you own property or have business interests in the City of Rancho Cordova?	Yes
List any days or evenings that you would not be available.	The 2nd Thursday of the month until June 2018. I am currently in the Rancho Cordova Chamber of Commerce Leadership Class XII (2017-2018) which runs 8:30 am to 5:00 pm or later. Tentative conflicting dates: Wednesday nights starting February 21, 2018 to April 04, 2018. I've submitted an application for the Rancho Cordova Police Department's 2018 Citizen's Academy. As of January 9, 2018, I have not been informed if I have been accepted to Citizen's Academy. The only other potential conflicts for the 2018 calendar year are Tuesday, June 5, 2018 and Tuesday November 6, 2018. These are mandatory overtime work days for the department that I am currently employed with.
List your past experience serving within the community of Rancho Cordova.	I am currently part of the Rancho Cordova Chamber of Commerce Leadership Class XII (2017-2018)
I believe I will bring the following strengths, skills, knowledge and assets to service on the Community Enhancement Fund Citizen Oversight Board.	I am currently employed with a government agency in the Accounting classification. I feel with my experience in accounting and reconciling accounts that I would be able to bring a compliance background to the Community Enhancement Fund Citizen Oversight Board. I also possess communication, problem solving, decision making and organizational skills that I feel that would be an asset to the Community Enhancement Fund Citizen Oversight Board.
State why you want to serve on the Community Enhancement Fund Citizen Oversight Board.	I feel transparency is important for any local government agency that uses taxpayer dollars to provide government services to the residents of Sacramento County. I also feel government agencies have a fiduciary responsibility to ensure taxpayer dollars are used appropriately. Being part of the Community Enhancement Fund Citizen Oversight Board would help me understand the workings of city government and how our tax dollars are given out to Community agencies to benefit the City of Rancho Cordova.
Yes/No Have you ever been a direct recipient of a Community Enhancement Fund grant?	No
Yes/No Are you a current direct recipient of a Community Enhancement Fund grant?	No
Yes/No Do you know of any reason such as a conflict of interest (financial or otherwise), which would adversely affect your ability to serve on the Community Enhancement Fund Citizen Oversight Board?	No
Use this space to provide any additional information or comments.	
Upload any additional documentation below.	Grabowski FPPC Form 700 01.09.18

Yes, I declare, under penalty of perjury, that all statements in this application are true and complete to the best of my knowledge and belief. I legally reside in the city limits of Rancho Cordova, am at least 18 years of age, and a registered voter of Rancho Cordova.

Yes

Notes:

Home address is within the City limits of Rancho Cordova.
Voter registration status was verified with Sacramento County Office of Elections.
Grabowski FPCC Form 700 was submitted. It is not attached since it is not required until an appointment is made.

Time Stamp	1/10/2018 11:11	
What is your full name?	Patricia Medina	
How many years have you been a Rancho Cordova resident?	15	
If employed, what is the name of your employer?	McNellis Partners	
Yes/No Do you own property or have business interests in the City of Rancho Cordova?	Yes	
List any days or evenings that you would not be available.	Normal work days/Hrs: Tuesday and Friday with an occasional third day (8 am- 4:30 pm) There is some flexibility with said days but for the most part are scheduled as regular work days. As a team member of the IFEST Committee, we will be having our first meeting January 23rd in which we will be setting a monthly (evening) meeting schedule.	
List your past experience serving within the community of Rancho Cordova.	Have volunteered on the IFEST Committee for at least the last 5 years. Also, have volunteered with Cordova Community Council for 4TH of July events. Participate as an artist and volunteer with art functions (MACC, City Hall Art Show)	
I believe I will bring the following strengths, skills, knowledge and assets to service on the Community Enhancement Fund Citizen Oversight Board.	My strengths and assets are imbedded in volunteerism and working as a team with others. Im invested in the community and its growth and would bring a fresh pair of eyes and ideas.	
State why you want to serve on the Community Enhancement Fund Citizen Oversight Board.	I believe an individual can make a difference by volunteering and participation. As a citizen of Rancho Cordova for the last 15 years, I have seen the city blossom in great ways and struggle in others....I would like to participate in the continued growth of Rancho Cordova.	
Yes/No Have you ever been a direct recipient of a Community Enhancement Fund grant?	No	
Yes/No Are you a current direct recipient of a Community Enhancement Fund grant?	No	
Yes/No Do you know of any reason such as a conflict of interest (financial or otherwise), which would adversely affect your ability to serve on the Community Enhancement Fund Citizen Oversight Board?	No	
Use this space to provide any additional information or comments.	I truly believe this would be a great way to be engaged in the City of Rancho Cordova as a citizen. Thank you for your consideration of my application.	
Upload any additional documentation below.		
Yes, I declare, under penalty of perjury, that all statements in this application are true and complete to the best of my knowledge and belief. I legally reside in the city limits of Rancho Cordova, am at least 18 years of age, and a registered voter of Rancho Cordova.	Yes	

Notes:

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Voter registration status was verified with Sacramento County Office of Elections.

Time Stamp	1/12/2018 15:35	
What is your full name?	Nica Gauff	
How many years have you been a Rancho Cordova resident?	48	
If employed, what is the name of your employer?	State of California	
Yes/No Do you own property or have business interests in the City of Rancho Cordova?	Yes	
List any days or evenings that you would not be available.	I have no restrictions	
List your past experience serving within the community of Rancho Cordova.	Volunteering at the: California Capital Airshow 5+ years Rancho Cordova Police Department	
I believe I will bring the following strengths, skills, knowledge and assets to service on the Community Enhancement Fund Citizen Oversight Board.	I have background and experience in the listed areas: Accounting Budgets Audits Approving and denying request for compliance/non-compliance Budget Reconciliations BA Degree Master Degree Reviewing reports for completeness and accuracy in order to make recommendations Reviewing expenditures Making recommendations to Management Allocation responsibility Position Control of allocated positions Position reconciliation Interacting with all levels of people I've lived in Rancho for 48 years (life long resident). I believe and care in our Community so much so that a few of my friends now live here. After I got married, my husband and I live here. I graduated from Mills Jr. High and Cordova High schools. I love this Community. I've watched this community develop thus becoming a city and would like to continue to see that growth. I've watched the redevelopment of Mather Air Force Base into a striving community of various things. I'm interested in future enhancements. and want to get involved.	
Yes/No Have you ever been a direct recipient of a Community Enhancement Fund grant?	No	
Yes/No Are you a current direct recipient of a Community Enhancement Fund grant?	No	
Yes/No Do you know of any reason such as a conflict of interest (financial or otherwise), which would adversely affect your ability to serve on the Community Enhancement Fund Citizen Oversight Board?	No	
Use this space to provide any additional information or comments.		
Upload any additional documentation below.	CEFCOB Rancho Cordova	



Nica Gauff

January 12, 2018

Dear City of Rancho Cordova,

I feel my education, life, and work experiences have equipped me to be a productive member of the Community Enhancement Fund Citizen Oversight Board.

During my 38+ years with the State of California, I spent 13 years in Accounting functions, reviewing and tracking expenditures, compiling and evaluating data and making recommendations to Management. I also worked 2+ years in Budgeting where I had responsibility for ensuring our Department stayed within their budget. This entailed forecasting their wants/needs and providing feedback on past and future expenditures.

In another position, I was responsible for the Capital Outlay and Local Assistance's budgets where I reviewed, complied, evaluated and tracked expenditures. With this data, we developed Agenda Items for the California Transportation Commission (CTC) to use in their decision making process for multimillion dollar projects. Subsequently, I had oversight to ensure the allocations were appropriately utilized.

In addition to my work experience, I possess both a Bachelor's Degree in Business Administration and Master's Degree in Human Resources.

Thank you for your consideration of my interest and I look forward to meeting with you.

Warm regards,

Nica Gauff



ATTACHMENT 1

Yes, I declare, under penalty of perjury, that all statements in this application are true and complete to the best of my knowledge and belief. I legally reside in the city limits of Rancho Cordova, am at least 18 years of age, and a registered voter of Rancho Cordova.

Yes

Notes:

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Voter registration status was verified with Sacramento County Office of Elections.

Community Enhancement Fund Citizen Oversight Board Application Submittal

ATTACHMENT 1

Time Stamp	1/13/2018 22:22
What is your full name?	David Patric Burke, RN
How many years have you been a Rancho Cordova resident?	1987
If employed, what is the name of your employer?	none
Yes/No Do you own property or have business interests in the City of Rancho Cordova?	Yes
List any days or evenings that you would not be available.	Any meetings of the board are available for me
List your past experience serving within the community of Rancho Cordova.	None, other than an idea in currently serving my community
I believe I will bring the following strengths, skills, knowledge and assets to service on the Community Enhancement Fund Citizen Oversight Board.	Currently actively unrestricted licensed Registered Nurse W/ California,, nurse since 1980. Honorably Discharged U.S. Army veteran. Common sense, knowledge of community needs, wants, and desire to serve in some manner. I have unusually strong creative skills
State why you want to serve on the Community Enhancement Fund Citizen Oversight Board.	I believe I can make a difference for the common good for our community, regardless of creed, religion, or ethnicity of country of birth
Yes/No Have you ever been a direct recipient of a Community Enhancement Fund grant?	No
Yes/No Are you a current direct recipient of a Community Enhancement Fund grant?	No
Yes/No Do you know of any reason such as a conflict of interest (financial or otherwise), which would adversely affect your ability to serve on the Community Enhancement Fund Citizen Oversight Board?	No
Use this space to provide any additional information or comments.	Any other question I would be happy to provide in an interview, if kindly granted.
Upload any additional documentation below.	
Yes, I declare, under penalty of perjury, that all statements in this application are true and complete to the best of my knowledge and belief. I legally reside in the city limits of Rancho Cordova, am at least 18 years of age, and a registered voter of Rancho Cordova.	Yes

Notes:

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Voter registration status was verified with Sacramento County Office of Elections.

Time Stamp	1/15/2018 10:50	
What is your full name?	Amanda Reynaud	
How many years have you been a Rancho Cordova resident?	2	
If employed, what is the name of your employer?	N/A	
Yes/No Do you own property or have business interests in the City of Rancho Cordova?	No	
List any days or evenings that you would not be available.	Mondays 7-9 p.m. Wednesdays 6 - 8 p.m.	
List your past experience serving within the community of Rancho Cordova.	October 2017 - present St. Vincent de Paul Team Member	
I believe I will bring the following strengths, skills, knowledge and assets to service on the Community Enhancement Fund Citizen Oversight Board.	As an experienced business professional, I am comfortable reviewing budgets and making recommendations. I am a "big picture" thinker able to objectively analyze information as well as financial statements in order to make decisions and implement strategic initiatives. Additionally, I have effective communication skills and work well with others.	
State why you want to serve on the Community Enhancement Fund Citizen Oversight Board.	Serving on the Community Enhancement Fund Citizen Oversight Board is an opportunity to contribute to the development of Rancho Cordova as well as increase government transparency and community trust-two practices I value as an engaged citizen. Moreover, my skills align with the roles and responsibilities to allow me to be an effective board member. It would be an honor to serve the community of Rancho Cordova.	
Yes/No Have you ever been a direct recipient of a Community Enhancement Fund grant?	No	
Yes/No Are you a current direct recipient of a Community Enhancement Fund grant?	No	
Yes/No Do you know of any reason such as a conflict of interest (financial or otherwise), which would adversely affect your ability to serve on the Community Enhancement Fund Citizen Oversight Board?	No	
Use this space to provide any additional information or comments.		
Upload any additional documentation below.		
Yes, I declare, under penalty of perjury, that all statements in this application are true and complete to the best of my knowledge and belief. I legally reside in the city limits of Rancho Cordova, am at least 18 years of age, and a registered voter of Rancho Cordova.	Yes	

Notes:

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Voter registration status was verified with Sacramento County Office of Elections.

Time Stamp	1/15/2018 13:30	
What is your full name?	Lee Massey Frechette	
How many years have you been a Rancho Cordova resident?	15	
If employed, what is the name of your employer?	Self employed	
Yes/No Do you own property or have business interests in the City of Rancho Cordova?	No	
List any days or evenings that you would not be available.	I am fully committed to this service and will make myself available whenever needed.	
List your past experience serving within the community of Rancho Cordova.	I am proud of my Rancho Cordova service record and can honestly say it has been an important part of my life. Here are some high points: • Board member for the Cordova Community Council. My board assignments include "Event Engineer" and I am counted upon to resolve logistical challenges. These advances are part of the success of the Cordova Community Council. Most recently I have worked on Volunteer Awards, Kids Day, IFest, Summer Movies and Concerts. I served as board chair for Heartstoppers Haunted House and currently serve as chairman of the Rancho Cordova Fourth of July event. My design for the Cordova Community Christmas Tree is a proud achievement, along with the former Holiday Ice Rink. My engineering background has been put to good use by the Cordova Community Council and other community organizations for more than a decade. • Team member of the 2010 All America City team. In that effort I was a member of the presentation team and was the chief of logistics, preparing shipment and driving the team equipment across the country in support of that successful endeavor. • Past President, Sacramento Valley Live Steamers Railroad • Past member, Rancho Cordova Rotary Club • Early pioneer of the California Capital Airshow, including two years as revenue manager. In recent years, I have been a volunteer with the show serving as support to the performing pilots. • Served as a member of the team writing the American River Parkway update, representing the Cordova Recreation and Park District. • Graduate of Leadership Rancho Cordova. My design for the class project, a complete update to the Welcome to Rancho Cordova signs, stand today at the gateways to our city.	
I believe I will bring the following strengths, skills, knowledge and assets to service on the Community Enhancement Fund Citizen Oversight Board.	I bring a unique set of experiences that provide insight into the decision-making the Oversight Board will face. My work background is broad, including a 20-year career in the nuclear industry working on a wide range of projects across the United States. That was followed by 10 years of experience working in a family-owned commercial real estate development/construction business. 4 years in parks and recreation, 12 years of service as a board member on the Cordova Community Council and over 25 years combined with various Rancho Cordova Nonprofit organizations. I have worked in both the public and private sectors with real world experience in both. I am familiar with both sides of the coin.	
State why you want to serve on the Community Enhancement Fund Citizen Oversight Board.	I am proud of the record of community service I have built here in Rancho Cordova and have been where the rubber meets the road in many small ways that have helped build the Rancho Cordova we enjoy today. I want to continue and expand that service on the Community Enhancement Fund Citizen Oversight Board.	

What is your full name?	Lee Massey Frechette
Yes/No Have you ever been a direct recipient of a Community Enhancement Fund grant?	No
Yes/No Are you a current direct recipient of a Community Enhancement Fund grant?	No
Yes/No Do you know of any reason such as a conflict of interest (financial or otherwise), which would adversely affect your ability to serve on the Community Enhancement Fund Citizen Oversight Board?	No
Use this space to provide any additional information or comments.	
Upload any additional documentation below.	
Yes, I declare, under penalty of perjury, that all statements in this application are true and complete to the best of my knowledge and belief. I legally reside in the city limits of Rancho Cordova, am at least 18 years of age, and a registered voter of Rancho Cordova.	Yes

Notes:

Home address is within the City limits of Rancho Cordova.
 Voter registration status was verified with Sacramento County Office of Elections.

Time Stamp	1/15/2018 17:10
What is your full name?	Eunie Linden
How many years have you been a Rancho Cordova resident?	8
If employed, what is the name of your employer?	N/A
Yes/No Do you own property or have business interests in the City of Rancho Cordova?	Yes
List any days or evenings that you would not be available.	I am typically unavailable after 5:30pm on the second Thursday of every month.
List your past experience serving within the community of Rancho Cordova.	I serve my immediate community as the President of the Anatolia Units 1, 2 and 4 Master Association, where I am tasked with representing the interests of our community of over 2,000 homeowners and residents, and overseeing the affairs of the association. In addition, I serve the greater community at large as a volunteer attorney with Legal Services of Northern California, where I provide legal advice and counsel to persons who could not otherwise afford an attorney.
I believe I will bring the following strengths, skills, knowledge and assets to service on the Community Enhancement Fund Citizen Oversight Board.	I believe that I bring a combination of both hard and soft skills that will allow me to contribute to the board and be an effective board member. As President of our homeowners' association, I fulfill my fiduciary duty to my community by making informed decisions; acting in the best interests of our community; and ensuring we have a healthy budget, are spending our dollars responsibly, and are funding community priorities. In addition, as a former committee consultant in the State Legislature, one of my primary responsibilities included exercising oversight of various licensing boards that were within our jurisdiction. This oversight required acute attention to detail, and analyzing, among other things, the budgets of various boards, in addition to determining whether the boards were implementing the policies set by the Legislature. I would bring these same skills to the board, and seek to ensure that the tax dollars generated in our City are being spent to serve the purpose for which they were passed – to enhance our community and ensure that local funding exists for local priorities. In addition, in my roles as both an HOA board member and as a committee consultant, I believe I have the soft skills necessary to ensure a collaborative and productive work environment exists, which would also allow me to contribute to the board and help fulfill the board's responsibilities.
State why you want to serve on the Community Enhancement Fund Citizen Oversight Board.	If selected to serve on the board, I would look forward to the opportunity to apply my skillset to ensure that dollars awarded are actually awarded; to ensure that dollars are being spent as directed by the City Council, to ensure that grantees are in compliance, and to serve in any other way as directed by our City Council.
Yes/No Have you ever been a direct recipient of a Community Enhancement Fund grant?	No
Yes/No Are you a current direct recipient of a Community Enhancement Fund grant?	No
Yes/No Do you know of any reason such as a conflict of interest (financial or otherwise), which would adversely affect your ability to serve on the Community Enhancement Fund Citizen Oversight Board?	No
Use this space to provide any additional information or comments.	I look forward to the opportunity to serve the community by participating on the Community Enhancement Fund Citizen Oversight Board.

Upload any additional documentation below.	Eunielinden_Resume_5_17
Yes, I declare, under penalty of perjury, that all statements in this application are true and complete to the best of my knowledge and belief. I legally reside in the city limits of Rancho Cordova, am at least 18 years of age, and a registered voter of Rancho Cordova.	Yes

Notes:

Home address is within the City limits of Rancho Cordova.

Voter registration status was verified with Sacramento County Office of Elections.

EUNIE LINDEN



EXPERIENCE

California State Assembly Committee on Business and Professions, Sacramento, CA

Committee Consultant, Nov. 2013 – Jan. 2016

Drafted committee analyses and advised the Committee on legislation primarily relating to consumer protection and professional licensing. Collaborated with legislative staff and other stakeholders to negotiate amendments to legislation to help ensure sound public policy. Staffed and managed legislation, and researched and drafted oversight reports on professional licensing bodies.

Office of Legislative Counsel, Sacramento, CA

Deputy Legislative Counsel, Oct. 2011 – Oct. 2013

Drafted legislation and provided advice, consultation, and written opinions to legislative staff on issues relating to health and human services, including Medi-Cal, CalWORKs, CalFresh, and public health.

City of Sacramento, Office of the City Attorney, Sacramento, CA

Law Clerk, Spring 2011

Drafted legal memoranda, motions, and briefs relating to employment law, environmental law, negligence, enforcement of judgments, and bankruptcy.

California Department of Justice, Civil Law Division, Correctional Law Section, Sacramento, CA

Law Clerk, Fall 2010

Drafted motions and legal memoranda on issues relating to prison reform policies and civil rights claims.

Downey Brand, Sacramento, CA

Law Clerk, Summer 2010

Drafted memoranda on issues relating to federal and state environmental laws, eminent domain, corporate negligence, and contracts.

The Honorable Edward M. Chen, U.S. District Court, Northern District of Calif., San Francisco, CA

Judicial Extern, Summer 2009

Prepared bench memoranda and drafted opinions on various issues, including the Telephone Consumer Protection Act, expert witness reports, and extradition requests.

EDUCATION AND CREDENTIALS

California State Bar, December 2011

University of California, Berkeley, School of Law (Boalt Hall), Berkeley, CA

Juris Doctor, 2011

Honors: American Bar Association, Judicial Internship Opportunity Scholarship (2009)
Asian Bar Association of Sacramento, Law Foundation Scholarship (2009)

University of California, Los Angeles, School of Public Affairs, Los Angeles, CA

Master of Public Policy, 2008

Thesis: Homelessness in Burbank: A Roadmap for City Management

Activities: Board of Directors, University of California Student Association

Legislative Liaison and Researcher, UCLA Graduate Student Association

California State University, Long Beach, Long Beach, CA

Bachelor of Arts, *cum laude*, in Political Science, 2005

Activities: AmeriCorps Member with the Interval House Domestic Violence Crisis Shelters (2002 – 2004)

COMMUNITY ENGAGEMENT

Legal Services of Northern California, Sacramento, California

Volunteer Attorney, January 2017 – present

Conduct client intakes and provide legal counsel and advice to clients on healthcare issues.

Anatolia Homeowners Association, Rancho Cordova, California

Board President, May 2017 – present

Manage the affairs and business of the Association, which represents over 2,000 homes and oversee a multimillion dollar annual budget.

Time Stamp	2/2/2018 15:15	
What is your full name?	Mason S Trujillo	
What is the name of the school you are attending?	Cordova High School	
What grade level are you currently in?	11	
The Community Enhancement Fund Citizen Oversight Board is expected to meet a couple times per year in the late afternoon to early evening hours. Meetings may last several hours. List any days or evenings that you would not be available. (We understand that schedules may change. Please list any standard reoccurring meetings in which you are a part of. An example answer would be, the 2nd Monday of the month from 6-8 p.m.)	Weekdays from 8am to 6pm aren't good for, but weekends and the end of the day during weeks work best for me.	
List your past experience serving within the community of Rancho Cordova.	I'm currently in Student Government and very involved in school sports. Also, every year I attend the Saint John Vianey Footlocker. Cordova Church of Christ works the homeless and I Love Rancho which I am A part of as well.	
State why you want to serve on the Community Enhancement Fund Citizen Oversight Board.	Id like to experience first hand how the professional world decides how and what we do with what we have. Also, to be a change, however small, in my community to help it become better then I came to it.	
Yes/No Do you know of any reason such as a conflict of interest (financial or otherwise), which would adversely affect your ability to serve on the Community Enhancement Fund Citizen Oversight Board?	No	
If you answered yes, please explain.		
Yes, I declare, under penalty of perjury, that all statements in this application are true and complete to the best of my knowledge and belief. I legally reside in the city limits of Rancho Cordova and am a student attending a Rancho Cordova high school within the Folsom Cordova Unified School District or a Promise Program college student attending Folsom Lake College.	Yes	

Notes:

Home address is within the City limits of Rancho Cordova.

Student applicants had until February 5, 2018 to submit their application.

MEMORANDUM



DATE: February 20, 2018

TO: Honorable Mayor and Council Members

FROM: Albert Stricker, Public Works Director and Zach Bosch, Associate Civil Engineer

SUBJECT: Resolution No. 3-2018 Authorizing The City Manager To Execute Contract No. 11-2018 With Neutron Holdings, Inc. DBA Limebike For The Rancho Cordova Pilot Bicycle Sharing Program

RECOMMENDATION

Staff recommends adoption of Resolution No. 3-2018 authorizing the City Manager to execute contract No. 11-2018 with Neutron Holdings, Inc. DBA "Limebike" for the Rancho Cordova Pilot Bicycle Sharing Program.

RESULT OF RECOMMENDED ACTION

Adoption of Resolution No. 3-2018 would result in Limebike launching a pilot bicycle sharing program in Spring 2018 with approximately 200 bicycles.

BACKGROUND

Bicycling is an active transportation option that promotes a healthy lifestyle and reduces traffic congestion and pollution. Bicycle sharing programs have proven to be a popular amenity in many communities because they provide convenient and low cost access to bicycles for short trips, without the need to store a personal bicycle. The California market for bike share is growing and typically uses docked or dockless systems, as discussed further below.

Docked systems rely on permanent docking stations located throughout an area so bicycles are available at specific origin and destination points. Docked systems require an upfront investment in infrastructure and a large user base to be successful; however they provide a consistent and reliable service when origin and destination points are known.

Dockless bicycle sharing programs utilize self-locking mechanisms on the bicycle so they are not required to be returned and docked at a specific location. Elimination of the docking stations reduces upfront infrastructure costs and provides greater flexibility for riders. This can be beneficial in starting a new program where travel patterns are not precisely known. One potential challenge for dockless bicycles is that they may be left in inconvenient locations (e.g. blocking a sidewalk). To mitigate this concern, dockless providers must be highly responsive to requests for service and users must receive education.

To determine if bike share is a viable option for Rancho Cordova and Folsom, a taskforce was formed with members from government agencies (City of Folsom, Regional Transit, Franchise Tax Board, Sacramento Metropolitan Air Quality Management District, Bureau of Automotive Repair, and the California State Assembly), local and regional employers (SAFE Credit Union, Kaiser Permanente, Intel and VSP), and various stakeholders from the highway 50 corridor (AG Spanos, Sacramento Area Bicycle Advocates, Bicycle Advocates of Rancho Cordova, Visit

Rancho Cordova, and Rancho Cordova Chamber of Commerce). The taskforce evaluated costs and benefits, reached out to six bike share companies and interviewed three. The taskforce rated Limebike as the most qualified provider due to the quality of their bicycles, user friendly interface with their app, responsiveness to daily operations, strong financial backing, and low startup cost to launch the system. Limebike service includes:

- No direct cost to the City for the service.
- Approximately 200 standard bicycles, including 40 “e-bicycles” which provide electric motors. The number would be increased or decreased based upon demand.
- Standard bicycles: the cost is \$1 for 30 minutes paid by the rider.
- E-bicycles: the cost is \$1 to unlock and \$1 for every 10 minutes paid by the rider.
- Payment transactions are executed through the company’s app or by text message, and there are discounted rates for low income residents.
- Each bicycle is equipped with GPS and an audible alarm system that engages if anyone attempts to move the bike without disengaging the locking device.
- Limebike relocates bicycles on a regular basis to best serve trip origins and destinations.
- Limebike would be required to move misplaced bicycles within two hours of being notified in non-critical locations, and within 30 minutes in critical locations.

Staff recommends that the City of Rancho Cordova execute an agreement with Limebike for a one year pilot program. If approved by council, the program would launch in Spring 2018.

FISCAL IMPACT

There is no impact to the General Fund.

ATTACHMENTS

1. Resolution No. 3-2018.
2. Agreement No. 11-2018.
3. Presentation.

ATTACHMENT 1**CITY OF RANCHO CORDOVA****RESOLUTION NO. 3-2018**

**RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA,
STATE OF CALIFORNIA, AUTHORIZING THE CITY MANAGER TO EXECUTE CONTRACT
NO. 11-2018 WITH NEUTRON HOLDINGS, INC. DBA LIMEBIKE FOR THE RANCHO
CORDOVA PILOT BICYCLE SHARING PROGRAM**

WHEREAS, the City of Rancho Cordova desires to enter into Contract No. 11-2018 with Neutron Holdings, Inc. DBA Limebike ("Limebike") for the Rancho Cordova Pilot Bicycle Sharing Program; and

WHEREAS, Limebike will supply the City with a network of dockless bicycles to achieve its goal to provide safe and affordable multi-modal transportation options to all residents, reduce traffic congestion, and maximize carbon-free mobility; and

WHEREAS, the Rancho Cordova Pilot Bicycle Sharing Program does not require any use of City funds. The contract does not impact the general fund; and

WHEREAS, the Rancho Cordova Pilot Bicycle Sharing Program term is one year.

NOW, THEREFORE, BE IT HEREBY RESOLVED THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA does authorize the City Manager to execute Contract No. 11-2018 with Neutron Holdings, Inc. DBA Limebike in a form approved by the City Attorney (**Attachment 2**).

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the 20th day of February 2018 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Linda Budge, Mayor

ATTEST:

Stacy Leitner, City Clerk

ATTACHMENT 2**Service Agreement****Bike Sharing Service**

This Bike Sharing Service Agreement (“Agreement”) is made this ____ day of _____ 2018, by and between the City of Rancho Cordova, a municipal corporation (“City”) and Neutron Holdings, Inc. DBA LimeBike (“LimeBike”). City and LimeBike are each individually referred to as a “Party,” and collectively, the “Parties.”

Recitals

WHEREAS, a goal of the City is to “ensure a safe, inviting and livable community” (Citywide Goal #2); and provide safe and affordable multi-modal transportation options to all residents, reduce traffic congestion and maximize carbon-free mobility; and

WHEREAS, bike share services can help achieve the above stated goal, as it will help provide safe and affordable multi-modal transportation options to all residents, reduce traffic congestion, and maximize carbon-free mobility; and

WHEREAS, LimeBike proposes to operate a temporary bike share pilot program within the City; and

WHEREAS, LimeBike will abide by all City ordinances and rules governing the use of the public right of way to efficiently and effectively provide bike share services; and

WHEREAS, LimeBike possesses GPS, 3G and self-locking technology in its bicycles such that bikes may be locked and opened by users with an app, and tracked to provide for efficient and compliant operations and maintenance.

NOW THEREFORE, in consideration of the mutual covenants and representations set forth in this Agreement, City and LimeBike hereby agree to launch a pilot bike share program as follows:

Agreement

1. **Pilot Term.** City hereby grants LimeBike a license to operate a pilot bike share program for a term up to twelve (12) months, which may be extended in writing, by mutual agreement.
2. **License to Use Right of Way.** Pursuant to the terms of this Agreement, and the requirements set forth in Exhibit A, the City hereby gives LimeBike a revocable, non-transferrable license to utilize the City Right of Way in order to provide bike share services within the City. For purposes of this Agreement, the term Right of Way (“ROW”) refers to sidewalks, roads, and other pathways owned and maintained by the City. Such license for use of the ROW is solely for the purposes of maintaining and offering its bikes for a bike share program within the City and dependent on compliance with all terms of this Agreement, and all conditions set forth in Exhibit A, attached hereto. This authorization is not a lease or an easement, and is not intended and shall not be construed to transfer or convey any real property interest.

ATTACHMENT 2

3. **Permitted Use.** LimeBike customers may use the ROW solely for parking of bicycles owned and maintained by LimeBike for use in the bike share program. LimeBike shall not place or attach any personal property, fixtures, or structures to property of City or private parties without prior written consent:

A. Use of the ROW, and LimeBike's operations within the City, shall, at a minimum: a) not adversely affect City's ROW or the City's streets or sidewalks; b) not adversely affect the property of any third parties; c) not inhibit pedestrian or vehicular movement within the ROW or along other property or rights-of-way owned or controlled by City; and) not create conditions which are a threat to public safety and security.

B. Upon termination of this Agreement by either party, LimeBike shall, at its sole cost and expense, immediately remove its property from the City.

C. All bicycles used under this pilot program shall meet the standards outlined in the Code of Federal Regulations (CFR) under Title 16, Chapter II, Subchapter C, Part 1512 – Requirements for Bicycles. Additionally, they shall meet the safety standards outlines in ISO 43.150-Cycles, subsection 4210. All bicycles shall meet the State of California's requirements for lights during hours of darkness. This includes a front light that emits white light and a rear red reflector.

4. **Bike parking.**

A. Bicycles shall only be legally parked on hard surfaces (e.g., concrete, asphalt, pavement, etc.) in the landscape/furniture zone of the sidewalk, or at a bicycle rack, or at any City-designated bike share parking zone, if any. The landscape/furniture zone of the sidewalk shall be defined as the section of the sidewalk between the curb and the through zone in which street furniture and amenities, such as lighting, benches, newspaper kiosks, utility poles, and bicycle parking are provided.

B. With the advance approval of the City, LimeBike may indicate virtual bicycle racks, such as with paint or decals, and/or use signage where appropriate to guide riders to these preferred, though not required, parking zones in order to assist with orderly parking of bicycles throughout the City.

C. Bicycles shall be upright when parked.

D. Bikes parked on private property will only be allowed at the discretion of the private property owner, and are otherwise prohibited.

E. LimeBike will continually manage and monitor the status and locations of the bicycles to ensure orderly parking, and the free, unobstructed, safe, and legally compliant use of the ROW. LimeBike maintains all responsibilities and duties related to managing, and monitoring the ROW to ensure the unobstructed, safe, legal, and unhindered use of the ROW by its bicycles. The City will notify LimeBike for any bike that is found

ATTACHMENT 2

adversely affecting the City ROW. LimeBike shall be responsible to correct improperly parked bikes within the timeframes listed in Exhibit A.

F. LimeBike shall also give the City special rights access to immediately unlock and remove bikes and temporarily store them, in the following instance:

1. If City determines that any bikes have been parked in a manner that obstructs or hinders the ROW, or otherwise is an unsafe or illegal position;
2. AND the City has alerted LimeBike's customer service to report the issue, and specifies that it is "Urgent";
3. AND that LimeBike fails to remedy the issue within 30-minutes from the time the City reports it to LimeBike;;
4. AND that, in the judgment of the City, the bike(s) should be removed by the City for the public welfare and/or convenience.

In the event that the City removes and/or stores any bikes pursuant to this section, the City shall then have the right to seek reimbursement for the actual costs to City for any such removal of bikes that the City performs. The City may automatically draw funds for such costs against the deposit set forth in section 20 of this Agreement. At all times, however, it is the duty of LimeBike and not the City to preserve the ROW as described herein.

G. The City, at its own discretion, may choose to support the bike sharing program with the installation of bike racks and/or painted bike parking spots, and any preferred, pre-designated parking zones.

5. Condition of ROW.

- A. City makes the ROW available to LimeBike in an "as is" condition. City makes no representation or warranty concerning the condition of the public way or its suitability for use by LimeBike or its customers, and assumes no duty to warn either LimeBike or its customers concerning conditions that exist now or may arise in the future.
- B. City assumes no liability for loss or damage to LimeBike's bikes or other property. LimeBike agrees that City is not responsible for providing security at any location where LimeBike's bicycles are stored or located, and LimeBike hereby waives any claim against City in the event LimeBike's bicycles or other property are lost or damaged.

6. **Maintenance and Care of ROW.** LimeBike expressly agrees to repair, replace or otherwise restore any part or item of real or personal property that is damaged, lost or destroyed as a result of the LimeBike's use of ROW. Should LimeBike fail to repair, replace or otherwise restore such real or personal property, LimeBike expressly agrees to pay such cost to City for making such repairs, replacements, or restorations.

ATTACHMENT 2

7. **Operations and Maintenance.** LimeBike shall be responsible to maintain the bike fleet as set forth in Exhibit A. LimeBike shall be solely responsible for all maintenance and service costs in order to maintain the bike fleet and associated maintenance to minimum level of service and reporting outlined in Exhibit A.

8. **Indemnification.** LimeBike shall defend, pay, indemnify and hold harmless City, its officers, officials, employees, agents, invitees and volunteers from all claims, suits, actions, damages, costs, fines, penalties, or expenses of any kind or nature by or in favor of anyone whomsoever and from and against any and all costs or expenses, including without limitation court costs and reasonable attorneys' fees, resulting from or in connection with loss of life, bodily or personal injury or property damage or any other claimed loss, violation, or injury, arising directly or indirectly out of or from or on account of:

A. Any occurrence upon, at or from ROW or occasioned wholly or in part by the entry, use or presence upon the ROW by LimeBike, except such loss or damage which was caused by the sole negligence or willful misconduct of City.

B. Use of LimeBike's bikes by an individual, regardless of whether such use was with or without the permission of LimeBike, including claims by users of the bikes or third parties.

9. **Insurance.** Prior to beginning, and continuing throughout the term of the Agreement, LimeBike shall, at its sole cost and expense, furnish the City with certificates of insurance evidencing that it has obtained and maintains insurance in the following amounts:

A. Workers' Compensation coverage that satisfies the minimum statutory limits.

B. Commercial General Liability and ROW damage insurance in an amount not less than Two Million and no/100 Dollars (\$2,000,000.00) per occurrence and Four Million and no/100 Dollars (\$4,000,000.00), annual aggregate, for bodily injury, property damage, products, completed operations, and contractual liability coverage.

C. Comprehensive automobile insurance in an amount not less than Two Million and no/100 Dollars (\$2,000,000.00) per occurrence.

Coverage shall not be suspended, voided or cancelled by either party, or reduced in coverage or in limits except after thirty (30) calendar days prior written notice by certified mail, return receipt requested, has been given to City, and City has agreed to such change of coverage.

All insurance policies shall be written on an occurrence basis and shall name the City as additional insureds and any City insurance or self-insurance shall be secondary and in excess to LimeBike's insurance. If LimeBike's insurance policy includes a self-insured retention ("SIR") or deductible that must be paid by a named insured as a precondition of the insurer's liability, or which has the effect of providing that payments of the SIR or deductible by others, including additional insureds or insurers do not serve to satisfy the SIR or deductible, such provisions must

ATTACHMENT 2

be modified by special endorsement so as to not apply to the additional insured coverage required by this agreement so as to not prevent any of the parties to this Agreement from satisfying or paying the SIR or deductible required to be paid as a precondition to the insurer's liability. Additionally, the certificates of insurance must note whether the policy does or does not include any SIR or deductible and also must disclose the deductible or SIR. The City's Risk Manager may waive or modify any of the insurance requirements of this section.

10. **Compliance with Law.** LimeBike at its own cost and expense, shall comply with all statutes, ordinances, regulations, and requirements of all governmental entities applicable to its use of City's ROW and the operation of its bike share program, including but not limited to laws governing operation of bicycles. If any license, permit, or other governmental authorization is required for LimeBike's lawful use or occupancy of ROW or any portion thereof, LimeBike shall procure and maintain such license, permit and/or governmental authorization throughout the terms of this Agreement. City shall reasonably cooperate with LimeBike, at no additional cost to City, such that LimeBike can properly comply with this Section and be allowed to use City's ROW as specified in section 3, above.

11. **Required Reports.** LimeBike shall provide reports to the City concerning utilization of its bikes and bike route usage not less than quarterly, and shall cooperate with City in the collection and analysis of aggregated data concerning its operations, as set forth in Exhibit A.

12. **No Joint Venture.** Nothing herein contained shall be in any way construed as expressing or implying that the parties hereto have joined together in any joint venture or liability company or in many manner have agreed to or are contemplating the sharing of profits and losses among themselves in relation to any matter relating to this Agreement.

13. **Exclusive Operator.** City designates LimeBike as the exclusive provider of bike share services within its city limits for the term of the pilot. This designation is personal to LimeBike and may not be assigned or transferred to any party.

14. **Term.** This agreement shall commence on April 1, 2018 (the Commencement Date) and shall expire on March 30, 2019 unless earlier termination pursuant to Section 15, below.

15. **Termination.** This Agreement may be terminated prior to the expiration date set forth in section 14, above, upon the occurrence of any of the following conditions:

A. Upon delivery of written notice from City to LimeBike terminating this agreement for any reason, or for no reason, by giving at least thirty (30) days' notice to LimeBike of such termination.

B. An attempt to transfer or assign this agreement

LimeBike shall not terminate this agreement without first giving at least 90 days' written notice. Upon the effective date of termination, of this Agreement, LimeBike shall remove all bicycles from the City and restore all City ROW to the condition of the City ROW at the commencement of this Agreement, if necessary.

ATTACHMENT 2

16. **Amendment.** The Agreement may be amended by mutual agreement of the parties. Such amendments shall only be effective if incorporated in written amendments to this agreement and executed by duly authorized representatives of the parties.

17. **Applicable Law and Venue.** The laws of the State of California shall govern the interpretation and enforcement of this Agreement.

18. **Counterparts.** This agreement may be executed simultaneously or in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same agreement.

19. **No Implied Waiver of Breach.** The waiver of any breach of a specific provision of this Agreement does not constitute a waiver of any other breach of that term or any other term of this Agreement.

20. **Evaluation.** LimeBike agrees to meet with City at least twice during the Pilot Period to evaluate performance and make adjustments to the program, as needed.

21. **Deposit.** LimeBike agrees to provide a Deposit of \$10,000, to be held by the city of Rancho Cordova for its use as provided in this Section. These funds shall be accessible to the City for future public property repair and maintenance costs, or any costs incurred in removing and storing bicycles improperly parked. If the City incurs any costs of address or abating any violations of these requirements, or incurs any costs of repair or maintenance that exceeds the deposit, LimeBike shall reimburse the City within 30 days of receiving written notice.

22. **Contact Information.** LimeBike shall provide City with a direct contact for bike share staff that are capable of rebalancing, removing, or otherwise performing any act with respect to the bike fleet as required under this Agreement.

Executed the day, month and year first written above by the parties as follow:

Neutron Holdings, Inc., a California
corporation, dba LimeBike

CITY OF RANCHO CORDOVA,
a municipal corporation

By: _____

By: _____

Cyrus Abhar

Print Name: _____

Its: City Manager

Title: _____

Attest: _____

City Clerk

Approved as to Form:

ATTACHMENT 2

Adam Lindgren, City Attorney

EXHIBIT A

The following performance indicators shall, at all times during the term of this Agreement, be met. LimeBike shall provide reports to the City at the time stated below in order to help City measure the success of the program and improving the livability and mobility of City residents and visitors. LimeBike will maintain its bikes to be in an excellent state of cleanliness and repair, with a minimum of 90% of deployed bikes operable at any time.

Performance Standard	Description	Measurement Tool	Minimum Performance Standard	Reporting Frequency
App & Customer Service Portal	LimeBike reservation system fully operational	Uptime reporting	The app (Uptime) will be operation 99.5% of the time.	quarterly
Bicycle Distribution	Maps identifying trends in peak bike distribution	Maps showing aggregate usage patterns	Fleet will focus on serving the City of Rancho Cordova	quarterly
Bicycles in service	# of Bikes in service	Daily uptime reports	Deploy and maintain a minimum of 200 bicycles in service in City any calendar month. Bicycles will be phased into deployment over a four week period and can be increased based on usage and demand, with City's prior approval. City has the right to have the total bicycles in service reduced at any time.	quarterly
Report-responsiveness	Response time to improper bike parking / other problems communicated to Customer service	Time relative to report logs	Within two (2) hours during business hours between 7 a.m. to 7 p.m. Monday through Friday except for State and Federal holidays. For any complaint outside of business hours, within two hours of start of business hours.	monthly

2926855.1



BIKE SHARE

FOR THE CITY OF RANCHO CORDOVA

Goals

- Inform Council on Bike Share.
- Provide update on work performed to date.
- Provide staff recommendation.



What is Bike Share?

- A service which rents bicycles on a short term basis to encourage an active mode of transportation for short trips.
- An amenity to the community that encourages economic development.
- Growing momentum in California and the country. Continued pursuit of Silver Level status as a “bike friendly community”.
- Docked Systems
 - Pros
 - Reliable Locations.
 - More Payment Options.
 - Less likely bikes are improperly parked.
 - Cons
 - Higher Initial Investment.
 - Limited Coverage.
- Dockless Systems
 - Pros
 - Greater area covered, scalable.
 - Destinations not predetermined.
 - No City funding needed.
 - Cons
 - Bikes may end up in unwanted locations.
 - Aesthetics of bikes parked around the City.
 - Bike may not be near when needed.



Work To Date

Is Bike Share right for Rancho Cordova?

- Created a Bike Share Task Force which includes members from City of Folsom, VSP, Rancho Chamber of Commerce, Kaiser, Franchise Tax Board, RT, Visit Rancho Cordova, BARC/SABA, SACOG, SMAQMD, Merlone Geier Partners. and others
- The Bike Share Task Force researched different bike share styles (Dockless, Docked, Hybrid). Researched cities of similar demographics that have bike share systems - identifying the benefits, concerns, and also evaluating options to bring bike share to the region.
- The Task Force heard 3 presentations and ranked the bike share providers that participated.
- The Task Force determined the most qualified provider was Limebike with a dockless system.



Why Was Limebike the Top Ranked Provider?

- Establishment of a 1 year pilot program.
 - Offers the flexibility needed to determine if Bike Share is sustainable in Rancho Cordova.
 - High quality bikes with features that lower need for ongoing maintenance.
 - Day to day operations handled by local Limebike team.
 - Incentives to keep bikes in circulation and to educate users on proper parking locations.
 - City receives origin & destination data.
 - Program would establish the City as a candidate for future expansion of SACOG's bike share program.
- No upfront cost to the City.
- Convenient payment through app.

WHAT LIMEBIKE HAS COMMITTED TO



Maximum response time to critical issues are 30 minutes, Response time to blocked access is less than 2 hours between 7 AM – 7PM.



A minimum of 200 bikes, with a percentage of those being e-bikes.



Engagement in the community at special events, helmet giveaways and low-income subsidies



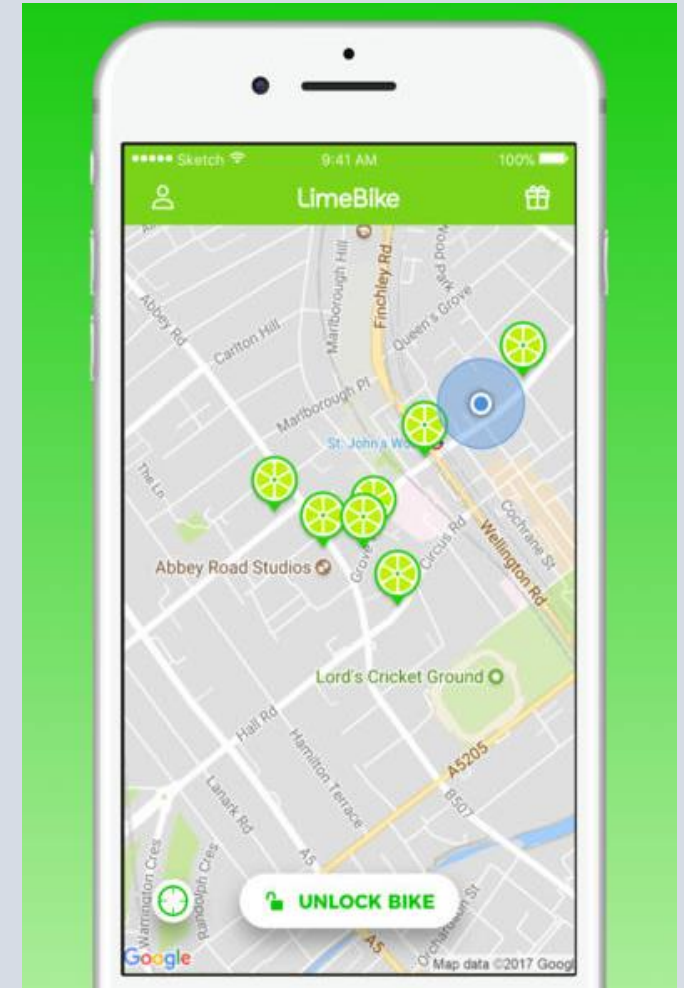
Establishment of Business network to ensure that commuters have bikes available.



City can require Limebike to establish pre-designated parking zones with signage and striping.

NEXT STEPS

- City Staff in partnership with 50 Corridor TMA, and the City of Folsom is targeting April as launch date.
- Begin to offer educational classes to cyclist and motorists as part of the “Campaign for a Peaceful Coexistence”
- Ramp of incentive and encouragement activities through new and established “May is Bike Month” events.
- Staff Recommendation
 - Authorize the City Manager to enter into agreement with Limebike to launch a bike share system to launch this Spring.



MEMORANDUM

DATE: February 20, 2018

TO: Honorable Mayor and Council Members

FROM: Michelle Mingay, Sr. Finance Analyst



SUBJECT: A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA AUTHORIZING THE ISSUANCE OF SPECIAL TAX BONDS FOR AND ON BEHALF OF THE CITY OF RANCHO CORDOVA SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1, APPROVING AND DIRECTING THE EXECUTION OF A SUPPLEMENTAL FISCAL AGENT AGREEMENT, APPROVING THE FORM OF PRELIMINARY OFFICIAL STATEMENT, APPROVING SALE OF SUCH BONDS, AND APPROVING OTHER RELATED DOCUMENTS AND ACTIONS

RECOMMENDATION

Adopt Resolution 29-2018.

RESULT OF RECOMMENDED ACTION

Adoption of this Resolution will authorize the sale of the final series of Special Tax Bonds (the "Bonds") for and on behalf of Sunridge North Douglas Community Facilities District No. 2005-1 for the purpose of providing money for the construction and acquisition of improvements, and the payment of certain fees, within the Community Facilities District.

BACKGROUND

Sunridge North Douglas Community Facilities District No. 2005-1 (the "CFD 2005-1") or (the "District") was formed in 2005 to assist the developer in the financing of the acquisition and construction of certain public facilities, and payment of certain fees, within the North Douglas project. Through various Council actions, the City Council has declared the necessity to incur bonded indebtedness in a maximum principal amount not to exceed \$35,000,000 and set an annual appropriations limit for the same.

In 2015, the City of Rancho Cordova (the "City") issued \$14,225,000 of Special Tax Bonds. The bond proceeds from this issue were used to finance the acquisition and construction of certain public facilities and infrastructure improvements necessary to support the planned development within District along with funding certain development impact fees related to the project.

Since then, approximately 50% of the parcels within the District have been fully developed and sold to individual homeowners. The construction and sale of these units has created a diversity of property ownership as well as increased property values, which is supported by the updated appraisal of the property in the District which was undertaken by Integra Realty Resources, an MAI appraiser.

Based on the current status of the property within the District, the appraisal estimates the value of the property within the District at approximately \$184 million. This has created an opportunity for the District to issue the final series of special tax bonds. Based on the proposed par amount of \$4.9 million, the property value compared to bonded debt lien would exceed the required 4:1 value to lien requirement, which is consistent with prior special tax bonds issued within the City.

The financing-related Resolution approves the sale of the Bonds in an amount not to exceed \$6 million, approves a Supplemental Fiscal Agent Agreement, the Preliminary Official Statement, Bond Purchase Agreement and authorizes related documents on behalf of the District. Descriptions of these documents are as follows:

Supplemental Fiscal Agent Agreement: The Supplemental Fiscal Agent Agreement allows US Bank to act on behalf of the City to provide for the issuance of the Bonds and to provide for the disbursement of proceeds of the Bonds, the disposition of the special taxes securing the Bonds and the administration and payment of the Bonds, all consistent with the terms and conditions for the first series of special tax bonds issued for the District in 2015.

Bond Purchase Agreement: The Bond Purchase Agreement is a legally binding document between the issuer (City on behalf of the District) and an underwriter (Piper Jaffray & Co.) establishing the terms of the Bond sale. After the issuer delivers the Bonds to the underwriter and the underwriter pays the issuer for them, the underwriter will put the Bonds on the market at the price and yield established during the Bond pricing call, currently scheduled for the week of March 12th, and investors will purchase the Bonds from the underwriter.

Preliminary Official Statement: The preliminary Official Statement is a document which serves as the prospectus for the Bonds. It is the disclosure document relied on by Bond investors that details the underlying security for the Bonds and all associated investment risks. The Official Statement is the offering document used by the underwriter to market the Bonds and indicated how investors in the Bonds will be repaid.

Assuming the City Council approves this financing; staff will work with the Bond Finance Team to determining the final Bond sizing and the preliminary Official Statement will be finalized and posted electronically for investors to review. Assuming the market remains stable, the City, NHA Advisors, LLC (NHA), the City's Municipal Advisor, and Piper Jaffray, Co., the bond underwriter, will hold a pre-pricing call the week of March 12th to review the bond market conditions and the preliminary interest rates, after which the Bonds will be sold. An authorized officer will then execute, on behalf of the City, a Bond Purchase Agreement with Piper Jaffray, Co., finalizing the bond interest rates and setting the delivery date, which is anticipated to be the week of March 26th.

FISCAL IMPACT

None. The Special Tax Bonds are secured solely by the Special Taxes levied within the District and are not a debt of the City's General Fund. Costs of issuance are payable solely from the Bond proceeds.

In accordance with Government Code 5852.1, the following information consists of estimates of certain costs and charges for the Bonds that have been provided by the City's municipal advisor, which has been represented by such party to have been provided in good faith: (1) estimated true interest cost of the Bonds: 4.75%; (2) estimated finance charge of the Bonds

(sum of all fees and charges paid to third parties): \$350,000; (3) estimated amount of proceeds of the Bonds received by the City (net of finance charges, reserves and capitalized interest, if any): \$4,680,000; and (4) estimated total payment amount (sum total of all payments to pay debt service on the Bonds plus the finance charge not paid with proceeds of the Bonds) calculated to the final maturity of the Bonds: \$9,335,000.

ATTACHMENT(S)

1. Resolution No. 29-2018
2. Supplemental Fiscal Agent Agreement
3. Bond Purchase Agreement
4. Preliminary Official Statement

ATTACHMENT 1**CITY OF RANCHO CORDOVA****RESOLUTION NO. 29-2018**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF RANCHO CORDOVA, STATE OF CALIFORNIA, AUTHORIZING THE ISSUANCE OF SPECIAL TAX BONDS FOR AND ON BEHALF OF THE CITY OF RANCHO CORDOVA SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1, APPROVING AND DIRECTING THE EXECUTION OF A SUPPLEMENTAL FISCAL AGENT AGREEMENT, APPROVING THE FORM OF PRELIMINARY OFFICIAL STATEMENT, APPROVING SALE OF SUCH BONDS, AND APPROVING OTHER RELATED DOCUMENTS AND ACTIONS

RESOLVED, by the City Council of the City of Rancho Cordova (the "City") that:

WHEREAS, the City Council has conducted proceedings under and pursuant to the Mello-Roos Community Facilities Act of 1982, as amended (the "Act"), to form the Sunridge North Douglas Community Facilities District No. 2005-1 (the "District"), to authorize the levy of special taxes upon the land within the District, and to issue bonds secured by said special taxes for the purpose of providing moneys for the construction and acquisition of improvements authorized for the District; and

WHEREAS, the City Council, as legislative body of the District, authorized the issuance of special tax bonds of the City for the District, and the qualified electors, have authorized the issuance of special tax bonds of the City for the District in the maximum principal amount of not to exceed \$35,000,000; and

WHEREAS, pursuant to the provisions of the Act and a Fiscal Agent Agreement dated as of October 1, 2015 (the "Original Fiscal Agent Agreement") between the City and U.S. Bank National Association, as fiscal agent (the "Fiscal Agent"), on October 15, 2015, the City issued, for and on behalf of the District, \$14,225,000 initial principal amount of City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds, Series 2015 (the "2015 Bonds") for the purpose of financing various public improvements authorized to be funded by the District; and

WHEREAS, Section 5.17 of the Original Fiscal Agent Agreement authorizes the issuance of Additional Bonds by a Supplemental Agreement (as such terms are defined in the Original Fiscal Agent Agreement) secured under the Original Fiscal Agent Agreement on a parity with the 2015 Bonds; and

WHEREAS, after due investigation and deliberation the City has determined that it is in the interests of the City and the District at this time for the City, for and on behalf of the District, to provide for the issuance of its City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds, Series 2018 in an aggregate principal amount not to exceed \$6,000,000 (the "2018 Bonds"), to provide moneys needed to construct and acquire various public improvements authorized to be funded by the District;

WHEREAS, there has been submitted to the City Council a Supplemental Agreement No. 1 to Fiscal Agent Agreement (the "Supplemental Agreement") to supplement the Original Fiscal Agreement and to provide for the issuance of the 2018 Bonds for the District, and the City

ATTACHMENT 1

Council, with the aid of City staff, has reviewed the Supplemental Agreement and found it to be in proper order, and now desires to approve the Supplemental Agreement and the issuance of the 2018 Bonds; and

WHEREAS, the City proposes to sell the 2018 Bonds to Piper Jaffray & Co., as underwriter (the "Underwriter"), pursuant to the terms of a Bond Purchase Agreement (the "Bond Purchase Agreement") by and between the City and the Underwriter, and the Underwriter proposes to offer the 2018 Bonds to the investing public by means of a Preliminary Official Statement (the "Preliminary Official Statement"); and

WHEREAS, it appears that each of said documents and instruments which are now before this meeting is in appropriate form and is an appropriate document or instrument to be executed and delivered for the purpose intended; and

WHEREAS, all conditions, things and acts required to exist, to have happened and to have been performed precedent to and in the issuance of the 2018 Bonds as contemplated by this Resolution and the documents referred to herein exist, have happened and have been performed in due time, form and manner as required by the laws of the State of California, including the Act.

NOW, THEREFORE, IT IS HEREBY ORDERED as follows:

Section 1. Pursuant to the Act, this Resolution, the Original Fiscal Agent Agreement and the Supplemental Agreement, special tax bonds of the City for the District designated as "City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds, Series 2018" in an aggregate principal amount not to exceed \$6,000,000 are hereby authorized to be issued. The 2018 Bonds shall be executed in the form set forth in, and otherwise as provided in, the Supplemental Agreement. The 2018 Bonds shall be secured by and payable from the special taxes levied in the District and certain other accounts and funds held by the Fiscal Agent on a parity with the 2015 Bonds.

In furtherance of the issuance of the 2018 Bonds, the City Council hereby makes the following findings and determinations: (i) it is prudent in the management and development of the City and the District to issue the 2018 Bonds to provide moneys needed to construct and acquire various public improvements authorized to be funded by the District, and (ii) the 2018 Bonds and the District are in compliance with the City's guidelines for issuance of Mello-Roos bonds.

The City Council hereby approves the Supplemental Agreement in the form presented to the City Council at this meeting. The City Manager, the Chief Financial Officer, and such other person or persons as either of them may designate (collectively, the "Authorized Officers") are each hereby authorized and directed to execute the Supplemental Agreement, for and in the name and on behalf of the City and the District, in such form, together with any additions thereto or changes therein deemed necessary or advisable by the Authorized Officer executing such document upon consultation with Bond Counsel. The proceeds of the 2018 Bonds shall be applied by the City for the purposes and in the amounts as set forth in the Supplemental Agreement. The City Council hereby authorizes the execution, delivery and performance by the City of the Supplemental Agreement.

Section 2. The City Council hereby approves the Bond Purchase Agreement between the City and the Underwriter in the form presented to the City Council at this meeting. The

ATTACHMENT 1

Authorized Officers are each hereby authorized and directed to accept the offer of the Underwriter to purchase the 2018 Bonds contained in the Bond Purchase Agreement and to execute the Bond Purchase Agreement, for and in the name and on behalf of the City and the District, in such form, together with any additions thereto or changes therein deemed necessary or advisable by the Authorized Officer executing such document upon consultation with Bond Counsel and the Municipal Advisor, provided that no additions or changes shall authorize an aggregate principal amount of 2018 Bonds in excess of \$6,000,000 or result in a true interest cost in excess of 5.0% or result in an underwriter's discount in excess of 1.1% of the aggregate principal amount of the 2018 Bonds. The City Council hereby authorizes the execution, delivery and performance by the City of the Bond Purchase Agreement. The City Council hereby finds and determines that the sale of the 2018 Bonds at negotiated sale as contemplated by the Bond Purchase Agreement will result in a lower overall cost.

Section 3. The City Council hereby approves the Preliminary Official Statement in the form presented to the City Council at this meeting. The Authorized Officers are each hereby authorized and directed to execute a final Official Statement (the "Official Statement"), for and in the name and on behalf of the City and the District, in such form, together with any additions thereto or changes therein deemed necessary or advisable by the Authorized Officer executing such document upon consultation with Bond Counsel and the Municipal Advisor. The City Council hereby authorizes and directs the Underwriter to distribute copies of said Preliminary Official Statement to persons who may be interested in the purchase of the 2018 Bonds and to deliver copies of the Official Statement to all actual purchasers of the 2018 Bonds. The City Council hereby authorizes the delivery by the City of the Preliminary Official Statement and the Official Statement. The City Council hereby authorizes and directs an Authorized Officer on behalf of the City to deem "final," pursuant to Rule 15c2-12 of the Securities Exchange Act of 1934, the Preliminary Official Statement prior to its distribution to prospective purchasers of the 2018 Bonds.

Section 4. The City hereby covenants, for the benefit of the owners of the 2018 Bonds on an equal basis with the owners of the 2015 Bonds, to commence and diligently pursue to completion any foreclosure action regarding delinquent installments of special taxes, said foreclosure action to be commenced and pursued as more completely set forth in the Original Fiscal Agent Agreement.

Section 5. The 2018 Bonds, when executed, shall be delivered to the Fiscal Agent for authentication. The Fiscal Agent is hereby requested and directed to authenticate the 2018 Bonds by executing the Fiscal Agent's certificate of authentication and registration appearing thereon, and to deliver the 2018 Bonds, when duly executed and authenticated, to the Underwriter in accordance with written instructions executed on behalf of the City by the Mayor and/or one or more of the Authorized Officers, which instructions such officers are each hereby authorized, for and in the name and on behalf of the City, to execute and deliver to the Fiscal Agent. Such instructions shall provide for the delivery of the 2018 Bonds to the Underwriter or its designee in accordance with the Bond Purchase Agreement, upon payment of the purchase price therefor.

Section 6. All actions heretofore taken by the officers and agents of the City with respect to the establishment of the District and the sale and issuance of the 2018 Bonds are hereby approved, confirmed and ratified, and the Authorized Officers are each hereby authorized and directed to do any and all things and take any and all actions and execute any and all certificates, agreements and other documents, which they, or any of them, may deem necessary or advisable in order to consummate the lawful issuance and delivery of the 2018

ATTACHMENT 1

Bonds in accordance with this Resolution (including a continuing disclosure certificate or agreement in the form included as an exhibit to the Preliminary Official Statement), and any certificate, agreement, and other document described in the documents herein approved. Any document herein approved and executed and delivered by any one of the Authorized Officers shall be a valid and binding agreement of the City.

Section 7. The City Council hereby approves the selection of Jones Hall, A Professional Law Corporation, as bond counsel and disclosure counsel, and NHA Advisors, LLC, as municipal advisor. Each Authorized Officer is authorized to execute a professional services agreement with such firms in connection with the proposed financing, and the execution of such agreements by an Authorized Officer shall be conclusive evidence of such approval.

Section 8. This Resolution shall take effect from and after its adoption.

PASSED AND ADOPTED by the City Council of the City of Rancho Cordova on the _____ day of _____, 2018 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

Linda Budge, Mayor

ATTEST:

Stacy Leitner, City Clerk

ATTACHMENT 2**SUPPLEMENTAL AGREEMENT NO. 1 TO FISCAL AGENT AGREEMENT**

by and between

CITY OF RANCHO CORDOVA

and

**U.S. BANK NATIONAL ASSOCIATION,
as Fiscal Agent**

Dated as of _____ 1, 2018

Relating to:

\$ _____
**City of Rancho Cordova
Sunridge North Douglas Community Facilities District No. 2005-1
Special Tax Bonds
Series 2018**

ATTACHMENT 2

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ATTACHMENT 2**SUPPLEMENTAL AGREEMENT NO. 1 TO FISCAL AGENT AGREEMENT**

THIS SUPPLEMENTAL AGREEMENT NO. 1 TO FISCAL AGENT AGREEMENT (this "Supplemental Agreement No. 1" or "Supplemental Agreement"), dated as of _____, 1, 2018, is by and between the CITY OF RANCHO CORDOVA, California, a municipal corporation and public body, corporate and politic, organized and existing under and by virtue of the Constitution and laws of the State of California (the "City") for and on behalf of the City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 (the "District"), and U.S. BANK NATIONAL ASSOCIATION, a national banking association duly organized and existing under the laws of the United States of America with a corporate trust office located in Seattle, Washington, as fiscal agent (the "Fiscal Agent") under a Fiscal Agent Agreement, dated as of October 1, 2015 (the "Original Fiscal Agent Agreement") by and between the Fiscal Agent and the City.

RECITALS:

WHEREAS, the City Council of the City (the "City Council") has formed the District under the provisions of the Mello-Roos Community Facilities Act of 1982, as amended (Section 53311, et seq. of the California Government Code) (the "Act");

WHEREAS, the City Council, as the legislative body with respect to the District, is authorized under the Act to levy special taxes to pay for the costs of facilities within the District and to authorize the issuance of bonds secured by said special taxes under the Act;

WHEREAS, the City Council, as legislative body of the District, authorized the issuance of special tax bonds of the City for the District, and the qualified electors, have authorized the issuance of special tax bonds of the City for the District in the maximum principal amount of not to exceed \$35,000,000; and

WHEREAS, pursuant to the provisions of the Act and the Original Fiscal Agent Agreement, on October 15, 2015, the City issued, for and on behalf of the District, \$14,225,000 initial principal amount of City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds, Series 2015 (the "2015 Bonds") for the purpose of financing various public improvements authorized to be funded by the District;

WHEREAS, Section 5.17 of the Original Fiscal Agent Agreement authorizes the issuance of Additional Bonds by a Supplemental Agreement (as such terms are defined in the Original Fiscal Agent Agreement) secured under the Original Fiscal Agent Agreement on a parity with the 2015 Bonds;

WHEREAS, after due investigation and deliberation the City has determined that it is in the interests of the City and the District at this time for the City, for and on behalf of the District, to provide for the issuance of its City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds, Series 2018 in the initial aggregate principal amount of \$_____ (the "2018 Bonds"), to provide moneys needed to construct and acquire facilities necessary for development of property within the City;

WHEREAS, this Supplemental Agreement No. 1 is a "Supplemental Agreement" as defined in Section 1.03 of the Original Fiscal Agent Agreement and the 2018 Bonds are "Additional Bonds" as defined in Section 1.03 of the Original Fiscal Agent Agreement and

ATTACHMENT 2

secured under the Original Fiscal Agent Agreement, as amended and supplemented by this Supplemental Agreement No. 1, on a parity with the 2015 Bonds;

WHEREAS, the City and the Fiscal Agent desire to enter into this Supplemental Agreement No. 1 pursuant to Sections 5.17 and 8.05 of the Original Fiscal Agent Agreement and to provide for the issuance of the 2018 Bonds;

WHEREAS, in providing for the issuance of the 2018 Bonds, it is necessary to supplement and amend the Original Fiscal Agent Agreement, as more particularly provided in Section 1 and Section 2 hereof, as such supplements and amendments are authorized by Sections 5.17 and 8.05 of the Original Fiscal Agent Agreement; and

WHEREAS, the City has determined that all acts and proceedings required by law necessary to make the 2018 Bonds, when executed by the City for the District, authenticated and delivered by the Fiscal Agent and duly issued, the valid, binding and legal special obligations of the City for the District, and to constitute the Original Fiscal Agent Agreement, as amended and supplemented by this Supplemental Agreement No. 1, a valid and binding agreement for the uses and purposes herein and therein set forth, in accordance with its terms, have been done or taken and the execution and delivery of this Supplemental Agreement No. 1 have been in all respects duly authorized.

AGREEMENT:

NOW, THEREFORE, in consideration of the premises and the mutual agreements herein contained, and for other consideration the receipt and sufficiency of which are hereby acknowledged, the parties hereto do hereby agree as follows:

SECTION 1. Supplement to Original Fiscal Agent Agreement. In accordance with the provisions of Sections 5.17 and 8.05 of the Original Fiscal Agent Agreement, the Original Fiscal Agent Agreement is hereby amended by adding a new article thereto, to be designated as Article X. Such Article X shall read in its entirety as follows:

ARTICLE X

2018 BONDS

Section 10.01. Definitions. Unless the context otherwise requires, the terms defined in this Section 10.01 shall, for all purposes of this Article X but not for any other purposes of this Agreement, have the respective meanings specified in this Section 10.01. All terms defined in Section 1.03 of this Agreement and not otherwise defined in this Section 10.01 shall, when used in this Article X, have the respective meanings given to such terms in Section 1.03.

"Article X" means this Article X which has been incorporated in and made a part of this Agreement pursuant to Supplemental Agreement No. 1, together with all amendments of and supplements to this Article X entered into pursuant to the provisions of Section 8.01.

"Closing Date" means _____, 2018, being the date upon which there was a physical delivery of the 2018 Bonds in exchange for the amount representing the purchase price of the 2018 Bonds by the Original Purchaser.

"Original Purchaser" means, Piper Jaffray & Co., the first purchaser of the 2018 Bonds upon their delivery by the Fiscal Agent on the Closing Date.

ATTACHMENT 2

“2018 Bonds” means the City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds, Series 2018 at any time outstanding under the Agreement.

“2018 Costs of Issuance” means items of expense payable or reimbursable directly or indirectly by the City and related to the authorization, sale and issuance of the 2018 Bonds, which items of expense shall include, but not be limited to, printing costs, costs of reproducing and binding documents, closing costs, filing and recording fees, initial fees, expenses and charges of the Fiscal Agent, expenses incurred by the City in connection with the issuance of the 2018 Bonds, financial advisor fees, 2018 Bond (underwriter's) discount or underwriting fee, legal fees and charges, including bond counsel, disclosure counsel, charges for execution, transportation and safekeeping of the 2018 Bonds and other costs, charges and fees in connection with the foregoing.

“2018 Costs of Issuance Fund” means the fund by that name established and held by the Fiscal Agent pursuant to Section 10.07.

“Term 2018 Bonds” means the 2018 Bonds maturing September 1, ____ and ____ .

Section 10.02. Authorization of 2018 Bonds. 2018 Bonds in the aggregate principal amount of _____ Dollars (\$ _____), are hereby authorized to be issued as Additional Bonds under and subject to the terms of this Agreement, the Act, and other applicable laws of the State of California.

Section 10.03. Terms of 2018 Bonds.

(A) Form; Denominations. The 2018 Bonds shall be issued as fully registered Bonds without coupons in the denomination of \$5,000 or any integral multiple in excess thereof.

(B) Date of Bonds. The 2018 Bonds shall be dated the Closing Date.

(C) CUSIP Identification Numbers. “CUSIP” identification numbers shall be imprinted on the 2018 Bonds, but such numbers shall not constitute a part of the contract evidenced by the 2018 Bonds and any error or omission with respect thereto shall not constitute cause for refusal of any purchaser to accept delivery of and pay for the 2018 Bonds. In addition, failure on the part of the City or the Fiscal Agent to use such CUSIP numbers in any notice to Owners shall not constitute an event of default or any violation of the City’s contract with such Owners and shall not impair the effectiveness of any such notice.

(D) Maturities, Interest Rates. The 2018 Bonds shall mature and become payable on September 1 in each of the years, and shall bear interest at the rates per annum as follows:

<u>Maturity Date</u> <u>(September 1)</u>	<u>Principal</u> <u>Amount</u>	<u>Interest</u> <u>Rate</u>	<u>Maturity Date</u> <u>(September 1)</u>	<u>Principal</u> <u>Amount</u>	<u>Interest</u> <u>Rate</u>
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ATTACHMENT 2

(E) Interest and Method of Payment. Interest on the 2018 Bonds shall be payable as provided in Section 2.02(E) of this Agreement, with the Closing Date as used therein being the Closing Date as defined in Section 10.01, and payments shall be made on the 2018 Bonds as provide in Section 2.02(F)

Section 10.04. Redemption of 2018 Bonds.

(A) Redemption.

(i) *Optional Redemption.* The 2018 Bonds maturing on or before September 1, 20__ are not subject to optional redemption prior to their respective maturity dates. The 2018 Bonds maturing on or after September 1, 20__ may be redeemed prior to maturity at the option of the City from any source of available funds, as a whole or in part, on any date on or after September 1, 20__, at a redemption price equal to the principal amount of the 2018 Bonds called for redemption, together with accrued interest to the date fixed for redemption, without premium.

(ii) *Mandatory Redemption from Prepayments.* The 2018 Bonds shall be subject to mandatory redemption from prepayments of the Special Tax by property owners, in whole or in part among maturities as shall be specified by the City and by lot within a maturity, on any Interest Payment Date at the following respective redemption prices (expressed as percentages of the principal amount of the 2018 Bonds to be redeemed), plus accrued interest thereon the date of redemption:

<u>Redemption Dates</u>	<u>Redemption Price</u>
March 1, 2018 to and including March 1, 20__	103%
September 1, 20__ and March 1, 20__	102
September 1, 20__ and March 1, 20__	101
September 1, 20__ and thereafter	100

(iii) *Mandatory Sinking Payment Redemption.* The Term 2018 Bonds are subject to mandatory sinking payment redemption in part on September 1, 20__ and on each September 1 thereafter to maturity, by lot, at a redemption price equal to one hundred percent (100%) of the principal amount thereof to be redeemed, without premium, in the aggregate respective principal amounts as set forth in the following table:

<u>Mandatory Redemption Date (September 1)</u>	<u>Sinking Fund Payment</u> \$
--	---------------------------------------

20__ (maturity)

The amounts in the foregoing table shall be reduced pro rata, in order to maintain substantially level debt service, as a result of any prior partial optional redemption or mandatory redemption of the 2018 Bonds.

ATTACHMENT 2

In lieu of redemption under this Section 10.04, moneys in the Bond Fund may be used and withdrawn by the Fiscal Agent for purchase of Outstanding 2018 Bonds, upon the filing with the Fiscal Agent of an Officer's Certificate requesting such purchase, at public or private sale as and when, and at such prices (including brokerage and other charges) as such Officer's Certificate may provide, but in no event may 2018 Bonds be purchased at a price in excess of the principal amount thereof, plus interest accrued to the date of purchase.

(B) Notice to Fiscal Agent. The City shall give the Fiscal Agent an Officer's Certificate containing notice of its intention to redeem 2018 Bonds pursuant to subsections (i) and (ii) not less than sixty (60) days prior to the applicable redemption date.

(C) Redemption Procedure by Fiscal Agent. The Fiscal Agent shall cause notice of any redemption to be mailed by first class mail, postage prepaid, at least thirty (30) days but not more than sixty (60) days prior to the date fixed for redemption, to the Securities Depositories and to the Municipal Securities Rulemaking Board and to the Securities Depositories, and to the respective registered Owners of any 2018 Bonds designated for redemption, at their addresses appearing on the 2018 Bond registration books in the Principal Office of the Fiscal Agent; but such mailing shall not be a condition precedent to such redemption and failure to mail or to receive any such notice, or any defect therein, shall not affect the validity of the proceedings for the redemption of such 2018 Bonds.

Such notice shall state the redemption date and the redemption price and, if less than all of the then Outstanding 2018 Bonds are to be called for redemption, shall designate the CUSIP numbers and 2018 Bond numbers of the 2018 Bonds to be redeemed by giving the individual CUSIP number and 2018 Bond number of each 2018 Bond to be redeemed or shall state that all 2018 Bonds between two stated 2018 Bond numbers, both inclusive, are to be redeemed or that all of the 2018 Bonds of one or more maturities have been called for redemption, shall state as to any 2018 Bond called in part the principal amount thereof to be redeemed, and shall require that such 2018 Bonds be then surrendered at the Principal Office of the Fiscal Agent for redemption at the said redemption price, and shall state that further interest on such 2018 Bonds will not accrue from and after the redemption date.

The City has the right to rescind any notice of the redemption of 2018 Bonds under Section 10.04(A)(i) by written notice to the Fiscal Agent on or prior to two Business Days prior to the date fixed for redemption. Any notice of redemption shall be cancelled and annulled if for any reason funds will not be or are not available on the date fixed for redemption for the payment in full of the 2018 Bonds then called for redemption, and such cancellation shall not constitute an event of default. The City and the Fiscal Agent have no liability to the Owners or any other party related to or arising from such rescission of redemption. The Fiscal Agent shall mail notice of such rescission of redemption in the same manner as the original notice of redemption was sent under this Section.

Upon the payment of the redemption price of 2018 Bonds being redeemed, each check or other transfer of funds issued for such purpose shall, to the extent practicable, bear the CUSIP number identifying, by issue and maturity, of the 2018 Bonds being redeemed with the proceeds of such check or other transfer.

Whenever provision is made in this Agreement for the redemption of less than all of the 2018 Bonds of any maturity, the Fiscal Agent shall select the 2018 Bonds to be redeemed, from all 2018 Bonds or such given portion thereof of such maturity by lot in any manner which the Fiscal Agent in its sole discretion shall deem appropriate.

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Upon surrender of 2018 Bonds redeemed in part only, the City shall execute and the Fiscal Agent shall authenticate and deliver to the registered Owner, at the expense of the City, a new 2018 Bond or 2018 Bonds, of the same series and maturity, of authorized denominations in aggregate principal amount equal to the unredeemed portion of the 2018 Bond or 2018 Bonds.

(D) Effect of Redemption. From and after the date fixed for redemption, if funds available for the payment of the principal of, and interest and any premium on, the 2018 Bonds so called for redemption shall have been deposited in the Bond Fund, such 2018 Bonds so called shall cease to be entitled to any benefit under this Agreement other than the right to receive payment of the redemption price, and no interest shall accrue thereon on or after the redemption date specified in such notice.

All 2018 Bonds redeemed and purchased by the Fiscal Agent pursuant to this Section shall be canceled by the Fiscal Agent. The Fiscal Agent shall destroy the cancelled 2018 Bonds and issue a certificate of destruction thereof to the City.

Section 10.05. Form of 2018 Bonds; Authentication and Delivery.

(A) Form of 2018 Bonds. The 2018 Bonds, the form of Fiscal Agent's certificate of authentication, and the form of assignment to appear thereon, shall be substantially in the respective forms set forth in Exhibit A attached hereto and by this reference incorporated herein, with necessary or appropriate variations, omissions and insertions, as permitted or required by this Agreement and the Act.

(B) Execution of 2018 Bonds. The 2018 Bonds shall be executed on behalf of the City by the Mayor and the City Clerk of the City who are in office on the date of adoption of this Supplemental Agreement or at any time thereafter, and the seal of the City may be impressed, imprinted or reproduced by facsimile signature thereon. If any officer whose signature appears on any 2018 Bond ceases to be such officer before delivery of the 2018 Bonds to the Owner, such signature shall nevertheless be as effective as if the officer had remained in office until the delivery of the 2018 Bonds to the Owner. Any 2018 Bond may be signed and attested on behalf of the City by such persons as at the actual date of the execution of such 2018 Bond shall be the proper officers of the City although at the nominal date of such 2018 Bond any such person shall not have been such officer of the City.

Only such of the 2018 Bonds as shall bear thereon a certificate of authentication in the form set forth in Exhibit A, manually executed and dated by the Fiscal Agent, shall be valid or obligatory for any purpose or entitled to the benefits of this Agreement, and such certificate of the Fiscal Agent shall be conclusive evidence that such 2018 Bonds have been duly authenticated and delivered hereunder and are entitled to the benefits of this Agreement.

(C) Authentication and Delivery of 2018 Bonds. At any time after the execution of Supplemental Agreement No. 1 and delivery by the City of an Officer's Certificate that the requirements of Section 5.17 for the issuance of the 2018 Bonds as Additional Bonds have been met, the City may issue the 2018 Bonds for the District in the aggregate principal amount set forth in Section 10.02 and deliver the 2018 Bonds to the Original Purchaser. The Authorized Officers of the City are hereby authorized and directed to deliver any and all documents and instruments necessary to cause the issuance of the 2018 Bonds in accordance with the provisions of the Act and this Agreement, as supplemented by Supplemental Agreement No. 1, to authorize the payment of 2018 Costs of Issuance and costs of the Project

ATTACHMENT 2

by the Fiscal Agent from the proceeds of the 2018 Bonds and to do and cause to be done any and all acts and things necessary or convenient for delivery of the 2018 Bonds to the Original Purchaser. The provisions of Sections 2.06 through 2.13 of the Original Fiscal Agent Agreement shall apply to the 2018 Bonds in a like manner as applied to the 2015 Bonds.

Section 10.06. Application of Proceeds of Sale of 2018 Bonds. The proceeds of the purchase of the 2018 Bonds by the Original Purchaser in the amount of \$_____, calculated as 100% of the principal amount of the Bonds, less an underwriter's discount of \$_____ and less an original issue discount of \$_____, shall be paid to the Fiscal Agent, who shall forthwith set aside, pay over and deposit such proceeds on the Closing Date as follows:

- (i) Deposit in the 2018 Improvements Account of the Improvement Fund \$_____;
- (ii) Deposit in the 2018 Bond Reserve Account of the Reserve Fund \$_____; and
- (iii) Deposit in the 2018 Costs of Issuance Fund \$_____.

The Fiscal Agent may, in its discretion, establish a temporary fund or account in its books and records to facilitate transfers required under this Section 10.06.

Section 10.07. 2018 Costs of Issuance Fund. There is hereby established a separate fund to be known as the "2018 Costs of Issuance Fund", which shall be held by the Fiscal Agent in trust. Amounts in the Costs of Issuance Fund shall be disbursed from time to time to pay 2018 Costs of Issuance, as set forth in an Officer's Certificate containing respective amounts to be paid to the designated payees, signed by an Authorized Officer and delivered to the Fiscal Agent. The Fiscal Agent shall pay all 2018 Costs of Issuance upon receipt of an invoice from any such payee which requests payment in an amount which is less than or equal to the amount set forth with respect to such payee in such Officer's Certificate, or upon receipt of an Officer's Certificate requesting payment of a 2018 Costs of Issuance not listed on the initial Officer's Certificate delivered to the Fiscal Agent on the Closing Date. The Fiscal Agent shall maintain the 2018 Costs of Issuance Fund for a period of 120 days from the Closing Date and then shall transfer any moneys remaining therein, including any investment earnings thereon, to the Authorized Officer for deposit by the Authorized Officer in the 2018 Improvements Account of the Improvement Fund. Thereafter, every invoice received by the Fiscal Agent shall be submitted to the Authorized Officer for payment from amounts on deposit in the 2018 Improvements Account of the Improvement Fund.

Section 10.08. 2018 Improvements Account.

(A) Disbursements. The Fiscal Agent shall deposit the proceeds set forth in Section 10.06(i) in the 2018 Improvements Account of the Improvement Fund, which shall be established and held in trust by the Fiscal Agent and shall be disbursed as specified in this Section. Disbursements from the 2018 Improvements Account shall be made by the Fiscal Agent upon receipt of an Officer's Certificate which shall:

- (i) set forth the amount required to be disbursed, the purpose for which the disbursement is to be made, the person to which the disbursement is to be paid and state that such disbursement is for a Project cost; and

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(ii) certify that no portion of the amount then being requested to be disbursed was set forth in any Officer's Certificate previously filed requesting disbursement.

The Fiscal Agent shall not incur any liability for any disbursement from the 2018 Improvements Account in reliance upon any Officer's Certificate.

(B) Investment. Moneys in the Improvement Fund and the accounts established thereunder shall be invested and deposited in accordance with Section 6.01. Interest earnings and profits from the investment of amounts in the Improvement Fund shall be retained by the Fiscal Agent in the Improvement Fund to be used for the purposes of the Improvement Fund.

(C) Closing of Fund. Upon the filing of an Officer's Certificate stating that the portion of the Project to be financed from the 2018 Improvements Account of the Improvement Fund and the accounts established thereunder has been completed and that all costs of such portion of the Project have been paid or are not required to be paid from the Improvement Fund, the Fiscal Agent shall transfer the amount, if any, remaining in the 2018 Improvements Account of the Improvement Fund to the Fiscal Agent for deposit in the Bond Fund for application to the payment of principal of and interest on the Bonds in accordance with Section 4.02 and the 2018 Improvements Account of the Improvement Fund shall be closed.

Section 10.09. Security for 2018 Bonds. The 2018 Bonds shall be Additional Bonds which shall be secured in the manner and to the extent set forth in Articles IV and V, and in this Article X.

Section 10.10. Effect of this Article X. Except as in this Article X expressly provided or except to the extent inconsistent with any provision of this Article X, the 2018 Bonds shall be deemed to be "Bonds" under and within the meaning of Section 1.03, and every term and condition contained in the foregoing provisions of this Agreement shall apply to the 2018 Bonds with full force and effect, with such omissions, variations and modifications thereof as may be appropriate to make the same conform to this Article X.

SECTION 2. Additional Amendments to Original Fiscal Agent Agreement. The Original Fiscal Agent Agreement is hereby further amended as follows:

(A) Section 1.03 of the Agreement is hereby amended by adding thereto the definitions set forth in Section 10.01.

(B) Section 3.03(A) of the Agreement is hereby further amended by deleting the references therein to "Series 2015" and "2015," the intent now being that the Special Tax Fund and the subaccounts thereof will be utilized as set forth in the Agreement for the benefit of all series of the Bonds.

(C) Section 3.04(A) of the Agreement is hereby amended by adding thereto, as a new third sentence thereof, the following: "There is also hereby created within the Improvement Fund a separate account designated as the "2018 Improvements Account" of the Improvement Fund, which account is hereby established for purposes of accounting for the use and disposition of 2018 Bond proceeds directed to the Improvement Fund pursuant to Section 10.06 and 10.08.

(D) Section 4.03(A) of the Agreement is hereby amended by adding thereto the following: "There is hereby created within the Reserve Fund separate accounts designated as the "2015 Bond Reserve Account" and "2018 Bond Reserve Account" which accounts are

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hereby established for purposes of accounting for the use and disposition of the amounts of the proceeds of the 2015 Bonds and 2018 Bonds, which were deposited to the Reserve Fund from the 2015 Bonds and 2018 Bonds, respectively. Amounts in the 2015 Bond Reserve Account and in the 2018 Bond Reserve Account shall for all purposes of this Agreement be deemed to be part of the amounts on deposit in the Reserve Fund and amounts in such accounts and any earnings thereon in such accounts shall be drawn upon in the same manner, according to the same terms and pro rata with all other amounts in the Reserve Fund whenever a draw is made on the Reserve Fund under this Section 4.03. All references in this Agreement to the "2015 Reserve Fund" shall be amended to refer to the "Reserve Fund."

(E) [[Section 5.17 of the Agreement is hereby amended and restated in its entirety as follows:

"Section 5.17 No Additional Bonds. The City covenants not to issue additional bonds, notes or other obligations payable from Special Tax Revenues equally and ratably with the Bonds previously issued, except that the City may issue such additional bonds, notes and other obligations to refund all or part of the Bonds."]]

(F) References in the Original Fiscal Agent Agreement to the 2015 Bonds which, if the context requires reference to the 2015 Bonds and any Additional Bonds in order to maintain the parity relationship of the 2015 Bonds and any Additional Bonds and the security therefor, shall be deemed to refer to "Bonds" as defined in the Original Fiscal Agent Agreement rather than "2015 Bonds."

SECTION 3. Partial Invalidity. If any section, paragraph, sentence, clause or phrase of this Supplemental Agreement No. 1 shall for any reason be held illegal, invalid or unenforceable, such holding shall not affect the validity of the remaining portions of this Supplemental Agreement No. 1. The City hereby declares that it would have entered into this Supplemental Agreement No. 1 and each and every other Section, paragraph, sentence, clause or phrase hereof and authorized the issue of the 2018 Bonds pursuant thereto irrespective of the fact that any one or more Sections, paragraphs, sentences, clauses, or phrases of this Supplemental Agreement No. 1 may be held illegal, invalid or unenforceable.

SECTION 4. Execution in Counterparts. This Supplemental Agreement No. 1 may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

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SECTION 5. Governing Law. This Supplemental Agreement No. 1 shall be construed and governed in accordance with the laws of the State of California applicable to contracts made and performed in such State.

IN WITNESS WHEREOF, the City and the Fiscal Agent have caused this Supplemental Agreement No. 1 to Fiscal Agent Agreement to be executed as of _____ 1, 2018.

CITY OF RANCHO CORDOVA

By: _____
Chief Financial Officer

U.S. BANK NATIONAL ASSOCIATION, as
Fiscal Agent

By _____
Authorized Officer

ATTACHMENT 2**EXHIBIT A TO SUPPLEMENTAL AGREEMENT NO. 1 TO FISCAL AGENT AGREEMENT****FORM OF 2018 BOND**

**UNITED STATES OF AMERICA
STATE OF CALIFORNIA**

No. _____

\$_____

**CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS, SERIES 2018**

INTEREST RATE:

MATURITY DATE:

BOND DATE:
_____, 2018

CUSIP:

REGISTERED OWNER: CEDE & CO.

PRINCIPAL AMOUNT: *** _____ DOLLARS***

The City of Rancho Cordova (the "City") for and on behalf of the City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 (the "District"), for value received, hereby promises to pay solely from the Special Tax (as hereinafter defined) to be collected in the District or amounts in certain funds and accounts held under the Agreement (as hereinafter defined), to the Registered Owner named above, or registered assigns (the "Owner"), on the Maturity Date set forth above, unless redeemed prior thereto as hereinafter provided, the Principal Amount set forth above, and to pay interest on such principal amount from the Bond Date shown above, or from the most recent Interest Payment Date (as hereinafter defined) to which interest has been paid or duly provided for, semiannually on March 1 and September 1, commencing March 1, 2018 (the "Interest Payment Dates"), at the Interest Rate set forth above, until the principal amount hereof is paid or made available for payment. The principal of this Bond is payable to the Owner hereof in lawful money of the United States of America upon presentation and surrender of this Bond at the principal corporate trust office of U.S. Bank National Association in St. Paul, Minnesota, as fiscal agent (the "Fiscal Agent"). Interest on this Bond shall be paid by check of the Fiscal Agent mailed by first class mail on each Interest Payment Date to the Owner hereof as of the close of business on the 15th day of the month preceding the month in which the Interest Payment Date occurs (the "Record Date") at such Owner's address as it appears on the registration books maintained by the Fiscal Agent, or by wire transfer made on such Interest Payment Date upon written instructions delivered to the Fiscal Agent by the applicable Record Date of any Owner of \$1,000,000 or more in aggregate principal amount of Bonds.

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This Bond is one of a duly authorized issue of bonds approved by resolution of the City Council of the City on _____, 2018, pursuant to the Mello-Roos Community Facilities Act of 1982, as amended, Sections 53311, *et seq.*, of the California Government Code (the "Mello-Roos Act") for the purpose of providing moneys for the construction and acquisition of improvements within the District, and is one of the bonds designated "City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds Series 2018" (the "Bonds"). The issuance of the Bonds and the terms and conditions thereof are provided for by a Supplemental Agreement No. 1 to Fiscal Agent Agreement, dated as of _____ 1, 2018, which amends and supplements a Fiscal Agent Agreement, dated as of October 1, 2015, by and between the City and the Fiscal Agent (together, the "Agreement") and this reference incorporates the Agreement herein, and by acceptance hereof the Owner of this Bond assents to said terms and conditions. The Agreement is authorized under, this Bond is issued under and both are to be construed in accordance with, the laws of the State of California.

Pursuant to the Mello-Roos Act, the Agreement and the Resolution, the principal of and interest on this Bond are payable solely from the annual special tax authorized under the Mello-Roos Act to be collected within the District (the "Special Tax") and certain funds held under the Agreement.

Interest on this Bond shall be payable from the Interest Payment Date next preceding the date of authentication hereof, unless (i) it is authenticated on an Interest Payment Date, in which event it shall bear interest from such Interest Payment Date, or (ii) such date of authentication is after a Record Date but on or prior to an Interest Payment Date, in which event interest will be payable from such Interest Payment Date, or (iii) such date of authentication is prior to the first Record Date, in which event interest will be payable from the Bond Date shown above; provided however, that if at the time of authentication of this Bond, interest is in default hereon, this Bond shall bear interest from the Interest Payment Date to which interest has previously been paid or made available for payment hereon.

Any tax for the payment hereof shall be limited to the Special Tax, except to the extent that provision for payment has been made by the City as may be permitted by law. The Bonds do not constitute obligations of the City for which the City is obligated to levy or pledge, or has levied or pledged, general or special taxation other than described herein above.

The Bonds maturing on or before September 1, 20__ are not subject to optional redemption prior to their respective maturity dates. The Bonds maturing on or after September 1, 20__ may be redeemed prior to maturity at the option of the City from any source of available funds, as a whole or in part, on any date on or after September 1, 20__, at a redemption price equal to the principal amount of the Bonds called for redemption, together with accrued interest to the date fixed for redemption, without premium.

The 2018 Bonds shall be subject to mandatory redemption from prepayments of the Special Tax by property owners, in whole or in part among maturities as shall be specified by the City and by lot within a maturity, on any Interest Payment Date at the following respective redemption prices (expressed as percentages of the principal amount of the 2018 Bonds to be redeemed), plus accrued interest thereon the date of redemption:

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<u>Redemption Dates</u>	<u>Redemption Price</u>
March 1, 20__ through and including March 1, 20__	103%
September 1, 20__ and March 1, 20__	102
September 1, 20__ and March 1, 20__	101
September 1, 20__ and any Interest Payment Date thereafter	100

The proceeds of any such prepayment shall be deposited in the Prepayment Account of the Bond Fund and applied by the Fiscal Agent to pay the redemption price of the 2018 Bonds.

Mandatory Sinking Fund Redemption. The Term Bonds maturing September 1, 20__ are subject to mandatory sinking payment redemption in part on September 1, 20__, and on each September 1 thereafter to maturity, by lot, at a redemption price equal to 100% of the principal amount thereof to be redeemed, without premium, in the aggregate respective principal amounts as set forth in the following tables:

Term Bonds of 20__

<u>Mandatory Redemption Date (September 1)</u>	<u>Sinking Fund Payment</u>
--	---------------------------------

(Maturity)

The amounts in the foregoing table shall be reduced pro rata at the direction of the City in an Officer's Certificate, in order to maintain substantially level debt service, as a result of any prior partial redemption of the 2018 Bonds.

Notice of redemption with respect to the Bonds to be redeemed shall be given to the Owners thereof, in the manner, to the extent and subject to the provisions of the Agreement.

This Bond shall be registered in the name of the Owner hereof, as to both principal and interest. Each registration and transfer of registration of this Bond shall be entered by the Fiscal Agent in books kept by it for this purpose and authenticated by its manual signature upon the certificate of authentication endorsed hereon.

No transfer or exchange hereof shall be valid for any purpose unless made by the registered owner, by execution of the form of assignment endorsed hereon, and authenticated as herein provided, and the principal hereof, interest hereon and any redemption premium shall be payable only to the registered owner or to such Owner's order. The Fiscal Agent shall require the Owner requesting transfer or exchange to pay any tax or other governmental charge required to be paid with respect to such transfer or exchange. No transfer or exchange hereof shall be required to be made (i) within 15 days prior to the date established by the Fiscal Agent for selection of Bonds for redemption or (ii) with respect to a Bond after such Bond has been selected for redemption.

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The Agreement and the rights and obligations of the City thereunder may be modified or amended as set forth therein. The principal of the Bonds is not subject to acceleration upon a default under the Agreement or any other document.

This Bond shall not become valid or obligatory for any purpose until the certificate of authentication hereon endorsed shall have been dated and manually signed by the Fiscal Agent.

It is hereby certified, recited and declared that all acts, conditions and things required by law to exist, happen and be performed precedent to and in the issuance of this Bond have existed, happened and been performed in due time, form and manner as required by law, and that the amount of this Bond, together with all other indebtedness of the City, does not exceed any debt limit prescribed by the laws or Constitution of the State of California.

Unless this Bond is presented by an authorized representative of The Depository Trust Company to the Fiscal Agent for registration of transfer, exchange or payment, and any Bond issued is registered in the name of Cede & Co. or such other name as requested by an authorized representative of The Depository Trust Company and any payment is made to Cede & Co., ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL since the registered owner hereof, Cede & Co., has an interest herein.

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IN WITNESS WHEREOF, the City of Rancho Cordova has caused this Bond to be executed in its name by the manual or facsimile signature of its Mayor and attested by the manual or facsimile signature of its City Clerk.

CITY RANCHO CORDOVA

By: _____
Mayor

Attested:

By: _____
City Clerk

FISCAL AGENT'S CERTIFICATE OF AUTHENTICATION

This is one of the Bonds described in the Resolution and the Agreement.

Dated: _____, 2018

U.S. BANK NATIONAL ASSOCIATION,
as Fiscal Agent

By: _____
Authorized Officer

ATTACHMENT 2**ASSIGNMENT**

FOR VALUE RECEIVED, the undersigned do(es) hereby sell, assign and transfer unto

(Name, address and Tax Identification Number of Assignee)

the within-mentioned registered Bond and hereby irrevocably constitute(s) and appoint(s) _____ attorney,
 to transfer the same on the registration books of the Fiscal Agent with full power of substitution
 in the premises.

Dated: _____

Signature Guaranteed:

NOTE: Signature(s) must be guaranteed by an eligible guarantor institution with membership in an approved signature guarantee medallion program pursuant to Securities and Exchange Commission Rule 17A(d)15.

NOTE: The signature(s) on this Assignment must correspond with the name(s) as written on the face of the within Bond in every particular without alteration or enlargement or any change whatsoever.

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§ _____
CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS
SERIES 2018

BOND PURCHASE AGREEMENT

_____, 2018

City of Rancho Cordova
 Sunridge North Douglas Community Facilities District No. 2005-1
 2729 Prospect Park Drive
 Rancho Cordova, California 95670

Ladies and Gentlemen:

The undersigned, Piper Jaffray & Co., as underwriter (the "Underwriter"), acting not as a fiduciary or agent for you, but on behalf of itself, offers to enter into this Bond Purchase Agreement (this "Purchase Agreement") with the City of Rancho Cordova (the "City") for its Sunridge North Douglas Community Facilities District No. 2005-1 (the "Community Facilities District"), which upon acceptance will be binding upon the Underwriter and the City. The agreement of the Underwriter to purchase the Bonds (as hereinafter defined) is contingent upon the City satisfying all of the obligations imposed upon it under this Purchase Agreement. This offer is made subject to the City's acceptance by the execution of this Purchase Agreement and its delivery to the Underwriter at or before 11:59 p.m., California time, on the date hereof, and, if not so accepted, will be subject to withdrawal by the Underwriter upon notice delivered to the City at any time prior to the acceptance hereof by the City. All capitalized terms used herein, which are not otherwise defined, shall have the meaning provided for such terms in the Supplemental Agreement No. 1 to Fiscal Agent Agreement, dated as of _____, 2018 which supplements a Fiscal Agent Agreement, dated as of October 1, 2015 (together, the "Fiscal Agent Agreement"), by and between the City and U.S. Bank National Association, as fiscal agent (the "Fiscal Agent").

1. Purchase, Sale and Delivery of the Bonds.

A. Subject to the terms and conditions and in reliance upon the representations, warranties and agreements set forth herein: the Underwriter hereby agrees to purchase from the City and the City hereby agrees to sell to the Underwriter all (but not less than all) of the \$_____ aggregate principal amount of the City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds, Series 2018 (the "Bonds"), dated the Closing Date (as hereinafter defined), bearing interest at the rates and maturing on the dates and in the principal amounts set forth in Appendix A hereto. The purchase price for the Bonds shall be \$_____ (being 100% of the aggregate principal amount thereof, plus net original issue premium of \$_____, less an Underwriter's discount of \$_____).

The Underwriter agrees to make a bona fide initial public offering of all of the Bonds in compliance with federal and state securities laws, at a price not in excess of the initial offering prices (or yields) set forth in Appendix A attached hereto and incorporated herein by reference. Subsequent to the initial public offering, the Underwriter reserves the right to change the public offering prices (or yields) as it deems necessary in connection with the offering of the Bonds, without any

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requirement of prior notice, provided that the Underwriter shall not change the interest rates set forth in Appendix A. The Bonds may be offered and sold to certain dealers at prices lower than such initial offering prices.

The Bonds shall be substantially in the form described in, shall be issued and secured under the provisions of, and shall be payable from the Special Taxes and certain other amounts as provided in the Fiscal Agent Agreement, the Preliminary Official Statement (as hereinafter defined), and the Mello-Roos Community Facilities Act of 1982, as amended, being Chapter 2.5, Part 1, Division 2, Title 5 of the Government Code of the State of California (the "Community Facilities District Act"). The issuance of the Bonds has been duly authorized by the City pursuant to a resolution (the "Resolution"), adopted by its City Council (the "City Council") on behalf of the Community Facilities District, on _____, 2018) (the "Act"). The proceeds of the Bonds shall be used to (i) construct and acquire certain public facilities (or pay fees related to public facilities) authorized for the Community Facilities District, (ii) fund a reserve fund for the Bonds, and (iii) pay certain costs of issuance of the Bonds.

B. The City hereby acknowledges that the Underwriter is entering into this Purchase Agreement in reliance on the representations, warranties and agreements made by the City on behalf of itself and on behalf of the Community Facilities District herein, and the City shall take all action necessary to enforce its rights hereunder for the benefit of the Underwriter and shall immediately notify the Underwriter if it becomes aware that any representation, warranty or agreement made by the City, on behalf of itself or on behalf of the Community Facilities District, herein is incorrect in any material respect.

C. The City acknowledges and agrees that: (i) the primary role of the Underwriter, as an underwriter, is to purchase securities for resale to investors in an arm's-length commercial transaction between the City and the Underwriter and that the Underwriter has financial and other interests that differ from those of the City and the Community Facilities District; (ii) the Underwriter is not acting as a municipal advisor, financial advisor or fiduciary to the City, the Community Facilities District, or any other person or entity and has not assumed any advisory or fiduciary responsibility to the City or the Community Facilities District with respect to the transaction contemplated hereby and the discussions, undertakings and proceedings leading thereto (irrespective of whether the Underwriter has provided other services or is currently providing other services to the City or the Community Facilities District on other matters); (iii) the only obligations the Underwriter has to the City or the Community Facilities District with respect to the transaction contemplated hereby expressly are set forth in this Purchase Agreement, except as otherwise provided by applicable rules and regulations of the Securities and Exchange Commission or the rules of the Municipal Securities Rulemaking Board (the "MSRB"); and (iv) the City has consulted its own legal, accounting, tax, financial and other advisors, as applicable, to the extent it has deemed appropriate in connection with the transaction contemplated herein. The City acknowledges that it has previously provided the Underwriter with an acknowledgement of receipt of the required Underwriter disclosure under Rule G-17 of the MSRB and acknowledges that it has engaged NHA Advisors, LLC, as its municipal advisor (as defined in Securities and Exchange Commission Rule 15Ba1) and will rely solely on NHA Advisors, LLC for financial advice with respect to the Bonds.

D. Pursuant to the authorization of the City, the Underwriter has distributed copies of the Preliminary Official Statement dated _____, 2018, relating to the Bonds, which, together with the cover page, inside cover page and appendices thereto is herein called the "Preliminary Official Statement." By its acceptance of this Purchase Agreement, the City hereby consents to and ratifies the use and distribution by the Underwriter of the Preliminary Official

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Statement, and the City agrees to execute a final official statement relating to the Bonds (the “Official Statement”) which will consist of the Preliminary Official Statement with such changes as may be made thereto, with the approval of Jones Hall, a Professional Corporation, Bond Counsel and Disclosure Counsel (herein called “Bond Counsel”), and the Underwriter, and to provide copies thereof to the Underwriter as set forth in Section 2(S) hereof. The City hereby authorizes and requires the Underwriter to use and promptly distribute, in connection with the offer and sale of the Bonds, the Preliminary Official Statement, the Official Statement and any supplement or amendment thereto. The City further authorizes the Underwriter to use and distribute, in connection with the offer and sale of the Bonds, the Fiscal Agent Agreement, this Purchase Agreement and all information contained herein, and all other documents, certificates and statements furnished by or on behalf of the City or the Community Facilities District to the Underwriter in connection with the transactions contemplated by this Purchase Agreement. The Preliminary Official Statement and/or the Official Statement may be delivered and printed in a “designated electronic format” as defined in the MSRB’s Rule G-32 and as may be agreed to by the City and the Underwriter. The City confirms that it does not object to distribution of the Preliminary Official Statement or the Official Statement in electronic form. A copy of the most recent Preliminary Official Statement sent to a potential purchaser shall be sent by first class mail or electronically (or other equally prompt means) not later than the first business day following the day upon which each such request is received.

E. To assist the Underwriter in complying with Securities and Exchange Commission Rule 15c2-12(b)(5) (the “Rule”), the City will undertake pursuant to the City Continuing Disclosure Agreement, in the form attached to the Official Statement under Appendix F (the “City Continuing Disclosure Agreement”), to provide annual reports and notices of certain enumerated events. A description of this undertaking is set forth in the Preliminary Official Statement and will also be set forth in the Official Statement.

F. Except as the Underwriter and the City may otherwise agree, the City will deliver to the Underwriter, at the offices of Bond Counsel in San Francisco, California, or at such other location as may be mutually agreed upon by the Underwriter and the City, the documents hereinafter mentioned; and the City will deliver to the Underwriter through The Depository Trust Company’s (“DTC”) FAST delivery system, the Bonds, in definitive form (all Bonds bearing CUSIP® numbers printed thereon), duly executed by the City and authenticated by the Fiscal Agent in the manner provided for in the Fiscal Agent Agreement and the Community Facilities District Act at 8:00 a.m. California time, on _____, 2018 (the “Closing Date”), and the Underwriter will accept such delivery and pay the purchase price of the Bonds as set forth in paragraph (A) of this Section by wire transfer, payable in federal or other immediately available funds (such delivery and payment being herein referred to as the “Closing”). The Bonds shall be in fully registered book-entry form (which may be typewritten) and shall be registered in the name of Cede & Co., as nominee of DTC, which will act as securities depository for the Bonds, and the specimen Bonds will be made available for checking by the Underwriter not less than 5 days prior to the Closing.

G. Except as the City and the Underwriter may otherwise agree, the City will deliver to the Underwriter, at the offices of Bond Counsel in San Francisco, California, or at such other location as may be mutually agreed upon by the Underwriter and the City, the documents hereinafter mentioned on the Closing Date.

2. Representations, Warranties and Covenants of the Community Facilities District. The City represents, warrants and covenants to the Underwriter, on behalf of itself and the Communities Facilities District, as the case may be, that:

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A. The City is a municipal corporation and charter city, duly organized and validly existing pursuant to the Constitution and laws of the State of California (the “State”), and has duly authorized the formation of the Community Facilities District pursuant to resolutions duly adopted by the City Council (the “Community Facilities District Formation Resolution” and, together with the Resolution, the “Community Facilities District Resolutions”) and the Act. The City Council, as the legislative body of the Community Facilities District, has duly adopted the Community Facilities District Formation Resolution, has duly adopted a Resolution and Ordinance levying the Special Taxes (for all purposes herein, as such are defined in the Fiscal Agent Agreement) within the Community Facilities District (the “Ordinance”), and has caused to be recorded in the real property records of Sacramento County, a notice of special tax lien and an amendment thereto (collectively, the “Notice of Special Tax Lien”) (the Community Facilities District Formation Resolution, the Ordinance, and the Notice of Special Tax Lien being collectively referred to herein as the “Formation Documents”), and the City Council has duly adopted the Resolution. Each of the Formation Documents remains in full force and effect as of the date hereof and has not been amended. The Community Facilities District is duly organized and validly existing as a community facilities district under the laws of the State. The City has, and at the Closing Date will have, as the case may be, full legal right, power and authority: (i) to execute, deliver and perform its obligations under this Purchase Agreement and the Fiscal Agent Agreement and to carry out all transactions contemplated by each of such agreements; (ii) to enter into the City Continuing Disclosure Agreement; and (iii) to carry out, give effect to and consummate the transactions contemplated by the Formation Documents, the Fiscal Agent Agreement, this Purchase Agreement and the Official Statement.

This Purchase Agreement, the Fiscal Agent Agreement, and the City Continuing Disclosure Agreement are collectively referred to herein as the “City Documents.”

B. By all necessary official action of the City, the City has duly authorized and approved the execution and delivery by the City of, and the performance by City of, the obligations on its part contained in, the City Documents and has approved the use and distribution by the Underwriter of the Preliminary Official Statement and the execution, use and distribution by the Underwriter of the Official Statement, and, as of the date hereof, such authorizations and approvals are in full force and effect and have not been amended, modified or rescinded. When executed and delivered by the parties thereto, the City Documents will constitute the legally valid and binding obligations of the City, on its own behalf and on behalf of the Communities Facilities District, enforceable upon the City and the Community Facilities District in accordance with their respective terms, except as enforcement may be limited by bankruptcy, insolvency, reorganization, moratorium or similar laws or equitable principles relating to or affecting creditors’ rights generally. To the best of the City’s knowledge, the City has complied, and will at the Closing Date be in compliance in all respects, with the terms of the City Documents that are applicable to the City, and the Community Facilities District has complied, and will at the Closing Date be in compliance in all respects, with the terms of the City Documents that are applicable to the Community Facilities District.

C. The information in the Preliminary Official Statement (other than statements pertaining to the book-entry system and under the headings “THE DISTRICT – Development in the District,” as to which no view is expressed) as of its date was and as of the date hereof is, and in the Official Statement (other than statements pertaining to the book-entry system and under the headings “THE DISTRICT – Development in the District,” as to which no view is expressed) as of its date is, true and correct in all material respects and does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading; and, upon delivery and up to and including 25 days

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after the End of the Underwriting Period (as defined in paragraph (D) below), the Official Statement will be amended and supplemented so as to contain no misstatement of any material fact or material omission of any statement necessary to make the statements contained therein, in the light of the circumstances in which such statements were made, not misleading.

D. Up to and including 25 days after the End of the Underwriting Period (as defined below), the City will advise the Underwriter promptly of any proposal to amend or supplement the Official Statement and will not effect or consent to any such amendment or supplement without the consent of the Underwriter, which consent will not be unreasonably withheld. The City will advise the Underwriter promptly of the institution of any proceedings known to it by any governmental agency prohibiting or otherwise materially affecting the use of the Official Statement in connection with the offering, sale or distribution of the Bonds. As used herein, the term “End of the Underwriting Period” means the later of such time as: (i) the Bonds are delivered to the Underwriter; or (ii) the Underwriter does not retain, directly or as a member of an underwriting syndicate, an unsold balance of the Bonds for sale to the public. Unless the Underwriter gives notice to the contrary, the End of the Underwriting Period shall be deemed to be the Closing Date. Any notice delivered pursuant to this provision shall be written notice delivered to the City at or prior to the Closing Date and shall specify a date (other than the Closing Date) to be deemed the “End of the Underwriting Period.” If in the opinion of the Underwriter any such event or proceedings requires the preparation and distribution of a supplement or amendment to the Official Statement, the City shall prepare and furnish to the Underwriter, at the City’s expense, such number of copies of the supplement or amendment to the Official Statement, in (i) a “designated electronic format” consistent with the requirements of the MSRB’s Rule G-32 and (ii) a printed format form in substance mutually agreed upon by the City and the Underwriter as the Underwriter may reasonably request. If such amendment or supplement to the Official Statement shall be made subsequent to the Closing Date, the City also shall furnish, or cause to be furnished, such additional legal opinions, certificates, instruments and other documents as the Underwriter may reasonably deem necessary to evidence the truth and accuracy of any such supplement or amendment to the Official Statement.

E. As of the time of acceptance hereof and as of the Closing Date, the City and the Community Facilities District, as applicable, have each complied, and will at the Closing Date be in compliance in all material respects, with the Formation Documents and the City Documents, and any immaterial noncompliance by the City or the Community Facilities District, if any, will not impair the ability of the City or the Community Facilities District, as applicable, to carry out, give effect to or consummate the transactions contemplated by the foregoing. From and after the date of issuance of its Bonds, the City will continue to comply with the covenants of the City contained in the City Documents and it shall cause the Community Facilities District to continue to comply with the covenants of the Community Facilities District contained in the City Documents.

F. Except as described in the Preliminary Official Statement, neither the City nor the Community Facilities District is, and as of the Closing Date, neither will be, in any respect material to the transactions referred to herein or contemplated hereby, in breach of or in default under, any law or administrative rule or regulation of the State, the United States of America, or of any department, division, agency or instrumentality of either thereof, or under any applicable court or administrative decree or order, or under any loan agreement, note, resolution, indenture, contract, agreement or other instrument to which the City or the Community Facilities District, as the case may be, is a party or is otherwise subject or bound; and, to the City’s knowledge, no event has occurred and is continuing which, with the passage of time or the giving of notice, or both, would constitute a default or event of default under any such instrument which breach, default or event could have an adverse effect on the City’s ability or the Community Facilities District’s ability to perform their respective obligations under the City Documents; and as of such times, except as

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disclosed in the Official Statement, the authorization, execution and delivery of the City Documents and compliance with the provisions of each thereof, or the performance of the conditions precedent to be performed by the City pursuant to this Purchase Agreement, will not conflict with or constitute a breach of or default under any applicable law or administrative rule or regulation of the State, the United States of America, or of any department, division, agency or instrumentality of either thereof, or under any applicable court or administrative decree or order, or under any loan agreement, note, resolution, indenture, contract, agreement or other instrument to which the City is a party or is otherwise subject or bound, in any manner which would materially and adversely affect the performance by the City or the Community Facilities District of their respective obligations under the City Documents or the performance of the conditions precedent to be performed by the City pursuant to this Purchase Agreement. The City has received all licenses, permits or other regulatory approvals required, if any, for the pledge, collection and/or application by the Community Facilities District of the Special Taxes (as defined in the Fiscal Agent Agreement) and other moneys pledged to the payment of the principal of and interest on the Bonds under the Fiscal Agent Agreement.

G. Except as may be required under the “blue sky” or other securities laws of any jurisdiction, all approvals, consents, authorizations, elections and orders of, or filings or registrations with, any governmental authority, board, agency or commission having jurisdiction which would constitute a condition precedent to, or the absence of which would materially adversely affect, the performance by the City or the Community Facilities District of their respective obligations under the City Documents, and the performance of the conditions precedent to be performed by the City pursuant to this Purchase Agreement, have been or will be obtained at the Closing Date and are or will be in full force and effect at the Closing Date.

H. At the time of acceptance hereof there is and as of the Closing there will be no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, government agency, public board or body (collectively and individually, an “Action”) pending (notice of which has been served on the City or the Community Facilities District) or to the best knowledge of the City or the Community Facilities District threatened, in which any such Action: (i) in any way questions the powers of the City Council or the existence of the Community Facilities District or the titles of the officers of the City and/or the Community Facilities District to their respective offices; (ii) affects, contests or seeks to prohibit, restrain or enjoin the issuance or delivery of the Bonds or the payment or collection of Special Taxes or any amounts pledged or to be pledged to pay the principal of and interest on the Bonds, or in any way contests or affects the validity of the City Documents or the consummation of the transactions on the part of the City or the Community Facilities District contemplated thereby; (iii) contests the exclusion of interest on the Bonds from federal or State income taxation or contests the powers of the City or the Community Facilities District which may result in any material adverse change relating to the financial condition of the City or the Community Facilities District; (iv) except as disclosed in the Official Statement, wherein an unfavorable decision, ruling or finding would materially adversely affect the financial position or condition of the City or the Community Facilities District or would result in any material adverse change in the ability of the City to pledge or apply the Special Taxes (as defined in the Fiscal Agent Agreement) or to pay debt service on the Bonds; or (v) contests the completeness or accuracy of the Preliminary Official Statement or the Official Statement or any supplement or amendment thereto or asserts that the Preliminary Official Statement or the Official Statement contained any untrue statement of a material fact or omitted to state any material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading; and as of the time of acceptance hereof there is and, as of the Closing Date, there will be no known basis for any Action of the nature described in clauses (i) through (v) of this sentence.

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I. The City will furnish such information, execute such instruments and take such other action in cooperation with the Underwriter and at the expense of the Underwriter as the Underwriter may reasonably request in order: (i) to qualify the Bonds for offer and sale under the “blue sky” or other securities laws and regulations of such states and other jurisdictions of the United States of America as the Underwriter may designate; and (ii) to determine the eligibility of the Bonds for investment under the laws of such states and other jurisdictions and will use its best efforts to continue such qualifications in effect so long as required for the distribution of the Bonds, provided; however, that the City will not be required to execute a special or general consent to service of process or qualify as a foreign corporation in connection with any such qualification in any jurisdiction.

J. The City Documents conform as to form and tenor to the descriptions thereof contained in the Preliminary Official Statement. The City represents that the Bonds, when issued, executed and delivered in accordance with the Fiscal Agent Agreement and sold to the Underwriter as provided herein, will be validly issued and outstanding obligations of the City, entitled to the benefits of the Fiscal Agent Agreement. The City and the Community Facilities District will each comply with the covenant in the Fiscal Agent Agreement to cause the Special Taxes to be levied and collected at the same time and in the same manner as ordinary *ad valorem* property taxes. The Fiscal Agent Agreement creates a valid pledge of, first lien upon and security interest in, the Special Taxes, and in the moneys in the Special Tax Fund established pursuant to the Fiscal Agent Agreement, on the terms and conditions set forth in the Fiscal Agent Agreement. The Fiscal Agent Agreement creates a valid pledge of the moneys in certain funds and accounts established pursuant to the Fiscal Agent Agreement, subject in all cases to the provisions of the Fiscal Agent Agreement permitting the application thereof for the purposes and on the terms and conditions set forth therein.

K. Except as disclosed in the Preliminary Official Statement, there are, to the best of the City’s knowledge, no entities with outstanding assessment liens against any of the properties within the Community Facilities District which are senior to or on a parity with the Special Taxes.

L. The issuance and sale of the Bonds is not subject to any transfer or other documentary stamp taxes of the State or any political subdivision thereof.

M. The City shall not knowingly take or omit to take any action that, under existing law, may adversely affect the exclusion from gross income for federal income tax purposes, or the exemption from State of California personal income tax, of the interest on the Bonds. The City has not been notified of any listing or proposed listing by the Internal Revenue Service to the effect that the City is a bond issuer whose arbitrage certifications may not be relied upon.

N. Any certificate signed on behalf of the Community Facilities District by any officer or employee of the City authorized to do so and delivered to the Underwriter in connection with the issuance and sale of the Bonds shall be deemed to be a representation and covenant by the Community Facilities District to the Underwriter as to the statements made therein.

O. The City will apply the proceeds of the Bonds in accordance with the Fiscal Agent Agreement and as described in the Official Statement.

P. At or prior to the Closing, the City will have duly authorized, executed and delivered the City Continuing Disclosure Agreement in substantially the form under Appendix F to the Official Statement. Based on a review of previous undertakings, the Preliminary Official Statement and the Official Statement describe the instances in which the City has failed to comply

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with any previous undertakings with regard to the Rule to provide annual reports or notices of material events in the last five years.

Q. Between the date of this Purchase Agreement and the date of Closing, the City will not offer or issue any bonds, notes or other obligations for borrowed money not previously disclosed to the Underwriter and the City shall not create, assume or guarantee any indebtedness payable from, or pledge or otherwise encumber, the Special Taxes or other assets, properties, funds or interests that will be pledged as security for the Bonds pursuant to the City Documents.

R. Until such time as moneys have been set aside in an amount sufficient to pay all then outstanding Bonds at maturity or to the date of redemption if redeemed prior to maturity, plus unpaid interest thereon and premium, if any, to maturity or to the date of redemption if redeemed prior to maturity, the City will faithfully perform and abide by all of the covenants, undertakings and provisions contained in the Fiscal Agent Agreement.

S. The Preliminary Official Statement was deemed final by a duly authorized officer of the City prior to its delivery to the Underwriter, except for the omission of such information as is permitted to be omitted in accordance with paragraph (b)(1) of the Rule. The City hereby covenants and agrees that, within seven (7) business days from the date hereof, or upon reasonable written notice from the Underwriter within sufficient time to accompany any confirmation requesting payment from any customers of the Underwriter, the City shall cause a final electronic and/or printed form of the Official Statement as set forth in Section 1 above to be delivered to the Underwriter in sufficient quantity to comply with paragraph (b)(4) of the Rule and Rules G-12, G-15, G-32 and G-36 of the Municipal Securities Rulemaking Board.

T. The City hereby approves the preparation and distribution of the Official Statement, consisting of the Preliminary Official Statement with such changes as are noted thereon and as may be made thereto, with the approval of Bond Counsel and the Underwriter from time to time prior to the Closing Date.

U. The City hereby ratifies any prior use of and authorizes the future use by the Underwriter, in connection with the offering and sale of the Bonds, of the Preliminary Official Statement, the Official Statement, this Purchase Agreement and all information contained herein, and all other documents, certificates and written statements furnished by the City to the Underwriter in connection with the transactions contemplated by this Purchase Agreement.

The execution and delivery of this Purchase Agreement by the City shall constitute a representation by the City to the Underwriter that the representations and warranties contained in this Section 2 with respect to the City and the Community Facilities District are true as of the date hereof.

3. Conditions to the Obligations of the Underwriter. The obligation of the Underwriter to accept delivery of and pay for the Bonds on the Closing Date shall be subject, at the option of the Underwriter, to the accuracy in all material respects of the representations and warranties on the part of the City, on its own behalf and on behalf of the Community Facilities District, contained herein, to the accuracy in all material respects of the statements of the officers and other officials of the city and the Community Facilities District made in any certificates or other documents furnished pursuant to the provisions hereof, to the performance by the City and the Community Facilities District of their obligations to be performed hereunder at or prior to the Closing Date and, to the following additional conditions:

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A. At the Closing Date, the Community Facilities District Resolutions, the Formation Documents, and the City Documents shall be in full force and effect, and shall not have been amended, modified or supplemented, except as may have been agreed to in writing by the Underwriter, and there shall have been taken in connection therewith, with the issuance of the Bonds, and with the transactions contemplated thereby, and by this Purchase Agreement, all such actions as, in the opinion of Bond Counsel, shall be necessary and appropriate.

B. At the Closing Date, except as was described in the Preliminary Official Statement, neither the City nor the Community Facilities District shall be, in any respect material to the Bonds, the City Documents or the transactions referred to herein or contemplated hereby, in breach of or in default under, any law or administrative rule or regulation of the State, the United States of America, or of any department, division, agency or instrumentality of either thereof, or under any applicable court or administrative decree or order, or under any loan agreement, note, resolution, indenture, contract, agreement or other instrument to which the City or the Community Facilities District, respectively, is a party or is otherwise subject or bound, and the performance by the City or the Community Facilities District, respectively, of its obligations under the Bonds, the City Documents, the Community Facilities District Resolutions, this Purchase Agreement and any other instruments contemplated by any of such documents, and compliance with the provisions of each thereof, will not conflict with or constitute a breach of or default under any applicable law or administrative rule or regulation of the State, the United States of America or of any department, division, agency or instrumentality of either thereof or under any applicable court or administrative decree or order or under any loan agreement, note, resolution, indenture, contract, agreement or other instrument to which the City or the Community Facilities District, respectively, is a party or is otherwise subject or bound, in any manner which would materially and adversely affect the performance by the City or the Community Facilities District, respectively, of its obligations under the City Documents, the Bonds or the Community Facilities District Resolutions.

C. The information contained in the Official Statement is, as of the Closing Date and as of the date of any supplement or amendment thereto pursuant hereto, true and correct in all material respects and does not, as of the Closing Date or as of the date of any supplement or amendment thereto, contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

D. The Underwriter shall have the right to cancel its obligation to purchase the Bonds and to terminate this Purchase Agreement by written notice to the City if, between the date of this Purchase Agreement and the Closing Date, in the Underwriter's sole and reasonable judgment any of the following events shall occur (each a "Termination Event"):

1. Between the date hereof and the Closing Date, the market price or marketability, at the initial offering prices set forth on the cover page of the Official Statement, of the Bonds, or the ability of the Underwriter to enforce contracts for the sale of the Bonds, shall have been materially adversely affected, in the judgment of the Underwriter (evidenced by a written notice to the City terminating the obligation of the Underwriter to accept delivery of and pay for the Bonds), by reason of any of the following:

- a. Legislation introduced in or enacted (or resolution passed) by the Congress of the United States of America or the legislature of the State or recommended to the Congress by the President of the United States of America or a member of the President's Cabinet, the Department of the Treasury, the Internal Revenue Service or any member of Congress or favorably reported for passage to either House of Congress by any committee of such House to

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which such legislation had been referred for consideration, or a decision rendered by a court established under Article III of the Constitution of the United States of America or by the Tax Court of the United States of America, or an order, ruling, regulation (final, temporary or proposed), press release or other form of notice issued or made by or on behalf of the Treasury Department of the United States of America, the Internal Revenue Service or other federal or State authority with appropriate jurisdiction, with the purpose or effect, directly or indirectly, of imposing federal or State income taxation upon such interest as would be received by any owners of the Bonds beyond the extent to which such interest is subject to taxation as of the date hereof;

b. Legislation introduced in or enacted (or resolution passed) by the Congress, or shall have been favorably reported out of committee or be pending in committee, or shall have been recommended to the Congress for passage by the President of the United States of America or a member of the President's Cabinet, or an order, decree, injunction or decision issued by any court of competent jurisdiction, or an order, ruling, regulation (final, temporary or proposed), press release, statement or other form of notice issued or made by or on behalf of the Securities and Exchange Commission, or any other governmental agency having jurisdiction of the subject matter, to the effect that obligations of the general character of the Bonds, the Resolution or the City Documents, are not exempt from registration under or other requirements of the Securities Act of 1933, as amended, or that the Fiscal Agent Agreement is not exempt from qualification under or other requirements of the Trust Fiscal Agent Agreement Act of 1939, as amended, or that the issuance, offering or sale of obligations of the general character of the Bonds, as contemplated hereby or by the Official Statement or otherwise is or would be in violation of the federal securities laws as amended and then in effect;

c. A general suspension of trading in securities on the New York Stock Exchange or other major exchange shall be in force, or minimum or maximum prices for trading shall have been fixed and be in force, or maximum ranges for prices for securities shall have been required and be in force on any such exchange, whether by virtue of determination by that exchange or by order of the Securities and Exchange Commission or any other governmental authority having jurisdiction;

d. There shall have occurred, (1) any material outbreak or escalation of hostilities or the declaration by the United States of America of a national emergency or war, (2) any other calamity or crisis in the financial markets of the United States of America or elsewhere, (3) the sovereign debt rating of the United States of America is downgraded by any major credit rating agency or a payment default occurs on United States Treasury obligations, or (4) a default with respect to the debt obligations of, or the institution of proceedings under any federal bankruptcy laws by or against, any state of the United States of America or any city, county or other political subdivision located in the United States of America having a population of over 500,000;

e. Except as disclosed in or contemplated by the Official Statement, any material adverse change in the affairs of the City or the Community Facilities District shall have occurred;

2. The introduction, proposal or enactment of any amendment to the federal or California Constitution or any action by any federal or State court, legislative body, regulatory body or other authority materially adversely affecting the tax status of the City or the Community Facilities District, their property, income, securities (or interest thereon), the validity or enforceability of Special Taxes;

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3. Any event occurring or information becoming known which, in the judgment of the Underwriter, makes untrue or incorrect in any material respect any statement or information contained in the Preliminary Official Statement or in the Official Statement or has the effect that the Preliminary Official Statement or the Official Statement contains any untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading;

4. A general banking moratorium shall have been declared by federal, State of New York or State of California officials authorized to do so or a material disruption in securities settlement, payment or clearance services affecting the Bonds shall have occurred;

5. Any new restriction on transactions in securities materially affecting the market for securities (including the imposition of any limitation in interest rates) or the extension of credit by, or a charge to the net capital requirements of, underwriters shall have been established by the New York Stock Exchange, the Comptroller of the Currency, the Securities and Exchange Commission or any other federal or State agency or the Congress of the United States of America, or by Executive Order;

6. A decision by a court of the United States of America shall be rendered, or a stop order, release, regulation or no-action letter by or on behalf of the Securities and Exchange Commission or any other governmental agency having jurisdiction of the subject matter shall have been issued or made, to the effect that the issuance, offering or sale of the Bonds as contemplated by this Purchase Agreement or by the Official Statement, or any document relating to the issuance, offering or sale of the Bonds is or would be in violation of any provision of the federal securities laws at the Closing Date, including the Securities Act of 1933, the Securities Exchange Act of 1934 and the Trust Fiscal Agent Agreement Act of 1939;

7. Any proceeding shall have been commenced or be threatened in writing by the Securities and Exchange Commission against the City or the Community Facilities District.

8. The commencement of an Action described in Section 2(H).

Upon the occurrence of a Termination Event and the termination of this Purchase Agreement by the Underwriter, all obligations of the City, the Community Facilities District, and the Underwriter under this Agreement shall terminate, without further liability, except that the City and the Underwriter shall pay their respective expenses as set forth in Section 6 below.

E. At or prior to the Closing Date, the Underwriter shall have received a counterpart original or certified copy of the following documents, in each case satisfactory in form and substance to the Underwriter:

1. Official Statement. The Official Statement and each supplement or amendment, if any thereto, executed by an authorized officer of the City;

2. Fiscal Agent Agreement. The Fiscal Agent Agreement, duly executed and delivered by the City and the Fiscal Agent;

3. Resolutions. Certifications by the City Clerk with respect to each resolution and ordinance of the City Council, for the City or as the legislative body of the

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Community Facilities District, relating to the City Documents, the transactions contemplated thereby, formation of the Community Facilities District and issuance of the Bonds;

4. City Continuing Disclosure Agreement. The City Continuing Disclosure Agreement executed and delivered by the City;

5. Bond Counsel Opinion. An unqualified approving opinion for the Bonds, dated the Closing Date and addressed to the City, of Bond Counsel, to the effect that the Bonds are the valid, legal and binding obligations of the City and that the interest thereon is excluded from gross income for federal income tax purposes and exempt from personal income taxes of the State, in substantially the form included as Appendix E to the Official Statement, together with a letter of Bond Counsel, dated the Closing Date and addressed to the Underwriter, to the effect that such opinion addressed to the City may be relied upon by the Underwriter to the same extent as if such opinion was addressed to it;

6. Supplemental Opinion. A supplemental opinion or opinions, dated the Closing Date and addressed to the Underwriter, of Bond Counsel, to the effect that:

(i) this Purchase Agreement has been duly authorized, executed and delivered by the City and, assuming due authorization, execution and delivery by the other parties thereto, constitutes the legal, valid and binding agreement of the City and is enforceable in accordance with its terms, except to the extent that enforceability may be limited by moratorium, bankruptcy, reorganization, insolvency or other similar laws affecting creditors' rights generally or by the exercise of judicial discretion in accordance with general principles of equity or otherwise in appropriate cases and by limitations on legal remedies against public agencies in the State;

(ii) the Bonds are not subject to the registration requirements of the Securities Act of 1933, as amended, and the Fiscal Agent Agreement is exempt from qualification under the Trust Indenture Act of 1939, as amended;

(iii) the information contained in the Official Statement on the cover and under the captions "THE 2018 BONDS" (other than by reference Appendix G – DTC and the Book-Entry Only System), "SECURITY FOR THE 2018 BONDS," "TAX MATTERS" and in Appendices C and E to the Official Statement (excluding any financial, statistical and economic data, forecasts, numbers, charts, graphs, estimates, projections, and assumptions and any information regarding The Depository Trust Company and the book-entry system as to which Bond Counsel need express no opinion or view, and further, excluding any material that may be treated as included under such captions by cross-reference), are accurate insofar as such statements purport to summarize certain provisions of the Bonds, the Fiscal Agent Agreement, Bond Counsel's final approving opinion and the Community Facilities District Act; and

(iv) the Community Facilities District has been duly formed, and the Special Taxes have been duly and validly levied in accordance with the provisions of the Act and, except to the extent prohibited by moratorium, bankruptcy, reorganization, fraudulent conveyance or transfer, insolvency or other similar laws affecting creditors' rights generally, a lien to secure payment of the Special Taxes has been imposed on taxable property in the Community Facilities District;

7. Special Counsel Opinion. An opinion, dated the Closing Date and addressed to the Underwriter, of Jones Hall, a Professional Corporation, acting as special counsel to the City and the Community Facilities District, substantially in the form of Appendix B hereto;

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8. Closing Certificate of the City. A certificate, dated the Closing Date, and signed by an authorized officer of the City substantially in the form of Appendix C hereto, together with such additional certifications as Bond Counsel may require;

9. Bank Incumbency Certificate. Certified copies of the general resolution of the Fiscal Agent authorizing the execution and delivery of certain documents by certain officers of the Fiscal Agent, which resolution authorizes the execution of the Fiscal Agent Agreement and the authentication of the Bonds;

10. Fiscal Agent's Certificate. A certificate of the Fiscal Agent, dated the Closing Date, in form and substance acceptable to the Underwriter and its counsel, substantially in the form of Appendix D hereto;

11. Fiscal Agent's Counsel Opinion. An opinion of counsel to the Fiscal Agent, dated the Closing Date, addressed to the Underwriter and the City, substantially in the form of Appendix E hereto;

12. Disclosure Counsel Opinion. An opinion, dated the Closing Date and addressed to the Underwriter and to the City, of Jones Hall, a Professional Corporation, as disclosure counsel ("Disclosure Counsel"), in form and substance acceptable to the Underwriter;

13. Opinion of Underwriter's Counsel. An opinion of counsel to the Underwriter, dated the date of the Closing, addressed to the Underwriter, in form and substance acceptable to the Underwriter;

14. Special Tax Consultant Certificate. A certificate, dated the Closing Date from Goodwin Consulting Group substantially in the form attached as Appendix F hereto;

15. Certificate Regarding Continuing Disclosure Compliance. A Continuing Disclosure Compliance Certificate, dated the Closing Date, duly executed and delivered by Goodwin Consulting Group, Inc. in form and substance acceptable to the Underwriter and Disclosure Counsel;

16. Transcript. A transcript of all proceedings relating to the authorization, issuance, sale and delivery of the Bonds, including certified copies of the Fiscal Agent Agreement and all resolutions of the City and the Community Facilities District relating thereto;

17. Nonarbitrage Certificate. A certificate of the City, dated the Closing Date, in a form acceptable to Bond Counsel and the Underwriter, that the Bonds are not arbitrage bonds within the meaning of Section 148 of the Internal Revenue Code of 1986, as amended;

18. Specimen Bonds. Copies of the Specimen Bonds;

19. Issue Price Certificate. An issue price certificate of the Underwriter in the form attached as Appendix K hereto;

20. Certificate of Underwriter. A certificate from the Underwriter to the City, in form satisfactory to the City and signed by an authorized officer of the Underwriter, accepting delivery of the Bonds to the Underwriter and receipt of all documents required by the

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Underwriter, and the satisfaction or waiver of all conditions and terms of this Purchase Agreement by the City, and confirming to the City that as of the Closing Date, all of the representations of the Underwriter contained in this Purchase Agreement are true, complete and correct in all material respects;

21. Form 8038-G. An Information Return for Tax-Exempt Bond Issues (Internal Revenue Service Form 8038-G), in a form satisfactory to Bond Counsel for filing, executed by a duly authorized officer of the City, together with evidence that such Form 8038-G has been mailed;

22. CDIAC Statements. Copies of filings with the California Debt and Investment Advisory Commission relating to the issuance of the Bonds;

23. Letter of Representations. A copy of the Blanket Letter of Representations to DTC relating to the Bonds signed by the City;

24. Certificate Regarding Preliminary Official Statement. Prior to and in connection with printing and distribution of the Preliminary Official Statement, (i) an executed certificate of the City, (ii) an executed certificate of Lennar Homes of California, Inc. ("Lennar") and MS Rialto North Douglas CA, LLC ("MS Rialto") in the form under Appendix G hereto, and (iii) an executed certificate of Woodside 05N, LP d/b/a Woodside Homes of Northern California, LP ("Woodside," and together with Lennar and MS Rialto, the "Property Owners," with each being a separate "Property Owner") in the form under Appendix G hereto.

25. Property Owner Continuing Disclosure Agreement. Executed copies of the Property Owner Continuing Disclosure Agreement from Lennar in the form set forth under Appendix F of the Official Statement.

26. Property Owner Closing Certificates. An executed bring-down certificate from each of (i) Lennar and MS Rialto together and (ii) Woodside, each dated as of the Closing Date, in forms and substance as set forth in Appendix H hereto.

27. Property Owner Counsel Opinions. (i) The opinion of counsel to Lennar in the form attached under Appendix I hereto, and (ii) the opinion of counsel to Woodside with appropriate assumptions and qualifications as are acceptable to the City and the Underwriter, containing the substance of the opinions set forth under Appendix I hereto, and in such final form as is acceptable to the City and the Underwriter, in both cases of (i) and (ii) with such opinions addressed to the City and the Underwriter.

28. Appraiser Closing Certificate. A certificate in form and substance as set forth in Appendix J hereto of Seevers Jordan Ziegenmeyer, the appraiser of the property within the Community Facilities District, dated as of the Closing Date.

29. Additional Bonds Certificate. A certificate in form and substance acceptable to Bond Counsel and Underwriter of Goodwin Consulting Group, Inc., dated as of the Closing Date, showing that the requirements of clause (A) of subsection (vii) of Section 5.17(a) of the Fiscal Agent Agreement are satisfied.

30. Additional Bonds Opinion. An opinion or opinions, dated the Closing Date and addressed to the City, Trustee and Underwriter, of Bond Counsel, meeting the requirements set forth in Section 5.17(b)(iv) of the Fiscal Agent Agreement.

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31. Additional Documents. Such additional legal opinions, certificates, instruments and other documents as the Underwriter may reasonably request to evidence the truth and accuracy, as of the date hereof and as of the Closing Date, of the material representations and warranties of the City, on its own behalf and on behalf of the Community Facilities District, contained herein, and of the statements and information contained in the Official Statement and the due performance or satisfaction by the City at or prior to the Closing of all agreements then to be performed and all conditions then to be satisfied by the City and the Community Facilities District in connection with the transactions contemplated hereby and by the Fiscal Agent Agreement and the Official Statement.

If the City shall be unable to satisfy the conditions to the obligations of the Underwriter to purchase, accept delivery of and pay for the Bonds contained in this Purchase Agreement, or if the obligations of the Underwriter to purchase, accept delivery of and pay for the Bonds shall be terminated for any reason permitted by this Purchase Agreement, this Purchase Agreement shall terminate and neither the City nor the Underwriter shall be under any further obligation hereunder, except that the respective obligations of the Underwriter and the City set forth in Section 6 hereof shall continue in full force and effect.

4. Representations and Agreements of the Underwriter. The Underwriter represents to and agrees with the City that, as of the date hereof and as of the date of the Closing:

A. The Underwriter is duly authorized to execute and deliver this Purchase Agreement and to take any action under the Purchase Agreement required to be taken by it.

B. The Underwriter is in compliance with MSRB Rule G-37 with respect to the City and the Community Facilities District, and is not prohibited thereby from acting as underwriter with respect to securities of the City and the Community Facilities District. The Underwriter is in compliance with MSRB Rule G-17 with respect to the City and the Community Facilities District.

C. The Underwriter has, and has had, no financial advisory relationship with the City or the Community Facilities District with respect to the Bonds, and no investment firm controlling, controlled by or under common control with the Underwriter has or has had any such financial advisory relationship, within the meaning of California Government Code Section 53590, or otherwise.

D. The Underwriter has not paid or agreed to pay, nor will it pay or agree to pay, any entity, company, firm or person (including, but not limited to, the City's financial consultants, or any officer, agent or employee thereof), other than a bona fide officer, agent or employee working for the Underwriter, any compensation, fee, gift or other consideration contingent upon or resulting from the award of or entering into this Purchase Agreement.

E. The Underwriter has reasonably determined that the City's undertaking in the City Continuing Disclosure Agreement to provide continuing disclosure with respect to the Bonds is sufficient to effect compliance with the Rule.

5. Establishment of Issue Price.

A. The Underwriter agrees to assist the City in establishing the issue price of the Bonds and shall execute and deliver to the City at Closing an "issue price" or similar certificate,

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together with the supporting pricing wires or equivalent communications, substantially in the form attached hereto as Appendix K, with such modifications as may be appropriate or necessary, in the reasonable judgment of the Underwriter, the City and Bond Counsel (as defined herein), to accurately reflect, as applicable, the sales price or prices or the initial offering price or prices to the public of the Bonds.

B. Except as otherwise set forth in Appendix A attached hereto, the City will treat the first (meaning single) price at which 10% of each maturity of the Bonds (the “10% test”) is sold to the public as the issue price of that maturity (if different interest rates apply within a maturity, each separate CUSIP number within that maturity will be subject to the 10% test). At or promptly after the execution of this Purchase Agreement, the Underwriter shall report to the City the price or prices at which it has sold to the public each maturity of Bonds. If at that time the 10% test has not been satisfied as to any maturity of the Bonds, the Underwriter agrees to promptly report to the City the prices at which it sells the unsold Bonds of that maturity to the public. That reporting obligation shall continue, whether or not the Closing Date has occurred, until the 10% test has been satisfied as to the Bonds of that maturity or until all Bonds of that maturity have been sold to the public.

C. The Underwriter confirms that it has offered the Bonds to the public on or before the date of this Purchase Agreement at the offering price or prices (the “initial offering price”), or at the corresponding yield or yields, set forth in Appendix A attached hereto, except as otherwise set forth therein. Appendix A also sets forth, as of the date of this Purchase Agreement, the maturities, if any, of the Bonds for which the Underwriter represents that (i) the 10% test has been satisfied (assuming orders are confirmed by the close of the business day immediately following the date of this Purchase Agreement) and (ii) the 10% test has not been satisfied and for which the City and the Underwriter agree that the restrictions set forth in the next sentence shall apply, which will allow the City to treat the initial offering price to the public of each such maturity as of the sale date as the issue price of that maturity (the “hold-the-offering-price rule”). So long as the hold-the-offering-price rule remains applicable to any maturity of the Bonds, the Underwriter will neither offer nor sell unsold Bonds of that maturity to any person at a price that is higher than the initial offering price to the public during the period starting on the sale date and ending on the earlier of the following:

- a. the close of the fifth (5th) business day after the sale date; or
- b. the date on which the Underwriter has sold at least 10% of that maturity of the Bonds to the public at a price that is no higher than the initial offering price to the public.

The Underwriter shall promptly advise the City when it has sold 10% of that maturity of the Bonds to the public at a price that is no higher than the initial offering price to the public, if that occurs prior to the close of the fifth (5th) business day after the sale date.

D. The Underwriter confirms that any selling group agreement and any retail distribution agreement relating to the initial sale of the Bonds to the public, together with the related pricing wires, contains or will contain language obligating each dealer who is a member of the selling group and each broker-dealer that is a party to such retail distribution agreement, as applicable, to (A) report the prices at which it sells to the public the unsold Bonds of each maturity allotted to it until it is notified by the Underwriter that either the 10% test has been satisfied as to the Bonds of that maturity or all Bonds of that maturity have been sold to the public and (B) comply with the hold-the-offering-price rule, if applicable, in each case if and for so long as directed by the Underwriter. The City acknowledges that, in making the representation set forth in this subsection, the

ATTACHMENT 3

Underwriter will rely on (i) in the event a selling group has been created in connection with the initial sale of the Bonds to the public, the agreement of each dealer who is a member of the selling group to comply with the hold-the-offering-price rule, if applicable, as set forth in a selling group agreement and the related pricing wires, and (ii) in the event that a retail distribution agreement was employed in connection with the initial sale of the Bonds to the public, the agreement of each broker-dealer that is a party to such agreement to comply with the hold-the-offering-price rule, if applicable, as set forth in the retail distribution agreement and the related pricing wires

E. The Underwriter acknowledges that sales of any Bonds to any person that is a related party to the Underwriter shall not constitute sales to the public for purposes of this section. Further, for purposes of this section:

a. “public” means any person other than an underwriter or a related party;

b. “underwriter” means (A) any person that agrees pursuant to a written contract with the City (or with the lead underwriter to form an underwriting syndicate) to participate in the initial sale of the Bonds to the public and (B) any person that agrees pursuant to a written contract directly or indirectly with a person described in clause (A) to participate in the initial sale of the Bonds to the public (including a member of a selling group or a party to a retail distribution agreement participating in the initial sale of the Bonds to the public);

c. a purchaser of any of the Bonds is a “related party” to an underwriter if the underwriter and the purchaser are subject, directly or indirectly, to (i) at least 50% common ownership of the voting power or the total value of their stock, if both entities are corporations (including direct ownership by one corporation of another), (ii) more than 50% common ownership of their capital interests or profits interests, if both entities are partnerships (including direct ownership by one partnership of another), or (iii) more than 50% common ownership of the value of the outstanding stock of the corporation or the capital interests or profit interests of the partnership, as applicable, if one entity is a corporation and the other entity is a partnership (including direct ownership of the applicable stock or interests by one entity of the other); and

d. “sale date” means the date of execution of this Purchase Agreement by all parties.

6. Expenses.

A. Whether or not the Underwriter accepts delivery of and pays for the Bonds as set forth herein, it shall be under no obligation to pay, and the City shall pay out of the proceeds of the Bonds or any other legally available funds of the City, all expenses incidental to the performance of the City’s obligations hereunder, including but not limited to the cost of printing and delivering the Bonds to the Underwriter; the costs of printing and shipping the Preliminary Official Statement and the Official Statement; the fees and disbursements of the City, the Community Facilities District, the Fiscal Agent, Bond Counsel, Disclosure Counsel, accountants and any other experts or consultants retained by the City or the Community Facilities District in connection with the issuance and sale of the Bonds; and any other expenses not specifically enumerated in paragraph (B) of this Section incurred in connection with the issuance and sale of the Bonds.

ATTACHMENT 3

B. Whether or not the Bonds are delivered to the Underwriter as set forth herein, the City shall be under no obligation to pay, and the Underwriter shall be responsible for and pay, CUSIP® and CDIAAC fees and expenses to qualify the Bonds for sale under any “blue sky” laws; and all other expenses incurred by the Underwriter in connection with its public offering and distribution of the Bonds not specifically enumerated in paragraph (A) of this Section, including the fees and disbursements of its counsel.

7. Undertakings of the City. The City agrees: (a) to inform the Underwriter, from time to time, upon the reasonable request of the Underwriter, of the amount then on deposit in the Reserve Fund and all accounts thereunder; and (b) to make available to the Underwriter, upon reasonable request of the Underwriter, at the expense of the City, sufficient copies of its audited financial statements, if any, and any resolutions of its legislative body with respect to the Community Facilities District Resolutions, the Bonds, the Fiscal Agent Agreement, the Official Statement, any amendments or supplements thereto, and other documents relating to the Bonds and pertaining to the City or the Community Facilities District adopted or executed, as the case may be, after the Closing Date, to the extent that such documents are publicly available.

8. Notices. Any notice of other communication to be given to the City under this Purchase Agreement may be given by delivering the same in writing to the City of Rancho Cordova, 2729 Prospect Park Drive, Rancho Cordova, California 95670, Attention: Finance Director; any notice or other communication to be given to the Underwriter under this Purchase Agreement may be given by delivering the same in writing to Piper Jaffray & Co., 50 California Street, Suite 3100, San Francisco, California 94111 Attention: Dennis McGuire. All such notices, requests or other communications may be made by telephone, personal or courier delivery, registered or certified mail, facsimile transmission or electronic communication, provided that delivery by facsimile transmission or electronic communication must be confirmed by the sender. The City and the Underwriter may, by notice given as aforesaid, specify a different address for any such notices, requests or other communications.

9. Parties In Interest. This Purchase Agreement is made solely for the benefit of the City and the Underwriter (including any successors or assignees of the Underwriter) and no other person shall acquire or have any right hereunder or by virtue hereof. The City and the Underwriter may not assign this Agreement. The term “successor” shall not include any holder of any Bonds merely by virtue of such holding.

10. Survival of Representations and Warranties. The representations and warranties of the City under this Purchase Agreement shall not be deemed to have been discharged, satisfied or otherwise rendered void by reason of the Closing and regardless of any investigations made by or on behalf of the Underwriter (or statements as to the results of such investigations) concerning such representations and statements of the City or the Community Facilities District and regardless of delivery of and payment for the Bonds.

11. Severability. If any provision of this Purchase Agreement is, or is held or deemed to be, invalid, inoperative or unenforceable as applied in any particular case in any jurisdiction or jurisdictions, because it conflicts with any provisions of any constitution, statute, rule of public policy or for any other reason, such circumstances shall not make the provision in question invalid, inoperative or unenforceable in any other case or circumstance, or make any other provision or provisions of this Agreement invalid, inoperative or unenforceable to any extent whatsoever.

ATTACHMENT 3

12. Execution in Counterparts. This Purchase Agreement may be executed by the parties hereto in separate counterparts, each of which when so executed and delivered shall be an original, but all such counterparts shall together constitute but one and the same instrument.

13. Effective. This Purchase Agreement shall become effective and binding upon the respective parties hereto upon the execution of the acceptance hereof by the City and shall be valid and enforceable as of the time of such acceptance.

14. No Prior Agreements. This Purchase Agreement supersedes and replaces all prior negotiations, agreements and understanding between the parties hereto in relation to the sale of the Bonds by the City.

15. Governing Law. This Purchase Agreement shall be governed by the laws of the State.

ATTACHMENT 3

16. Effective Date. This Purchase Agreement shall become effective and binding upon the respective parties hereto upon the execution of the acceptance hereof by the City and shall be valid and enforceable as of the time of such acceptance.

Very truly yours,
PIPER JAFFRAY & CO.

By: _____
Its: Authorized Officer

The foregoing is hereby agreed to and
accepted as of the date first above written:

CITY OF RANCHO CORDOVA

By: _____
Authorized Representative

Time of Execution: _____ p.m. California time

**[EXECUTION PAGE OF BOND PURCHASE AGREEMENT – CITY OF RANCHO
CORDOVA SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT
NO. 2005-1]**

ATTACHMENT 3**APPENDIX A**

\$ _____
CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS
SERIES 2018

MATURITY SCHEDULE

<u>Maturity (September 1)</u>	<u>Principal Amount</u>	<u>Interest Rate</u>	<u>Yield</u>	<u>Price</u>	<u>10% Test Satisfied*</u>	<u>10% Test Not Satisfied</u>	<u>Subject to Hold-The- Offering- Price Rule</u>
2019							
2020							
2021							
2022							
2023							
2024							
2025							
2026							
2027							
2028							
2029							
2030							
2031							
2032							
2033							
2034							
2035							
2036							
2037							
2038							
20__ ^(T)							
20__ ^(T)							

^(T) Term Bond.

^(C) Priced to optional call at par on September 1, 20__.

* At the time of execution of this Purchase Agreement and assuming orders are confirmed by the close of the business day immediately following the date of this Purchase Agreement.

Optional Redemption. The Bonds maturing on or before September 1, 20__ are not subject to optional redemption prior to their respective maturity dates. The Bonds maturing on or after September 1, 20__ may be redeemed prior to maturity at the option of the City from any source of available funds, as a whole or in part, on any date on or after September 1, 20__, at a redemption price equal to the principal amount of the Bonds called for redemption, together with accrued interest to the date fixed for redemption, without premium.

<u>Redemption Dates</u>	<u>Redemption Price</u>
March 1, 20__ through and including March 1, 20__	103%
September 1, 20__ and March 1, 20__	102
September 1, 20__ and March 1, 20__	101
September 1, 20__ and any Interest Payment Date thereafter	100

Year (September 1)	Mandatory Sinking Fund Redemption Amount
-----------------------	---

† Maturity.

Year (September 1)	Mandatory Sinking Fund Redemption Amount
-----------------------	---

\$

AGENDA ITEM 17.3

ATTACHMENT 3**APPENDIX B****OPINION OF SPECIAL COUNSEL**

_____, 2018

VIA OVERNIGHT MAIL

Piper Jaffray & Co.
 50 California Street, Suite 3100
 San Francisco, California 94111

City of Rancho Cordova
 Sunridge North Douglas Community Facilities District
 No. 2005-1
 2729 Prospect Park Drive
 Rancho Cordova, California 95670

Re: City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds, Series 2018

Ladies and Gentlemen:

We have acted as counsel for the City of Rancho Cordova (the “City”) and the Sunridge North Douglas Community Facilities District No. 2005-1 (the “Community Facilities District”), in connection with the purchase and sale of the City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds, Series 2018 (the “Bonds”). As such Counsel, we have reviewed the Bond Purchase Agreement, dated _____, 2018 (the “Purchase Agreement”), by and between Piper Jaffray & Co. (the “Underwriter”) and the City, the Supplemental Agreement No. 1 to Fiscal Agent Agreement, dated as of _____, 2018 which supplements a Fiscal Agent Agreement, dated as of October 1, 2015 (together, the “Fiscal Agent Agreement”), by and between the City and U.S. Bank National Association, as fiscal agent (the “Fiscal Agent”), the City Continuing Disclosure Agreement, dated _____, 2018, by and between the Fiscal Agent and the City (the “City Continuing Disclosure Agreement”), the Preliminary Official Statement, dated _____, 2018, relating to the Bonds (the “Preliminary Official Statement”), the Official Statement, dated _____, 2018, relating to the Bonds (the “Official Statement”), Resolution No. _____ adopted by the City Council of the City _____, 2018 (“Bond Resolution”), and such other documents, certificates, records and papers as we have deemed necessary to render the below opinions.

The Bonds, Fiscal Agent Agreement, Purchase Agreement, and the City Continuing Disclosure Agreement, are collectively referred to herein as the “Bond Documents.” Capitalized terms used herein and not otherwise defined shall have the meanings assigned to them in the Purchase Agreement.

With your permission we have assumed, without undertaking to verify the same by independent investigation, the following: (a) the authenticity of original documents and the genuineness of all signatures (other than those of the City and the Community Facilities District); (b) the conformity to the originals of all documents submitted to us as copies; (c) the truth, accuracy, and completeness of the information, representations, and warranties contained in these documents,

ATTACHMENT 3

certificates, records and papers we have reviewed; and (d) compliance with all covenants and agreements contained in such documents.

Based on the foregoing, and in reliance thereon, as of the date hereof, we are of the following opinions:

1. The City is a municipal corporation and charter city, duly organized and validly existing pursuant to the Constitution and laws of the State of California;

2. The Community Facilities District is duly organized and validly existing as a community facilities district under the Constitution and laws of the State;

3. The Bond Resolution was duly adopted at a meeting of the City Council, which meeting was duly called and held pursuant to law and with all public notice required by law and at which a quorum was present and acting throughout;

4. The preparation and distribution of the Preliminary Official Statement and the Official Statement have been duly approved by the City Council, acting for itself or as the Legislative Body of the Community Facilities District;

5. The execution and delivery by the City of the Bond Documents, and the Bonds and the performance of its obligations thereunder have been duly authorized by all requisite action of the City Council, acting for itself or as the Legislative Body of the Community Facilities District, and the Bonds and the Bond Documents have been duly executed and delivered by the Community Facilities District, and constitute legal, valid and binding obligations of the Community Facilities District enforceable against the Community Facilities District, in accordance with their respective terms, subject to bankruptcy, insolvency, reorganization, moratorium and other laws affecting the enforcement of creditors' rights in general and to the application of equitable principles if equitable remedies are sought;

6. To the best of our knowledge, no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, regulatory agency, public board or body is pending or to the best of such counsel's knowledge, threatened in any way affecting the existence of the City or the Community Facilities District or the titles of the officers of each to their respective offices, or seeking to restrain or to enjoin the execution and delivery of the Bond Documents, or the issuance, sale or delivery of the Bonds or the application of the proceeds thereof or the collection or application of the Special Taxes, or the exclusion from gross income for State personal income taxes of interest on the Bonds, or in any way contesting or affecting the validity or enforceability of the Bonds, the Bond Documents or any action of the City or the Community Facilities District contemplated by any of said documents or in any way contesting the completeness or accuracy of the Preliminary Official Statement or the Official Statement or the powers of the City or its authority with respect to the Purchase Agreement or any other applicable agreement, or any action on the part of the City or the Community Facilities District contemplated by any of said documents;

7. To the best of our knowledge, the City and the Community Facilities District are not in breach of or in default under any court or administrative decree or order, or under any loan agreement, note, resolution, indenture, contract, agreement or other instrument to which the City or the Community Facilities District is a party or is otherwise subject or bound, including the Bond Documents, a consequence of which could be to materially and adversely affect the ability of the

ATTACHMENT 3

City or the Community Facilities District to perform their obligations under the Bonds, the Bond Documents or which, with the passage of time or the giving of notice or both, would constitute an event of default thereunder; and;

8. To the best of our knowledge, the adoption of the Bond Resolution and the execution and delivery of the Bonds and the Bond Documents, did not and will not conflict with or constitute a breach of or default under any applicable court or administrative decree or order, or under any loan agreement, note, ordinance, resolution, indenture, contract, agreement or other instrument to which the City or the Community Facilities District, as the case may be, is a party or is otherwise subject or bound, a consequence of which could be to materially and adversely affect the ability of City or the Community Facilities District to perform their obligations under the Bonds or any Bond Documents.

The opinions set forth above are subject to the following additional qualifications:

General principles of equity, regardless of whether such enforceability is considered in a proceeding in equity or at law; and limitations imposed by bankruptcy, insolvency, fraudulent conveyance, receivership, conservatorship, reorganization, arrangement, liquidation, moratorium or other similar laws affecting the enforcement of creditors' rights in general heretofore or hereafter enacted, as such laws may be applied in the event of bankruptcy, insolvency, reorganization, arrangement, receivership, conservatorship, liquidation, readjustment of debt or other similar proceedings of, or moratorium or similar occurrence affecting municipal corporations in the State.

We express no opinion as to matters governing by laws other than the laws of the State and the federal laws of the United States of America, or the enforceability of any choice of law provision in the documents described herein.

This opinion is solely for your benefit in connection with the transactions covered by the first paragraph of this letter and may not be relied upon or used by, circulated, quoted or referred to, nor may copies hereof be delivered to, any other person or for any other purpose without our prior written approval; provided, however, copies of this opinion may be included in the closing transcripts for the transactions connected with the issuance of the Bonds. We disclaim any obligation to update this opinion letter for events occurring or coming to our attention after the date hereof.

Respectfully submitted,

JONES HALL, A PROFESSIONAL CORPORATION

ATTACHMENT 3**APPENDIX C**

§ _____
CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS
SERIES 2018

CLOSING CERTIFICATE OF THE CITY

I, the undersigned, hereby certify that I am the _____ of the City of Rancho Cordova (the “City”), the City Council (the “City Council”) of which is the Legislative Body for Sunridge North Douglas Community Facilities District No. 2005-1 (the “Community Facilities District”), a community facilities district duly organized and existing under the laws of the State of California (the “State”) and I am authorized to execute this Certificate on behalf of the City in connection with the issuance of the above-captioned bonds (the “Bonds”). All capitalized terms herein not otherwise defined shall have the meanings given such terms in the Bond Purchase Agreement (the “Bond Purchase Agreement”), dated _____, 2018, by and between the City and Piper Jaffray & Co.

I further certify on behalf of the City that:

(i) The representations, warranties and covenants of the City contained in the Bond Purchase Agreement, made on behalf of the City and the Community Facilities District, are true and correct in all material respects on and as of the date hereof as if made on the date hereof;

(ii) The Community Facilities District Resolutions, Formation Documents and the City Documents are in full force and effect and have not been amended, modified or supplemented;

(iii) Except as described in the Official Statement, there is no action, suit, proceeding, inquiry or investigation at law or in equity, or by any court or regulatory agency, public board or body pending, with respect to which the City or the Community Facilities District has been served with process, or to the best knowledge of the City or the Community Facilities District, threatened wherein an unfavorable decision, ruling or finding would: (a) affect the creation, organization, existence or powers of the City or the Community Facilities District, or the titles of their officers to their respective offices, (b) enjoin or restrain the issuance, sale and delivery of the Bonds, the levy or collection of the Special Taxes or any other moneys or property pledged or to be pledged under the Fiscal Agent Agreement, or the pledge thereof, (c) in any way question or affect any of the rights, powers, duties or obligations of the City or the Community Facilities District with respect to the Special Taxes or moneys and assets pledged or to be pledged to pay the principal of, premium, if any, or interest on the Bonds, (d) in any way question or affect any authority for the issuance of the Bonds, or the validity or enforceability of the Bonds or the proceedings relating to the issuance of the Bonds, or (e) in any way question or affect the Bond Purchase Agreement or the transactions contemplated thereby, the Official Statement or the City Documents;

(iv) The information in the Preliminary Official Statement (other than statements pertaining to the book-entry system and under the headings “THE DISTRICT – Development in the District,” as to which no view is expressed) as of its date was and as of the date hereof is, and in the Official Statement (other than statements pertaining to the book-entry system and under the headings “THE DISTRICT – Development in the District,” as to which no view is expressed) as of its date

ATTACHMENT 3

was and as of the date hereof is, true and correct in all material respects and does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading;

(v) The City has complied with all agreements and covenants, and satisfied all conditions, on its part to be complied with or satisfied under the Bond Purchase Agreement and under the Community Facilities District Resolutions, the Formation Documents, the City Documents and the Official Statement at or prior to the date hereof;

(vi) No event has occurred since the date of the Official Statement which either makes untrue or incorrect in any material respect as of the date hereof any statement or information contained in the Preliminary Official Statement or the Official Statement (other than statements pertaining to the book-entry system and under the headings "THE DISTRICT – Development in the District," as to which no view is expressed) or is not reflected in the Official Statement but should be reflected therein in order to make the statements and information therein not misleading in any material respect;

(vii) The use of and distribution by the Underwriter of the Preliminary Official Statement and the Official Statement in connection with the offer and sale of the Bonds is hereby ratified; and

(viii) The City and the Community Facilities District are each in compliance with all covenants set forth in the Fiscal Agent Agreement.

IN WITNESS WHEREOF, the undersigned has executed this certificate as of the date set forth below.

Dated: _____, 2018

CITY OF RANCHO CORDOVA

By: _____

Its: _____

ATTACHMENT 3**APPENDIX D****U.S. BANK NATIONAL ASSOCIATION CERTIFICATE**

The undersigned is an authorized officer of U.S. Bank National Association (the “Bank”), and as such, is familiar with the facts herein certified and is authorized and qualified to state and certify the following:

(i) The Bank is duly organized and existing as a national banking association under the laws of the United States of America, having the full power and authority to accept and perform its duties under the Supplemental Agreement No. 1 to Fiscal Agent Agreement, dated as of _____, 2018 which supplements a Fiscal Agent Agreement, dated as of October 1, 2015 (together, the “Fiscal Agent Agreement”), by and between the City and U.S. Bank National Association, as fiscal agent. Capitalized terms used herein and not otherwise defined have the meanings given to such terms in the Bond Purchase Agreement, dated as of _____, 2018, by and between the City and Piper Jaffray & Co.;

(ii) Pursuant to the Fiscal Agent Agreement, the Bank will apply the proceeds from the Bonds to the purposes specified in the Fiscal Agent Agreement;

(iii) The Bank is duly authorized to accept the obligations created by the Fiscal Agent Agreement and to authenticate the Bonds pursuant to the terms of the Fiscal Agent Agreement;

(iv) The Fiscal Agent Agreement has been duly authorized, executed and delivered by the Bank and, assuming due authorization, execution and delivery thereof by the other parties thereto, constitutes a valid and binding agreement of the Bank enforceable against the Bank in accordance with its terms;

(v) The Bonds have been validly authenticated and delivered by the Bank pursuant to the Fiscal Agent Agreement;

(vi) No consent, approval, authorization or other action by any governmental or regulatory authority having jurisdiction over the Bank that has not been obtained is or will be required for the authentication of the Bonds or the consummation by the Bank of the other transactions contemplated to be performed by the Bank in connection with the authentication of the Bonds and the acceptance and performance of the obligations created by the Fiscal Agent Agreement;

(vii) There is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, regulatory agency, public board or body that has been served on the Bank or, to the best of its knowledge, threatened in any way affecting the existence of the Bank, or seeking to restrain or to enjoin the execution and delivery of the Fiscal Agent Agreement or the authentication of the Bonds, by the Bank, or in any way contesting or affecting the validity or enforceability, as against the Bank, of the Fiscal Agent Agreement or any action of the Bank contemplated by any of said documents, or in which an adverse outcome would materially and adversely affect the ability of the Bank to perform its obligations under the Fiscal Agent Agreement;

ATTACHMENT 3

(viii) The Bank is not in breach of or in default under any applicable law or administrative rule or regulation of the State of California (the “State”) or the United States of America, or of any department, division, agency or instrumentality of either thereof, or under any applicable court or administrative decree or order, or under any loan agreement, note, resolution, indenture, contract, agreement or other instrument to which the Bank is a party or is otherwise subject or bound, a consequence of which could be to materially and adversely affect the ability of the Bank to perform its obligations under the Fiscal Agent Agreement (*provided, however*, that the Bank does not certify as to compliance with State or federal securities laws); and

(ix) The authentication of the Bonds, and the execution and delivery of the Fiscal Agent Agreement by the Bank, and compliance with the provisions of each, will not conflict with or constitute a breach of or default under any applicable law or administrative rule or regulation of the State or the United States of America, or of any department, division, agency or instrumentality of either thereof, or under any applicable court or administrative decree or order, or under any loan agreement, note, ordinance, resolution, Fiscal Agent Agreement, contract, agreement or other instrument to which the Bank is a party or is otherwise subject or bound, a consequence of which could be to materially and adversely affect the ability of the Bank to perform its obligations under the Fiscal Agent Agreement.

Dated: _____, 2018

U.S. BANK NATIONAL ASSOCIATION,
as Fiscal Agent

By: _____
Authorized Officer

ATTACHMENT 3**APPENDIX E****FISCAL AGENT’S COUNSEL OPINION**

_____, 2018

City of Rancho Cordova
 Sunridge North Douglas Community Facilities District No. 2005-1
 Rancho Cordova, California 95670

Piper Jaffray & Co.
 San Francisco, California 94111

Re: \$ _____
City of Rancho Cordova Sunridge North Douglas Community Facilities
District No. 2005-1 Special Tax Bonds, Series 2018

Ladies and Gentlemen:

We have acted as counsel for U.S. Bank National Association, a national banking association (the “Bank”) in connection with the execution by the Bank of the Supplemental Agreement No. 1 to Fiscal Agent Agreement, dated as of _____, 2018 which supplements a Fiscal Agent Agreement, dated as of October 1, 2015 (together, the “Fiscal Agent Agreement”), by and between the City and the Bank, as Fiscal Agent. We are generally familiar with the Articles of Association and the Bylaws of the Bank and are also familiar with the corporate proceedings of the Bank with regard to its authorization, execution and delivery of the Fiscal Agent Agreement. Capitalized terms used herein shall have the respective meanings ascribed to them in the Fiscal Agent Agreement, except as otherwise defined herein.

We have examined such documents and have reviewed such questions of law as we have considered necessary and appropriate for the purposes of this opinion. In such review, we have assumed the genuineness of all signatures, the authenticity of all documents submitted to us as originals, and the conformity with originals of all documents submitted to us as copies. Where questions of fact material to our opinions expressed below were not established independently, we have relied upon statements of officers of the Bank as contained in their certificates.

Based upon the foregoing, we are of the opinion that:

1. The Bank is a national banking association duly organized, validly existing and in good standing under the laws of the United States of America.
2. The Bank has all requisite corporate power, authority and legal right to execute and deliver the Fiscal Agent Agreement and to perform its duties and obligations under the Fiscal Agent Agreement, and has taken all necessary corporate action to authorize the execution and delivery thereof and the performance of its obligations thereunder, including the authentication and delivery of the Bonds in its capacity as Fiscal Agent under the Fiscal Agent Agreement.

ATTACHMENT 3

3. The Bank has duly authorized, executed and delivered the Fiscal Agent Agreement. Assuming the due authorization, execution and delivery thereof by the other parties thereto, the Fiscal Agent Agreement is a legal, valid and binding agreement of the Bank, enforceable in accordance with its terms against the Bank.

4. To our knowledge, no authorization, approval, consent, or order of any governmental agency or regulatory authority having jurisdiction over the Bank that has not been obtained by the Bank is required for the authorization, execution and delivery by the Bank of the Fiscal Agent Agreement or the authentication and delivery of the Bonds by the Bank under the Fiscal Agent Agreement.

The opinions set forth above are subject to the following qualifications and exceptions:

(a) the opinions are subject to the effect of any applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium or other similar laws of general application affecting creditors' rights; and

(b) the opinions are subject to the effect of general principles of equity, including (without limitation) concepts of materiality, reasonableness, good faith and fair dealing, and other similar doctrines affecting the enforceability of agreements generally (regardless of whether considered in a proceeding in equity or at law).

Our opinions expressed above are limited to the laws of the State of California and the federal laws of the United States of America.

The foregoing opinions are being furnished to you solely for your benefit and may not be relied upon by, nor may copies be delivered to, any other person without our prior written consent.

Very truly yours,

ATTACHMENT 3**APPENDIX F**

\$ _____
CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS
SERIES 2018

CERTIFICATE OF SPECIAL TAX CONSULTANT

The undersigned hereby states and certifies:

1. That he is an authorized officer of Goodwin Consulting Group, Inc. (the “Special Tax Consultant”) and as such is familiar with the facts herein certified and is authorized and qualified to certify the same.

2. That the Special Tax Consultant has prepared the Rate and Method of Apportionment of Special Tax (the “Rate and Method”) as set forth in Appendix A to the Official Statement dated _____, 2018, for the City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 (the “Community Facilities District”) Special Tax Bonds, Series 2018 (the “Bonds”). Capitalized terms not otherwise defined herein shall be defined as provided in the Rate and Method or the Supplemental Agreement No. 1 to Fiscal Agent Agreement, dated as of _____, 2018 which supplements a Fiscal Agent Agreement, dated as of October 1, 2015 (together, the “Fiscal Agent Agreement”), by and between the City and the Fiscal Agent named therein.

3. That the Special Taxes, if levied in accordance with the Rate and Method and collected will annually yield sufficient revenue to make timely payments of the annual debt service on the Bonds, and annual Administrative Expenses related to the levy and collection of the Special Taxes and the expenses of the Fiscal Agent for the Bonds (no representation is made as to the actual amounts that will be collected in future years).

4. That the Special Tax, if collected in the maximum amounts permitted pursuant to the Rate and Method on the Closing Date, would generate at least ____% of the Maximum Annual Debt Service payable with respect to the Bonds payable from such Special Taxes plus estimated Administrative Expenses equal to a maximum of \$_____ for Fiscal Year 2017-18 (subject to inflation at ____% per Fiscal Year effective for Fiscal Year 2018-19), assuming the debt service schedule shown in the Official Statement are true and correct.

5. That all information supplied by the Special Tax Consultant for use in the Official Statement is true and correct, as of the date of the Official Statement and as of the date hereof.

6. That, as of the dates of the Preliminary Official Statement and the Official Statement and as of the date hereof, the information contained in those portions of the Official Statement entitled “SECURITY FOR THE 2018 BONDS – Special Taxes and – Special Tax Formula,” “THE DISTRICT,” “CONTINUING DISCLOSURE,” “APPENDIX A,” including the tables sourced to the Special Tax Consultant, and the other data provided by the Special Tax Consultant and included in the Official Statement, do not, to our knowledge, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made therein, in light of the circumstances under which they were made, not misleading.

ATTACHMENT 3

7. The Community Facilities District, the City, the Underwriter, Piper Jaffray & Co., and all the professionals involved in the financing are entitled to rely on this Certificate.

Dated: _____, 2018

GOODWIN CONSULTING GROUP

By: _____

Title: _____

ATTACHMENT 3**APPENDIX G**

**CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS
SERIES 2018**

CERTIFICATE OF PROPERTY OWNERS

The undersigned parties certify and represent that they are duly authorized on behalf of LENNAR HOMES OF CALIFORNIA, INC., a California corporation ("Lennar") or MS RIALTO NORTH DOUGLAS CA, LLC, a Delaware limited liability company ("MS RIALTO"), to execute and deliver this certificate (this "Certificate") in connection with the issuance, sale and delivery by City of Rancho Cordova of the Bonds captioned above (the "Bonds"). For purposes of this certificate, each of Lennar and MS Rialto shall be a "Property Owner," and collectively they shall be the "Property Owners."

Capitalized terms used but not defined in this Certificate have the same meaning as is set forth in the Bond Purchase Agreement with respect to the Bonds between Piper Jaffray & Co., as underwriter (the "Underwriter"), and the City.

As used in this Certificate, the term "Actual Knowledge of the Undersigned" means the knowledge that the undersigned currently has as of the date of this Certificate or has obtained through (i) interviews with such officers and responsible employees of the respective Property Owner as the undersigned has reasonably determined are likely, in the ordinary course of his or her respective duties, to have knowledge of the matters set forth in this Certificate, and (ii) reviews of documents reasonably available to the undersigned and which the undersigned reasonably deemed necessary for the undersigned to execute this Certificate. The undersigned has not conducted any extraordinary inspection or inquiry other than such inspections or inquiries as are prudent and customary in connection with the ordinary course of the respective Property Owner's current business and operations.

As used in this Certificate, the term "Relevant Entity" of the respective Property Owner means any person presently directly or indirectly through one or more intermediaries controlling, controlled by or under common control with the respective Property Owner, and about whom information could be material to potential investors in their investment decision regarding the Bonds (including without limitation information relevant to the proposed development of the property in the Community Facilities District (defined herein), or to the respective Property Owner's ability to pay the Special Taxes prior to delinquency).

As used in this Certificate, the term "Property" means the property currently owned by the Property Owner within the City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 (the "Community Facilities District"), as further described in the Preliminary Official Statement.

The undersigned parties certify and represent that they are familiar with the facts set forth in this Certificate, and further hereby certify to the Actual Knowledge of the Undersigned as follows on behalf of the Property Owners:

ATTACHMENT 3

(1) Each Property Owner has been duly organized and validly exists in good standing under the laws of the State of California and has or will have prior to the Closing, as required, all requisite corporate right, power and authority:

(i) to execute and deliver this Certificate,

(ii) in the case of Lennar only, to execute and deliver the Property Owner Continuing Disclosure Agreement at Closing,

(iii) to acquire, own, develop and sell the Property, as described in the Preliminary Official Statement,

(iv) to carry on its business as described in the Preliminary Official Statement, and

(v) in the case of Lennar only, to perform its obligations under the Property Owner Continuing Disclosure Agreement.

(2) Lennar agrees to execute at Closing the Property Owner Continuing Disclosure Agreement substantially in the form attached to the Preliminary Official Statement under Appendix F, with such additional changes as may be agreed upon by Lennar.

(3) Except as disclosed in the Preliminary Official Statement, to the Actual Knowledge of the Undersigned, neither Property Owner is aware of any material failures by it or any entity under managerial control of such Property Owner to comply in all material respects with previous continuing disclosure undertakings in a written certificate or agreement executed by it or its Relevant Entities to provide periodic continuing disclosure reports or notices of material events respecting securities offerings in California within the past five years.

(4) To the Actual Knowledge of the Undersigned on behalf of Lennar, execution and delivery of the Property Owner Continuing Disclosure Agreement, and the performance by Lennar of its obligations under the Property Owner Continuing Disclosure Agreement, will not conflict with or constitute a breach of or default under any loans, lines of credit, agreements, or other contractual or financial obligations of Lennar, or any applicable law, regulation, judgment or decree.

(5) To the Actual Knowledge of the Undersigned, neither Property Owner nor any of their Relevant Entities is currently in material default on any loans, lines of credit, agreements, or other contractual or financial obligations, or in breach of any applicable law, regulation, judgment or decree, and no event has occurred and is continuing that would constitute such a default or breach, the result of which could materially adversely affect the ability of such Property Owner:

(i) to acquire, own, develop and sell the Property, as described in the Preliminary Official Statement,

(ii) to pay Special Taxes on the Property (to the extent the responsibility of the Property Owner) prior to delinquency,

ATTACHMENT 3

(iii) to carry on its business as described in the Preliminary Official Statement, or

(iv) in the case of Lennar only, to perform its obligations under the Property Owner Continuing Disclosure Agreement.

(6) Except as disclosed in the Preliminary Official Statement, neither Property Owner has assumed any obligations under any loans, lines of credit, agreements, or other contractual or financial arrangements, or any applicable judgment or decree, which could materially adversely affect the ability of such Property Owner:

(i) to acquire, own, develop and sell the Property, as described in the Preliminary Official Statement,

(ii) to pay Special Taxes on the Property (to the extent the responsibility of the Property Owner) prior to delinquency,

(iii) to carry on its business as described in the Preliminary Official Statement, or

(iv) in the case of Lennar only, to perform its obligations under the Property Owner Continuing Disclosure Agreement.

(7) Except as described in the Preliminary Official Statement, neither Property Owner has any loans outstanding and unpaid and no lines of credit that are secured by the Property.

(8) Except as disclosed in the Preliminary Official Statement, to the Actual Knowledge of the Undersigned, neither Property Owner nor any of their Relevant Entities is currently in default in, or, in the last five years, has ever defaulted to any material extent in, the payment of special taxes or assessments in connection with the Community Facilities District or any other community facilities districts or assessment districts in California that was not cured prior to the institution of any enforcement action with a court of law.

(9) Except as disclosed in the Preliminary Official Statement, to the Actual Knowledge of the Undersigned, there is no litigation, inquiry, investigation or administrative proceeding of any nature pending against either Property Owner (with service of process to the Property Owner having been accomplished), or to the Actual Knowledge of the Undersigned, overtly threatened in writing against either Property Owner, or to the Actual Knowledge of the Undersigned, pending or overtly threatened in writing against any Relevant Entity of either Property Owner, in each case which, if successful, could:

(i) materially adversely affect the ability of such Property Owner to acquire, own, develop and sell the Property, as described in the Preliminary Official Statement,

(ii) materially adversely affect the ability of such Property Owner to pay Special Taxes on the Property (to the extent the responsibility of the Property Owner) prior to delinquency,

ATTACHMENT 3

(iii) materially adversely affect the ability of such Property Owner to carry on its business as described in the Preliminary Official Statement,

(iv) in the case of Lennar only, materially adversely affect the ability of the Property Owner to perform its obligations under the Property Owner Continuing Disclosure Agreement,

(v) challenge, question the validity or enforceability of, or restrain or enjoin the performance of, the Special Taxes, the Bonds, the Resolution, the Fiscal Agent Agreement, the Property Owner Continuing Disclosure Agreement or the Bond Purchase Agreement, or

(vi) restrain or enjoin collection of Special Taxes or other sums to be pledged to pay the principal of and interest on the Bonds.

(10) Except as disclosed in the Preliminary Official Statement:

(i) the Property Owners and, to the Actual Knowledge of the Undersigned, their Relevant Entities, are solvent;

(ii) except as set forth in this paragraph, neither Property Owner nor, to the Actual Knowledge of the Undersigned, any of their Relevant Entities, has filed for bankruptcy or been declared bankrupt in the last 10 years provided, that Lennar Mare Island, LLC, a Relevant Entity of the Lennar, was one of the twenty-two debtors in the June 2008 Landsource bankruptcy case, which has subsequently been discharged; and

(iii) to the Actual Knowledge of the Undersigned, there are no proceedings pending (with service of process to the Property Owners having been accomplished) or overtly threatened in writing in which either Property Owner or any of their Relevant Entities may be adjudicated as bankrupt, become the debtor in a bankruptcy proceeding, be discharged from any or all of its respective debts or obligations, be granted an extension of time to pay its respective debts or obligations, or be granted a reorganization or readjustment of its respective debts or obligations.

(11) As of the date hereof, the information in the sections of the Preliminary Official Statement entitled “THE DISTRICT – Development in the District,” “OWNERSHIP OF PROPERTY WITHIN THE DISTRICT,” and “CONTINUING DISCLOSURE – Lennar,” concerning the Property Owners and their Relevant Entities, the Property, the Property Owners’ development and financing plans, and the Property Owners’ contractual arrangements (but excluding any information cited as coming from a source other than the Property Owners) is true and correct in all material respects, and contains no untrue statement of a material fact and does not omit any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(12) Except as disclosed in the Preliminary Official Statement, the Property Owners have not submitted an application for, nor received actual notice of,

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(i) the formation or authorization of any other assessment district or community facilities district that would include any portion of the property within the Community Facilities District, or

(ii) the authorization or issuance of any debt secured by an assessment or another special tax to be levied on any portion of the property within the Community Facilities District, other than the Special Tax.

(13) Except as set forth in the Preliminary Official Statement, to the Actual Knowledge of the Undersigned, there are no claims, disputes, lawsuits, actions or contingent liabilities of or against either Property Owners or its Relevant Entities, or among, by or between the Property Owners and any contractors working on the development of the Property in the Community Facilities District, which may materially and adversely affect:

(i) the ability of such Property Owner to acquire, own, develop and sell the Property, as described in the Preliminary Official Statement,

(ii) the ability of such Property Owner to pay Special Taxes on the Property (to the extent the responsibility of the Property Owner) prior to delinquency,

(iii) the ability of such Property Owner to carry on its business as described in the Preliminary Official Statement, or

(iv) the ability of such Property Owner to perform its obligations under the Property Owner Continuing Disclosure Agreement.

(14) To the Actual Knowledge of the Undersigned, all information submitted by, or on behalf of, the respective Property Owner to (i) the Appraiser, as such information is set forth in the Appraisal, was, at the time of submission, and, except as modified by later information submitted by such Property Owner, is, as of the date of this Certificate, true and correct in all material respects, and (ii) the City, the Community Facilities District, Bond Counsel, Disclosure Counsel, or the Underwriter in connection with the issuance of the Bonds was, at the time of submission and, except as modified by later information submitted by such Property Owner, is as of the date of this Certificate, true and correct in all material respects.

(15) Each Property Owner covenants that, while the Bonds or any refunding obligations related thereto are outstanding, the Property Owner will not bring any action, suit, proceeding, inquiry or investigation at law or in equity, before any court, regulatory agency, public board or body, that in any way:

(i) seeks to challenge or overturn the formation of the Community Facilities District,

(ii) seeks to challenge the adoption of the ordinance levying Special Taxes within the Community Facilities District,

(iii) seeks to invalidate the Community Facilities District or any of the Bonds or any refunding obligations, or

ATTACHMENT 3

(iv) seeks to invalidate the special tax liens imposed under Section 3115.5 of the Streets and Highways Code based on recordation of the notices of special tax lien relating thereto.

The foregoing covenant shall not prevent such Property Owner in any way from bringing any other action, suit, proceeding, inquiry or investigation at law or in equity relating to the following:

(a) a claim that the Special Tax has not been levied in accordance with the Rate and Method,

(b) the application or use of the Special Taxes levied and collected, or

(c) the enforcement of the obligations of the Community Facilities District under the Fiscal Agent Agreement or any agreements between the Property Owner and the City or the Community Facilities District or under which the Property Owner is a beneficiary.

(16) Each Property Owner has received a copy of the Rate and Method containing the prepayment formula. Each Property Owner acknowledges that any prepayment of the Special Taxes may only be made in accordance with the Rate and Method.

(17) Each Property Owner shall comply with the provision of the Mello-Roos Community Facilities Act of 1982, as amended, relating to the Notice of Special Tax described in California Government Code Section 53341.5 in connection with the sale of the Property.

(18) Based upon its current development plans, including, without limitation, its current budget and subject to economic conditions and risks generally inherent in the development of real property, each Property Owner anticipates that it will have sufficient funds to (i) carry on its business as described in the Preliminary Official Statement, (ii) acquire, own, develop and sell the Property as described in the Preliminary Official Statement, and (iii) pay Special Taxes on the Property (to the extent the responsibility of the Property Owner) prior to delinquency.

However, no assurance can be given that sources of financing available to such Property Owner will be sufficient to complete the property development and home construction as currently anticipated and as described in the Preliminary Official Statement. While each Property Owner has made such internal financing available in the past, there can be no assurance whatsoever of its willingness or ability to do so in the future. Neither Property Owner nor any of their Relevant Entities has any legal obligation of any kind to make any such funds available or to obtain loans. Other than pointing out the willingness of each Property Owner to provide internal financing in the past, neither Property Owner has represented in any way that it will do so in the future. If and to the extent that internal financing and home sales revenues are inadequate to pay the costs to complete each Property Owner's planned development in the Community Facilities District and other financing by such Property Owner is not put into place, there could be a shortfall in the funds required to complete the proposed development by the Property Owners and portions of the Property may not be developed.

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(19) The Property Owners consent to the issuance of the Bonds. The Property Owners acknowledge and agree that the proceeds of such Bonds will be used for the acquisition and construction of the improvements described in the Preliminary Official Statement. The Property Owners acknowledge that the costs to acquire and construct such improvements are estimates, and that any increase in costs in excess of the estimated costs relating to improvements will reduce the improvements which may be financed by the City, and neither the City, nor the Community Facilities District has any obligation to provide moneys to pay for any such costs.

(20) During the period between the date of this Certificate and the Closing Date, if any Property Owner has actual knowledge of any event relating to or affecting such Property Owner, its Relevant Entities, or the acquisition, ownership, development or sale of the Property which could cause the information under the captions of the Preliminary Official Statement indicated in Section 11 of this Certificate (and subject to the limitations and exclusions contained in Section 11 of this Certificate) to contain an untrue statement of a material fact or to omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, such Property Owner shall notify the City and the Underwriter and if, in the opinion of counsel to the City or the Underwriter, such event requires the preparation and publication of a supplement or amendment to the Preliminary Official Statement, such Property Owner shall reasonably cooperate with the City in the preparation of an amendment or supplement to the Preliminary Official Statement in form and substance satisfactory to counsel to the City and to the Underwriter.

(21) For a period of 90 days after the Closing Date, if any Property Owner has actual knowledge of any event relating to or affecting such Property Owner, its Relevant Entities, or the acquisition, ownership development or sale of the Property which could cause the information under the captions of the Final Official Statement indicated in Section 11 of this Certificate (and subject to the limitations and exclusions contained in Section 11 of this Certificate) to contain an untrue statement of a material fact or to omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, such Property Owner shall notify the City and the Underwriter and if, in the opinion of counsel to the City or the Underwriter, such event requires the preparation and publication of a supplement or amendment to the Final Official Statement, such Property Owner shall reasonably cooperate with the City in the preparation of an amendment or supplement to the Final Official Statement in form and substance satisfactory to counsel to the City and to the Underwriter.

(22) As a condition to the issuance of the Bonds, each Property Owner agrees to deliver a bring-down certificate, dated the Closing Date, in substantially the form attached as Appendix H to the Bond Purchase Agreement, to affirm and restate such Property Owner's certifications, representations and covenants made in this Certificate. If any event related to or affecting such Property Owner, its Relevant Entities or the acquisition, ownership, development or sale of the Property occurs, as a result of which it is necessary to modify the bring-down certificate, the Property Owner agrees to deliver a new bring-down certificate revised to reflect such event.

(23) Each Property Owner acknowledges and agrees that:

ATTACHMENT 3

(i) in connection with the purchase and sale of the Bonds under the Bond Purchase Agreement, and with the discussions, undertakings and procedures leading up to the consummation of the purchase and sale of the Bonds under the Purchase Agreement, the Underwriter is and has been acting solely as principal and is not acting as the agent or fiduciary of any Property Owner,

(iii) the Underwriter has not assumed a fiduciary responsibility in favor of any Property Owner with respect to (a) the offering of the Bonds contemplated hereby or the process leading thereto (whether or not the Underwriter, or any affiliate of the Underwriter, has advised or is currently advising the Property Owner on other matters), or (b) any other obligation to any Property Owner with respect to the offering contemplated by the Bond Purchase Agreement, and

(iii) such Property Owner has consulted its own legal, financial and other advisors to the extent it has deemed appropriate in connection with the offering contemplated by the Bond Purchase Agreement.

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On behalf of Lennar and/or MS Rialto, as the case may be, I have reviewed the contents of this Certificate and such Property Owner has consulted with counsel regarding the meaning of its contents. Each Property Owner acknowledges and understands that a variety of state and federal laws, including but not limited to the Securities Act of 1933, as amended, and Rule 10b-5 promulgated under the Securities Exchange Act of 1934, as amended, may apply to such Property Owner, and that under some circumstances certification as to the matters set forth in this Certificate, without additional disclosures or other action, may not fully discharge all duties and obligations of such Property Owner under such laws.

Dated: _____, 2018

LENNAR HOMES OF CALIFORNIA, INC.,
a California corporation

By: _____

Name: _____

Title: _____

MS RIALTO NORTH DOUGLAS CA, LLC
a Delaware limited liability company

By: MS RIALTO RESIDENTIAL HOLDINGS, LLC
a Delaware limited liability company, its member

By: MSR HOLDING COMPANY, LLC
a Delaware limited liability company, its member

By: LENNAR HOMES OF CALIFORNIA, INC.,
a California corporation, its California member

By: _____

Name: _____

Title: _____

ATTACHMENT 3

**CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS
SERIES 2018**

CERTIFICATE OF PROPERTY OWNER

The undersigned certifies and represents that he or she is duly authorized on behalf of WOODSIDE 05N, LP D/B/A WOODSIDE HOMES OF NORTHERN CALIFORNIA, LP, a California limited partnership (the "Property Owner"), to execute and deliver this certificate (this "Certificate") in connection with the issuance, sale and delivery by City of Rancho Cordova of the Bonds captioned above (the "Bonds").

Capitalized terms used but not defined in this Certificate have the same meaning as is set forth in the Bond Purchase Agreement with respect to the Bonds between Piper Jaffray & Co., as underwriter (the "Underwriter"), and the City.

As used in this Certificate, the term "Actual Knowledge of the Undersigned" means the knowledge that the undersigned currently has as of the date of this Certificate or has obtained through (i) interviews with such officers and responsible employees of the Property Owner as the undersigned has reasonably determined are likely, in the ordinary course of his or her respective duties, to have knowledge of the matters set forth in this Certificate, and (ii) reviews of documents reasonably available to the undersigned and which the undersigned reasonably deemed necessary for the undersigned to execute this Certificate. The undersigned has not conducted any extraordinary inspection or inquiry other than such inspections or inquiries as are prudent and customary in connection with the ordinary course of the Property Owner's current business and operations.

As used in this Certificate, the term "Relevant Entity" of the Property Owner means any person presently directly or indirectly through one or more intermediaries controlling, controlled by or under common control with the Property Owner, and about whom information could be material to potential investors in their investment decision regarding the Bonds (including without limitation information relevant to the proposed development of the property in the Community Facilities District (defined herein), or to the Property Owner's ability to pay the Special Taxes prior to delinquency).

As used in this Certificate, the term "Property" means the property currently owned by the Property Owner within the City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 (the "Community Facilities District"), as further described in the Preliminary Official Statement.

The undersigned certifies that he or she is familiar with the facts set forth in this Certificate, and further hereby certifies to the Actual Knowledge of the Undersigned as follows on behalf of the Property Owner:

- (1) The Property Owner has been duly organized and validly exists in good standing under the laws of the State of California and has or will have prior to the Closing, as required, all requisite corporate right, power and authority:

ATTACHMENT 3

(i) to acquire, own, develop and sell the Property, as described in the Preliminary Official Statement, and

(ii) to carry on its business as described in the Preliminary Official Statement.

(2) To the Actual Knowledge of the Undersigned, neither the Property Owner nor any of its Relevant Entities is currently in material default on any loans, lines of credit, agreements, or other contractual or financial obligations, or in breach of any applicable law, regulation, judgment or decree, and no event has occurred and is continuing that would constitute such a default or breach, the result of which could materially adversely affect the ability of the Property Owner:

(i) to acquire, own, develop and sell the Property, as described in the Preliminary Official Statement,

(ii) to pay Special Taxes on the Property (to the extent the responsibility of the Property Owner) prior to delinquency, or

(iii) to carry on its business as described in the Preliminary Official Statement.

(3) Except as disclosed in the Preliminary Official Statement, the Property Owner has not assumed any obligations under any loans, lines of credit, agreements, or other contractual or financial arrangements, or any applicable judgment or decree, which could materially adversely affect the ability of the Property Owner:

(i) to acquire, own, develop and sell the Property, as described in the Preliminary Official Statement,

(ii) to pay Special Taxes on the Property (to the extent the responsibility of the Property Owner) prior to delinquency, or

(iii) to carry on its business as described in the Preliminary Official Statement.

(4) Except as described in the Preliminary Official Statement, the Property Owner has no loans outstanding and unpaid and no lines of credit that are secured by the Property.

(5) Except as disclosed in the Preliminary Official Statement, to the Actual Knowledge of the Undersigned, neither the Property Owner nor any of its Relevant Entities is currently in default in, or, in the last five years, has ever defaulted to any material extent in, the payment of special taxes or assessments in connection with the Community Facilities District or any other community facilities districts or assessment districts in California that was not cured prior to the institution of any enforcement action with a court of law.

(6) Except as disclosed in the Preliminary Official Statement, to the Actual Knowledge of the Undersigned, there is no litigation, inquiry, investigation or administrative proceeding of any nature pending against the Property Owner (with service of process to the Property Owner having been accomplished), or to the Actual Knowledge of the Undersigned,

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overtly threatened in writing against the Property Owner, or to the Actual Knowledge of the Undersigned, pending or overtly threatened in writing against any Relevant Entity of the Property Owner, in each case which, if successful, could:

(i) materially adversely affect the ability of the Property Owner to acquire, own, develop and sell the Property, as described in the Preliminary Official Statement,

(ii) materially adversely affect the ability of the Property Owner to pay Special Taxes on the Property (to the extent the responsibility of the Property Owner) prior to delinquency,

(iii) materially adversely affect the ability of the Property Owner to carry on its business as described in the Preliminary Official Statement,

(iv) challenge, question the validity or enforceability of, or restrain or enjoin the performance of, the Special Taxes, the Bonds, the Resolution, the Fiscal Agent Agreement, or the Bond Purchase Agreement, or

(iv) restrain or enjoin collection of Special Taxes or other sums to be pledged to pay the principal of and interest on the Bonds.

(7) Except as disclosed in the Preliminary Official Statement:

(i) the Property Owner and, to the Actual Knowledge of the Undersigned, its Relevant Entities, are solvent;

(ii) neither the Property Owner nor, to the Actual Knowledge of the Undersigned, any of its Relevant Entities, has filed for bankruptcy or been declared bankrupt in the last 10 years; and

(iii) to the Actual Knowledge of the Undersigned, there are no proceedings pending (with service of process to the Property Owner having been accomplished) or overtly threatened in writing in which the Property Owner or any of its Relevant Entities may be adjudicated as bankrupt, become the debtor in a bankruptcy proceeding, be discharged from any or all of its respective debts or obligations, be granted an extension of time to pay its respective debts or obligations, or be granted a reorganization or readjustment of its respective debts or obligations.

(8) As of the date hereof, the information in the sections of the Preliminary Official Statement entitled “THE DISTRICT – Development in the District,” “OWNERSHIP OF PROPERTY WITHIN THE DISTRICT,” “VALUE OF PROPERTY WITHIN THE DISTRICT”, concerning the Property Owner and its Relevant Entities, the Property, the Property Owner’s development and financing plans, and the Property Owner’s contractual arrangements (but excluding any information cited as coming from a source other than the Property Owner) is true and correct in all material respects, and contains no untrue statement of a material fact and does not omit any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

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(9) Except as disclosed in the Preliminary Official Statement, the Property Owner has not submitted an application for, nor received actual notice of,

(i) the formation or authorization of any other assessment district or community facilities district that would include any portion of the property within the Community Facilities District, or

(ii) the authorization or issuance of any debt secured by an assessment or another special tax to be levied on any portion of the property within the Community Facilities District, other than the Special Tax.

(10) Except as set forth in the Preliminary Official Statement, to the Actual Knowledge of the Undersigned, there are no claims, disputes, lawsuits, actions or contingent liabilities of or against the Property Owner or its Relevant Entities, or among, by or between the Property Owner and any contractors working on the development of the Property in the Community Facilities District, which may materially and adversely affect:

(i) the ability of the Property Owner to acquire, own, develop and sell the Property, as described in the Preliminary Official Statement,

(ii) the ability of the Property Owner to pay Special Taxes on the Property (to the extent the responsibility of the Property Owner) prior to delinquency, or

(iii) the ability of the Property Owner to carry on its business as described in the Preliminary Official Statement.

(11) To the Actual Knowledge of the Undersigned, all information submitted by, or on behalf of, the Property Owner to (i) the Appraiser, as such information is set forth in the Appraisal, was, at the time of submission, and, except as modified by later information submitted by the Property Owner, is, as of the date of this Certificate, true and correct in all material respects, and (ii) the City, the Community Facilities District, Bond Counsel, Disclosure Counsel, or the Underwriter in connection with the issuance of the Bonds was, at the time of submission and, except as modified by later information submitted by the Property Owner, is as of the date of this Certificate, true and correct in all material respects.

(12) The Property Owner covenants that, while the Bonds or any refunding obligations related thereto are outstanding, the Property Owner will not bring any action, suit, proceeding, inquiry or investigation at law or in equity, before any court, regulatory agency, public board or body, that in any way:

(i) seeks to challenge or overturn the formation of the Community Facilities District,

(ii) seeks to challenge the adoption of the ordinance levying Special Taxes within the Community Facilities District,

(iii) seeks to invalidate the Community Facilities District or any of the Bonds or any refunding obligations, or

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(iv) seeks to invalidate the special tax liens imposed under Section 3115.5 of the Streets and Highways Code based on recordation of the notices of special tax lien relating thereto.

The foregoing covenant shall not prevent the Property Owner in any way from bringing any other action, suit, proceeding, inquiry or investigation at law or in equity relating to the following:

(a) a claim that the Special Tax has not been levied in accordance with the Rate and Method,

(b) the application or use of the Special Taxes levied and collected, or

(c) the enforcement of the obligations of the Community Facilities District under the Fiscal Agent Agreement or any agreements between the Property Owner and the City or the Community Facilities District or under which the Property Owner is a beneficiary.

(13) The Property Owner has received a copy of the Rate and Method containing the prepayment formula. The Property Owner acknowledges that any prepayment of the Special Taxes may only be made in accordance with the Rate and Method.

(14) The Property Owner shall comply with the provision of the Mello-Roos Community Facilities Act of 1982, as amended, relating to the Notice of Special Tax described in California Government Code Section 53341.5 in connection with the sale of the Property.

(15) Based upon its current development plans, including, without limitation, its current budget and subject to economic conditions and risks generally inherent in the development of real property, the Property Owner anticipates that it will have sufficient funds to (i) carry on its business as described in the Preliminary Official Statement, (ii) acquire, own, develop and sell the Property as described in the Preliminary Official Statement, and (iii) pay Special Taxes on the Property (to the extent the responsibility of the Property Owner) prior to delinquency.

However, no assurance can be given that sources of financing available to the Property Owner will be sufficient to complete the property development and home construction as currently anticipated and as described in the Preliminary Official Statement. While the Property Owner has made such internal financing available in the past, there can be no assurance whatsoever of its willingness or ability to do so in the future. Neither the Property Owner nor any of its Relevant Entities has any legal obligation of any kind to make any such funds available or to obtain loans. Other than pointing out the willingness of the Property Owner to provide internal financing in the past, the Property Owner has not represented in any way that it will do so in the future. If and to the extent that internal financing and home sales revenues are inadequate to pay the costs to complete the Property Owner's planned development in the Community Facilities District and other financing by the Property Owner is not put into place, there could be a shortfall in the funds required to complete the proposed development by the Property Owner and portions of the Property may not be developed.

ATTACHMENT 3

(16) The Property Owner consents to the issuance of the Bonds. The Property Owner acknowledges and agrees that the proceeds of such Bonds will be used for the acquisition and construction of the improvements described in the Preliminary Official Statement. The Property Owner acknowledges that the costs to acquire and construct such improvements are estimates, and that any increase in costs in excess of the estimated costs relating to improvements will reduce the improvements which may be financed by the City, and neither the City, nor the Community Facilities District has any obligation to provide moneys to pay for any such costs.

(17) During the period between the date of this Certificate and the Closing Date, if the Property Owner has actual knowledge of any event relating to or affecting the Property Owner, its Relevant Entities, or the acquisition, ownership, development or sale of the Property which could cause the information under the captions of the Preliminary Official Statement indicated in Section 11 of this Certificate (and subject to the limitations and exclusions contained in Section 11 of this Certificate) to contain an untrue statement of a material fact or to omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, the Property Owner shall notify the City and the Underwriter and if, in the opinion of counsel to the City or the Underwriter, such event requires the preparation and publication of a supplement or amendment to the Preliminary Official Statement, the Property Owner shall reasonably cooperate with the City in the preparation of an amendment or supplement to the Preliminary Official Statement in form and substance satisfactory to counsel to the City and to the Underwriter.

(18) For a period of 90 days after the Closing Date, if the Property Owner has actual knowledge of any event relating to or affecting the Property Owner, its Relevant Entities, or the acquisition, ownership development or sale of the Property which could cause the information under the captions of the Final Official Statement indicated in Section 11 of this Certificate (and subject to the limitations and exclusions contained in Section 11 of this Certificate) to contain an untrue statement of a material fact or to omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading, the Property Owner shall notify the City and the Underwriter and if, in the opinion of counsel to the City or the Underwriter, such event requires the preparation and publication of a supplement or amendment to the Final Official Statement, the Property Owner shall reasonably cooperate with the City in the preparation of an amendment or supplement to the Final Official Statement in form and substance satisfactory to counsel to the City and to the Underwriter.

(19) As a condition to the issuance of the Bonds, the Property Owner agrees to deliver a bring-down certificate, dated the Closing Date, in substantially the form attached as Appendix H to the Bond Purchase Agreement, to affirm and restate the Property Owner's certifications, representations and covenants made in this Certificate. If any event related to or affecting the Property Owner, its Relevant Entities or the acquisition, ownership, development or sale of the Property occurs, as a result of which it is necessary to modify the bring-down certificate, the Property Owner agrees to deliver a new bring-down certificate revised to reflect such event.

(20) The Property Owner acknowledges and agrees that:

ATTACHMENT 3

(i) in connection with the purchase and sale of the Bonds under the Bond Purchase Agreement, and with the discussions, undertakings and procedures leading up to the consummation of the purchase and sale of the Bonds under the Purchase Agreement, the Underwriter is and has been acting solely as principal and is not acting as the agent or fiduciary of the Property Owner,

(iii) the Underwriter has not assumed a fiduciary responsibility in favor of the Property Owner with respect to (a) the offering of the Bonds contemplated hereby or the process leading thereto (whether or not the Underwriter, or any affiliate of the Underwriter, has advised or is currently advising the Property Owner on other matters), or (b) any other obligation to the Property Owner with respect to the offering contemplated by the Bond Purchase Agreement, and

(iii) the Property Owner has consulted its own legal, financial and other advisors to the extent it has deemed appropriate in connection with the offering contemplated by the Bond Purchase Agreement.

ATTACHMENT 3

On behalf of the Property Owner, I have reviewed the contents of this Certificate and the Property Owner has consulted with counsel regarding the meaning of its contents. The Property Owner acknowledges and understands that a variety of state and federal laws, including but not limited to the Securities Act of 1933, as amended, and Rule 10b-5 promulgated under the Securities Exchange Act of 1934, as amended, may apply to the Property Owner, and that under some circumstances certification as to the matters set forth in this Certificate, without additional disclosures or other action, may not fully discharge all duties and obligations of the Property Owner under such laws.

Dated: _____, 2018

WOODSIDE 05N, LP D/B/A WOODSIDE HOMES OF
NORTHERN CALIFORNIA, LP,
a California limited partnership

By: _____

Name: _____

Title: _____

ATTACHMENT 3**APPENDIX H**

§ _____
CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS
SERIES 2018

BRING-DOWN CERTIFICATE OF PROPERTY OWNERS

The undersigned parties certify and represent that they are duly authorized on behalf of LENNAR HOMES OF CALIFORNIA, INC., a California corporation ("Lennar") or MS RIALTO NORTH DOUGLAS CA, LLC, a Delaware limited liability company ("MS RIALTO"), to execute and deliver this certificate (this "Certificate") in connection with the issuance, sale and delivery by City of Rancho Cordova of the Bonds captioned above (the "Bonds"). For purposes of this certificate, each of Lennar and MS Rialto shall be a "Property Owner," and collectively they shall be the "Property Owners."

This Bring-Down Certificate is delivered pursuant to the Bond Purchase Agreement with respect to the Bonds dated _____, 2018, between Piper Jaffray & Co., as underwriter, and the City (the "Purchase Agreement").

In connection with the distribution of the Preliminary Official Statement relating to the Bonds, the Property Owner executed a Certificate of Property Owner dated _____, 2018 (the "Certificate").

Capitalized terms used but not defined in this Bring-Down Certificate have the same meanings as set forth in the Purchase Agreement and the Certificate.

The undersigned, on behalf of the respective Property Owners, further certify as follows:

(1) The undersigned parties are familiar with the facts certified in the Certificate and this Bring-Down Certificate, and are authorized and qualified to certify the same as authorized officers of the Property Owners.

(2) Each statement made in the Certificate is affirmed and restated as if made on the date hereof; provided that each statement made in the Certificate referring to the Preliminary Official Statement is affirmed as it relates to the Final Official Statement.

(3) To the Actual Knowledge of the Undersigned (as defined in the Certificate), no event has occurred since the date of the Preliminary Official Statement that has, in any material way, adversely affected

(i) the business, properties, operations, prospects or financial condition of either Property Owner,

(ii) each respective Property Owner's ability to acquire, own, develop and sell the Property, or

ATTACHMENT 3

(iii) each respective Property Owner's ability to pay Special Taxes on the Property (to the extent the responsibility of such Property Owner) prior to delinquency.

(4) Lennar has duly executed and delivered the Property Owner Continuing Disclosure Agreement, and the Property Owner Continuing Disclosure Agreement constitutes the legal, valid and binding obligation of Lennar, enforceable against Lennar in accordance with its terms, except as such enforcement is limited by bankruptcy, insolvency, reorganization, arrangement, moratorium, fraudulent conveyance, and other similar laws relating to or affecting the rights of creditors and certain equitable, legal, or statutory principles affecting the enforcement of contractual rights generally, regardless of whether such enforcement is considered in a proceeding in equity or at law.

Dated: _____, 2018

LENNAR HOMES OF CALIFORNIA, INC.,
a California corporation

By: _____

Name: _____

Title: _____

MS RIALTO NORTH DOUGLAS CA, LLC
a Delaware limited liability company

By: MS RIALTO RESIDENTIAL HOLDINGS, LLC
a Delaware limited liability company, its member

By: MSR HOLDING COMPANY, LLC
a Delaware limited liability company, its member

By: LENNAR HOMES OF CALIFORNIA, INC.,
a California corporation, its California member

By: _____

Name: _____

Title: _____

ATTACHMENT 3

§ _____
CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS
SERIES 2018

BRING-DOWN CERTIFICATE OF PROPERTY OWNER

The undersigned certifies and represents that he or she is duly authorized on behalf of WOODSIDE 05N, LP D/B/A WOODSIDE HOMES OF NORTHERN CALIFORNIA, LP, a California limited partnership (the "Property Owner"), to execute and deliver this bring-down certificate (this "Bring-Down Certificate") in connection with the issuance, sale and delivery by City of Rancho Cordova of the Bonds captioned above (the "Bonds").

This Bring-Down Certificate is delivered pursuant to the Bond Purchase Agreement with respect to the Bonds dated _____, 2018, between Piper Jaffray & Co., as underwriter, and the City (the "Purchase Agreement").

In connection with the distribution of the Preliminary Official Statement relating to the Bonds, the Property Owner executed a Certificate of Property Owner dated _____, 2018 (the "Certificate").

Capitalized terms used but not defined in this Bring-Down Certificate have the same meanings as set forth in the Purchase Agreement and the Certificate.

The undersigned, on behalf of the Property Owner, further certifies as follows:

(1) The undersigned is familiar with the facts certified in the Certificate and this Bring-Down Certificate, and is authorized and qualified to certify the same as an authorized officer of the Property Owner.

(2) Each statement made in the Certificate is affirmed and restated as if made on the date hereof; provided that each statement made in the Certificate referring to the Preliminary Official Statement is affirmed as it relates to the Final Official Statement.

(3) To the Actual Knowledge of the Undersigned (as defined in the Certificate), no event has occurred since the date of the Preliminary Official Statement that has, in any material way, adversely affected

(i) the business, properties, operations, prospects or financial condition of the Property Owner,

(ii) the Property Owner's ability to acquire, own, develop and sell the Property, or

ATTACHMENT 3

(iii) the Property Owner's ability to pay Special Taxes on the Property (to the extent the responsibility of the Property Owner) prior to delinquency.

Dated: _____, 2018

WOODSIDE 05N, LP D/B/A WOODSIDE HOMES OF
NORTHERN CALIFORNIA, LP,
a California limited partnership

By: _____

Name: _____

Title: _____

ATTACHMENT 3**APPENDIX I**

\$ _____
CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS
SERIES 2018

FORM OF DEVELOPER'S COUNSEL OPINION (LENNAR)

_____, 2018

City of Rancho Cordova
 Sunridge North Douglas Community Facilities District No. 2005-1
 2729 Prospect Park Drive
 Rancho Cordova, California 95670

Piper Jaffray & Co.
 50 California Street, Suite 3100
 San Francisco, California 94111

Re: \$ _____ City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds Series 2018

Ladies and Gentlemen:

We have acted as counsel to Lennar Homes of California, Inc., a California corporation (the "Developer") in connection with the issuance and sale by City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 (the "District") of \$ _____ City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds Series 2018 (the "Bonds"). This opinion is rendered pursuant to the Bond Purchase Agreement dated _____, 2018 (the "Bond Purchase Agreement"), entered into in connection therewith. Capitalized terms used herein without definition shall have the meanings set forth in the Bond Purchase Agreement.

In rendering the opinions set forth herein, we have reviewed and examined such documents as we have determined to be appropriate, including the following documents:

1. The Bond Purchase Agreement;
2. The Preliminary Official Statement dated _____, 2018 and the Final Official Statement dated _____, 2018 (together, the "Official Statement");
3. The Developer Continuing Disclosure Agreement dated _____, 2018, executed by Developer (the "Developer Agreement"); and
4. The Certificate of Property Owner, executed by Developer dated _____, 2018, and the Bring-Down Certificate of Property Owner, executed by Developer dated _____, 2018, as

ATTACHMENT 3

required pursuant to Section 3.E.24 and 3.E.26, respectively, of the Bond Purchase Agreement (collectively, the "Developer Certificate").

For purposes of this opinion, the term "Litigation Search" shall mean a litigation search of Developer, performed in the Superior Court of the State of California, County of Sacramento; the California Court of Appeal, Third Appellate District; the United States District Court, Eastern District of California; the United States Bankruptcy Court, Eastern District of California; and the United States Ninth Circuit Court of Appeal, conducted by Corporation Service Company (Order Date _____, 2018; Order Number _____ (the "Litigation Search"), but without warranty as to the completeness and accuracy thereof due to the potential for errors or inaccuracies in the data and files made available from the applicable courts.

With respect to factual matters underlying our opinions herein, we have made no independent investigation or inquiry and have relied solely upon the Developer's Certificate. We advise you that the phrase "to our knowledge," as used herein, means that no facts have come to our attention, based upon an inquiry of attorneys in this firm who devote substantive legal attention to Developer, or as a result of our examination of the Developer's Certificate and the Litigation Search, that indicate to us anything contrary to the statement to which the phrase relates. Except as expressly set forth above, the phrase does not mean that we have conducted any investigation or inquiry or performed any other examination or review. We have no reason to believe that any factual matters or assumptions relied upon by us are not true, correct and complete.

Our opinions herein are limited to the internal laws of the State of California and the federal laws of the United States of America. We express no opinion whatsoever with respect to the laws of any other jurisdiction and assume no responsibility for the applicability of such laws.

In rendering our opinions herein, we have assumed the following, with your approval:

(i) The genuineness and authenticity of all signatures on original documents submitted to us (other than any signatures on behalf of Developer); the authenticity and completeness of all documents submitted to us as originals; the conformity to originals of all documents submitted to us as copies; where any signature, other than any signature on behalf of Developer purports to have been made in a corporate, governmental, fiduciary or other capacity, the person who affixed such signature had the full power and authority to do so;

(ii) The due authorization, execution and delivery of the applicable agreements by the parties thereto, other than the Developer, and the legality, validity, binding effect and enforceability against such parties of their respective obligations under such agreements;

(iii) The truth, accuracy and completeness of all factual representations and warranties of all parties under the documents described in paragraphs 1 through 4, above;

(iv) The constitutionality or validity of a relevant statute, rule, regulation or agency action is not in issue unless a reported decision in the State of California has specifically addressed but not resolved, or has established, its unconstitutionality or invalidity; and

(v) All official public records relied upon by us are accurate and complete.

ATTACHMENT 3

Based upon the foregoing and in reliance thereon, and based on our examination of such questions of law as we have deemed appropriate under the circumstances, and subject to any further assumptions, comments, exceptions, qualifications and limitations set forth below, as of the date hereof, it is our opinion that:

1. Developer is a corporation, duly formed, validly existing and in good standing under the laws of the State of California, and has full power and authority to enter into the Developer Agreement.

2. The Developer has duly and validly executed and delivered the Developer Agreement, and the Developer Agreement constitutes the legal, valid and binding obligation of the Developer, enforceable against Developer in accordance with its terms.

3. To our knowledge, the execution and delivery by Developer of the Developer Agreement and the performance of its obligations thereunder do not and will not result in a violation of any provision of, or in default under any agreement or other instrument to which Developer is a party.

4. To our knowledge, except as set forth in the Official Statement, there is no litigation pending against Developer (with service of process to Developer having been duly given and completed) or overtly threatened against Developer which would materially and adversely affect the validity or enforceability of the Developer Agreement, Developer's ability to complete the planned acquisition, development and sale of the Property as described in the Official Statement or to pay the Special Taxes or ad valorem property taxes prior to delinquency on the Property it owns in the District.

5. Without having undertaken to determine independently the accuracy, completeness or fairness of the statements contained in the Official Statement under the captions, "THE DISTRICT – Anticipated Development in the District"; "OWNERSHIP OF PROPERTY WITHIN THE DISTRICT"; and "CONTINUING DISCLOSURE - Lennar" (except that no opinion or belief need to be expressed as to any information relating to The Depository Trust Company, or any information relating to CUSIP numbers, or with respect to any financial, statistical or engineering information, data or forecasts, numbers, charts, estimates, projections, assumptions or expressions of opinion or assessed valuations, or to any information which is attributable to a source other than Developer, contained in the Official Statement), no facts came to our attention during the course of our representation of Developer that would lead us to believe that the information under said captions of the Official Statement relating to the Developer, its Relevant Entities and their contractual arrangements, organizations, activities, properties and financial condition, and the proposed development of the Property, contains any untrue statement of a material fact or omits any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

In addition, all of our opinions expressed hereinabove are specifically subject to and limited by the following:

a) We express no opinion as to matters governed by any laws other than the substantive laws of California which are in effect as of the date hereof, and we assume no obligation to modify or supplement this opinion with respect to changes in such laws after the date hereof.

ATTACHMENT 3

b) As counsel to the Developer in this matter, we have not rendered financial advice to the Developer and do not represent, by this opinion or otherwise, that we have reviewed or made any assessment about, nor do we offer any opinion about, the financial condition of the Developer, past, present or future, including any financial information contained in the Developer Agreement; nor have we reviewed the financial feasibility of this transaction or those matters which the proceeds of the Bonds will fund or any of its components and, accordingly, we offer no opinion whatsoever regarding such financial feasibility.

c) The effect of laws or court decisions relating to bankruptcy, insolvency, fraudulent conveyance, equitable subordination, reorganization, arrangement, moratorium or other laws or court decisions relating to or affecting creditors' rights generally.

d) Limitations imposed by California or federal law or equitable principles upon the availability of the remedy of specific performance of any of the remedies, covenants or other provisions of any document or agreement and upon the availability of injunctive relief or other equitable remedies.

In addition, we express no opinion as to the title of the property within the District or any entitlements, permits, approvals or other assets relating to the Developer's development of its property as proposed in the Official Statement.

This letter is intended solely for your use in relation to the Bond Purchase Agreement and may not be reproduced or filed publicly or relied upon for any other purpose by you or for any purpose whatsoever by any other party without the express written consent of the undersigned except that this opinion may be copied and distributed as part of a closing book of the bond transaction documents, provided that such distribution shall not expand in any way the permitted uses of this letter.

We assume no responsibility for the effect of any fact or circumstance occurring subsequent to the date of this letter, including, without limitation, legislative or other changes in the law. Further, we assume no responsibility to advise you of any facts or circumstances of which we become aware after the date hereof, regardless of whether or not they may affect our opinions herein. This opinion is given as of the date hereof, and we assume no obligation to update our opinions herein after the date hereof.

Very truly yours,

HEFNER, STARK & MAROIS, LLP

ATTACHMENT 3

§ _____
CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS
SERIES 2018

FORM OF DEVELOPER'S COUNSEL OPINION (WOODSIDE)

A. One or more letters of counsel to Woodside 05N, LP d/b/a Woodside Homes of Northern California, LP, a California limited partnership (the "Developer"), which may be in-house counsel or an outside law firm engaged by the Developer in connection with the issuance of the Bonds, or both, collectively to the effect that:

1. No information came to the attention of the lawyers in such counsel's firm or office rendering legal services in connection with its representation of the Developer that caused such counsel to believe that, as of the date of the Official Statement and as of the date of such letter, the information in the sections of the Preliminary Official Statement entitled "THE DISTRICT – Development in the District," "OWNERSHIP OF PROPERTY WITHIN THE DISTRICT," and "CONTINUING DISCLOSURE – Woodside," concerning the Developer and its Relevant Entities, the Property, the Developer's development and financing plans, and the Developer's contractual arrangements (but excluding any information cited as coming from a source other than the Developer) (except that no belief is expressed as to (a) any financial statements and other financial, statistical, economic, or engineering data or forecasts, estimates, projections, assumptions, or expressions of opinion, or (b) any information about valuation, appraisals, market absorption, archaeological, or environmental matters), contained or contain any untrue statement of a material fact or omitted or omit to state a material fact necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

ATTACHMENT 3**APPENDIX J**

\$ _____
CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS
SERIES 2018

CERTIFICATE OF APPRAISER

Integra Realty Resources (the “Appraiser”), Sacramento, California prepared an appraisal of the properties within the City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 (the “Community Facilities District”) dated _____, 2018 (the “Appraisal”). The Appraisal is described and summarized in the Preliminary Official Statement dated _____, 2018 (the “Preliminary Official Statement”) and the Official Statement dated _____, 2018 (the “Official Statement”), including as Appendix B thereto, relating to the bonds captioned above.

The Appraiser hereby certifies that, to the best of his knowledge and belief, all information with respect to the Appraisal in the Preliminary Official Statement and in the Official Statement was true and correct as of the date of the Appraisal and that the Appraiser is aware that acts and events may have occurred since the date of the Appraisal which could result in both positive and negative effects on market value; however, an updated Appraisal has not been completed as of this date.

The Appraiser hereby consents to the use of the Appraisal in connection with the distribution and use of the Preliminary Official Statement and Official Statement.

Dated: _____, 2018

INTEGRA REALTY RESOURCES

By: _____

ATTACHMENT 3**APPENDIX K**

\$ _____
CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS
SERIES 2018

FORM OF ISSUE PRICE CERTIFICATE

[TO COME AT PRICING]

ATTACHMENT 4

PRELIMINARY OFFICIAL STATEMENT DATED _____, 2018

NEW ISSUE-FULL - BOOK ENTRY

NOT RATED

In the opinion of Jones Hall, A Professional Law Corporation, San Francisco, California, Bond Counsel, based upon an analysis of existing laws, regulations, rulings and court decisions and assuming (among other things) compliance with certain covenants, interest on the 2018 Bonds is excluded from gross income for federal income tax purposes and is exempt from State of California personal income taxes. In the opinion of Bond Counsel, interest on the 2018 Bonds is not a specific preference item for purposes of federal alternative minimum taxes although Bond Counsel observes that such interest is included as a specific preference item in computing the individual alternative minimum tax and, for taxable years that began prior to January 1, 2018, in computing the corporate alternative tax. Bond Counsel expresses no opinion regarding any other tax consequences caused by ownership or disposition of, or the accrual or receipt of interest on, the 2018 Bonds. See "LEGAL MATTERS – Tax Exemption" herein.

\$ _____ *

CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS
SERIES 2018

Dated: Date of Delivery

Due: September 1, as shown on inside cover

Authority for Issuance. The Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds, Series 2018 (the "2018 Bonds"), are being issued by the City of Rancho Cordova (the "City") by and through its Sunridge North Douglas Community Facilities District No. 2005-1 (the "District"). The 2018 Bonds are special tax obligations of the City, authorized pursuant to the Mello-Roos Community Facilities Act of 1982, as amended, being California Government Code Section 53311, et seq. (the "Mello-Roos Act"), and are issued pursuant to a Supplemental Agreement No. 1 to Fiscal Agent Agreement, dated as of _____, 2018, which supplements a Fiscal Agent Agreement dated as of October 1, 2015 (together, the "Fiscal Agent Agreement") by and between the City and U.S. Bank National Association, as fiscal agent (the "Fiscal Agent"). See "THE 2018 BONDS – Authority for Issuance."

Security and Sources of Payment. The 2018 Bonds are secured by and payable from a pledge of Special Tax Revenues (as defined herein), consisting primarily of certain special taxes levied on property within the District according to a rate and method of apportionment of special tax (less administrative expenses up to a cap), as well as the proceeds of any foreclosure actions brought following a delinquency in the payment of such special taxes, and from amounts held in certain funds under the Fiscal Agent Agreement, all as more fully described herein. For Fiscal Year 2018-19, the taxable real property within the District that secures the 2018 Bonds is projected to consist of 662 parcels, 338 of which are single-family homes owned by individual homeowners, and 324 of which are owned by merchant builders that are developing into single-family homes. An additional parcel is currently being used as a temporary roadway and, therefore, has not been included in the foregoing parcel counts. See "SECURITY FOR THE 2018 BONDS."

Use of Proceeds. The 2018 Bonds are issued to (i) construct and acquire certain public facilities (or pay fees related to public facilities) authorized for the District; (ii) make a deposit into the debt service reserve fund (the "Reserve Fund"); and (iii) pay the costs of issuance of the 2018 Bonds. See "FINANCING PLAN."

Future Additional Bonds [For Refunding Purposes Only]. The 2018 Bonds will be issued on a parity basis with the City's outstanding special tax bonds previously issued for the District captioned "\$14,225,000 City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds, Series 2015" (the "Parity Bonds"). The City may issue additional bonds secured by Special Tax Revenues on a parity with the 2018 Bonds and the Parity Bonds[, so long as the additional bonds are issued for the purpose of refunding all or a portion of the 2018 Bonds or the Parity Bonds]]. See "SECURITY FOR THE 2018 BONDS – Additional Bonds."

Bond Terms. Interest on the 2018 Bonds is payable September 1, 2018, and thereafter semiannually on September 1 and March 1 of each year. The 2018 Bonds will be issued in the denomination of \$5,000 or integral multiples of \$5,000 in excess thereof. The 2018 Bonds, when delivered, will be initially registered in the name of Cede & Co., as nominee of The Depository Trust Company ("DTC"). DTC will act as securities depository for the 2018 Bonds. See "THE 2018 BONDS – Description of the 2018 Bonds" and "APPENDIX G – DTC and the Book-Entry Only System."

Redemption. The 2018 Bonds are subject to optional redemption, mandatory sinking fund redemption, and special mandatory redemption from prepaid Special Taxes. See "THE 2018 BONDS – Redemption."

NEITHER THE FAITH AND CREDIT NOR THE TAXING POWER OF THE CITY, THE COUNTY OF SACRAMENTO, THE STATE OF CALIFORNIA OR ANY POLITICAL SUBDIVISION THEREOF IS PLEDGED TO THE PAYMENT OF THE 2018 BONDS. THE 2018 BONDS DO NOT CONSTITUTE A DEBT OF THE CITY IN CONTRAVENTION OF ANY STATUTORY OR CONSTITUTIONAL DEBT LIMITATION. THE INFORMATION SET FORTH IN THIS OFFICIAL STATEMENT, INCLUDING INFORMATION UNDER THE HEADING "BOND OWNERS' RISKS," SHOULD BE READ IN ITS ENTIRETY.

MATURITY SCHEDULE
 (see inside cover)

This cover page contains certain information for quick reference only. It is not a summary of essential information about the 2018 Bonds. Potential investors should read this entire Official Statement to obtain information essential for making an informed investment

This Preliminary Official Statement and the information contained herein are subject to completion or amendment. These securities may not be sold nor may offers to buy be accepted prior to the time the Official Statement is delivered in final form. Under no circumstances shall this Preliminary Official Statement constitute an offer to sell or a solicitation of an offer to buy nor shall there be any sale of these securities in any jurisdiction in which such offer solicitation or sale would be unlawful prior to registration or qualification under the securities laws of such jurisdiction.

ATTACHMENT 4

decision. Investment in the 2018 Bonds involves risks that may not be appropriate for some investors. See "BOND OWNERS' RISKS" for a discussion of special risk factors that should be considered in evaluating the investment quality of the 2018 Bonds.

The 2018 Bonds are offered when, as and if issued by the City and accepted by the Underwriter, subject to approval as to their legality by Jones Hall, A Professional Law Corporation, San Francisco, California, Bond Counsel, and subject to certain other conditions. Jones Hall, A Professional Law Corporation, also serves as disclosure counsel to the City. Certain matters will be passed upon for the City by Meyers Nave, A Professional Law Corporation, Sacramento, California, as City Attorney. Certain legal matters will be passed upon for the Underwriter by its counsel, Nossaman LLP. It is anticipated that the 2018 Bonds, in book-entry form, will be available for delivery through the facilities of DTC on or about _____, 2018.

[Piper Jaffray Logo]

The date of this Official Statement is: _____, 2018.

* Preliminary; subject to change.

ATTACHMENT 4

MATURITY SCHEDULE

\$ _____ Serial Bonds
(Base CUSIP†: _____)

<u>Maturity (September 1)</u>	<u>Principal Amount</u>	<u>Interest Rate</u>	<u>Yield</u>	<u>Price</u>	<u>CUSIP† ()</u>
-----------------------------------	-----------------------------	--------------------------	--------------	--------------	-----------------------

\$ _____ % Term Bond due September 1, _____, Yield: _____%, Price: _____%;
CUSIP† _____

† Copyright 2018, American Bankers Association. CUSIP data herein are provided by CUSIP Global Services, managed by Standard & Poor's Capital IQ, and are provided for convenience of reference only. None of the City, the District nor the Underwriter assumes any responsibility for the accuracy of these CUSIP data.

ATTACHMENT 4**CITY OF RANCHO CORDOVA****City Council**

Linda Budge, Mayor
Robert J. McGarvey, Vice Mayor
David Sander, Councilmember
Garrett Gatewood, Councilmember
Donald Terry, Councilmember

Staff

Cyrus Abhar, City Manager
Kim Juran-Karageorgiou, Administrative Services Director
Stacy Leitner, City Clerk
Adam Lindgren of Meyers Nave, A Professional Law Corporation, City Attorney

SPECIAL SERVICES**Bond Counsel**

Jones Hall, A Professional Law Corporation
San Francisco, California

Municipal Advisor

NHA Advisors, LLC
San Rafael, California

Special Tax Consultant

Goodwin Consulting Group, Inc.
Sacramento, California

Fiscal Agent

U.S. Bank National Association
Seattle, Washington

Disclosure Counsel

Jones Hall, A Professional Law Corporation
San Francisco, California

ATTACHMENT 4

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OFFICIAL STATEMENT

\$ _____ *

CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS
SERIES 2018

This Official Statement, including the cover page and all Appendices hereto, is provided to furnish certain information in connection with the issuance by the City of Rancho Cordova (the “**City**”) for its Sunridge North Douglas Community Facilities District No. 2005-1 (the “**District**”) of its Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds, Series 2018 (the “**2018 Bonds**”).

Any statements made in this Official Statement involving matters of opinion or of estimates, whether or not so expressly stated, are set forth as such and not as representations of fact, and no representation is made that any of the estimates will be realized. Definitions of certain terms used herein and not defined herein shall have the meaning set forth in the Fiscal Agent Agreement. See APPENDIX C.

INTRODUCTION

This introduction is not a summary of this Official Statement. It is only a brief description of and guide to, and is qualified by, more complete and detailed information contained in the entire Official Statement, including the cover page and attached appendices, and the documents summarized or described in this Official Statement. A full review should be made of the entire Official Statement. The offering of the 2018 Bonds to potential investors is made only by means of the entire Official Statement.

Creation of the District. The District was established and authorized to incur bonded indebtedness in an aggregate principal amount not to exceed \$20,000,000 at a special election in the District held in October 2005, which amount was increased to \$35,000,000 at a special election held for the District in April 2015, pursuant to the Mello-Roos Community Facilities Act of 1982, as amended (Sections 53311, *et seq.*, of the Government Code of the State of California) (the “**Mello-Roos Act**”). The 2018 Bonds represent the second [[and final]] (except for potential refundings) series of a total of special tax bonds authorized and issued for the District.

The 2018 Bonds. The 2018 Bonds are issued pursuant to the provisions of the Mello-Roos Act, a Supplemental Agreement No. 1 to Fiscal Agent Agreement, dated as of _____, 2018, which supplements a Fiscal Agent Agreement dated as of October 1, 2015 (together, the “**Fiscal Agent Agreement**”) between the City and U.S. Bank National Association, as fiscal

* Preliminary; subject to change.

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agent (the “**Fiscal Agent**”), and a resolution adopted on _____, 2018 by the City Council of the City, which authorized the issuance of the 2018 Bonds (the “**Resolution**”).

The 2018 Bonds are secured on parity with the City’s outstanding bonds captioned “\$14,225,000 City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds, Series 2015” (the “**Parity Bonds**”), which were issued on October 15, 2015, representing the first series of special tax bonds pursuant to the \$35,000,000 authorization for the District.

Registration of Ownership of the 2018 Bonds. The 2018 Bonds are issued only as fully registered bonds in book-entry form, registered in the name of Cede & Co., as nominee of The Depository Trust Company (“**DTC**”), without coupons, in the denomination of \$5,000 or any integral multiple thereof and shall be dated as of and bear interest from the date of delivery thereof at the rate or rates set forth on the cover page hereof. Interest on the 2018 Bonds is payable on March 1 and September 1 of each year (each an “**Interest Payment Date**”), commencing March 1, 2018. Ultimate purchasers of 2018 Bonds will not receive physical certificates representing their interest in the 2018 Bonds. So long as the 2018 Bonds are registered in the name of Cede & Co., as nominee of DTC, references herein to the Owners shall mean Cede & Co., and shall not mean the ultimate purchasers of the 2018 Bonds. Payments of the principal, premium, if any, and interest on the 2018 Bonds will be made directly to DTC, or its nominee, Cede & Co. so long as DTC or Cede & Co. is the registered owner of the 2018 Bonds. Disbursements of such payments to DTC’s Participants is the responsibility of DTC and disbursements of such payments to the Beneficial Owners is the responsibility of DTC’s Participants and Indirect Participants, as more fully described herein. See “APPENDIX G - DTC and the Book-Entry Only System.”

Use of Proceeds. Proceeds of the 2018 Bonds will primarily be used to finance a portion of the costs of acquiring and constructing certain public infrastructure improvements necessary for development in the District, or payment of fees related thereto (the “**Facilities**,” as described herein). The Facilities consist generally of road and related improvements, including drainage, water, sanitary sewer, joint trench utilities, concrete curbs, gutters and sidewalks, maintenance holes, street lighting, landscaping, masonry walls, traffic signals, park improvements (and/or fees to finance such improvements) and other miscellaneous infrastructure improvements necessary for development of property within the District. Proceeds of the 2018 Bonds will also be used to make a deposit in the Reserve Fund (defined herein), and to pay the cost of issuance of the 2018 Bonds.

Security and Sources of Payment of the 2018 Bonds. The 2018 Bonds are payable from the levy, according to a methodology approved by the City, of special taxes for facilities (the “**Special Tax**” or “**Facilities Special Tax**”), net of administration expenses as described herein (the “**Special Tax Revenues**”) on taxable real property within the boundaries of the District. *The special tax levy in the District also includes a component attributable to services provided to property in the District, which is not pledged to or available for payment of the 2018 Bonds.* The 2018 Bonds are also payable from the proceeds of any foreclosure actions brought following a delinquency in the payment of the Special Taxes, and from amounts held in certain funds and accounts pursuant to the City, including a Reserve Fund, all as more fully described herein. The Special Tax applicable to each taxable parcel in the District will be levied and collected according to the tax liability determined by the application of the Amended and Restated Rate and Method of Apportionment of Special Tax dated as of February 19, 2015 for the District (the “**Special Tax Formula**”). The Special Tax Formula is set forth in APPENDIX A hereto. The Special Taxes represent fixed liens on the parcels of land subject to a Special Tax

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of the District and failure to pay the Special Taxes could result in proceedings to foreclose title to the delinquent property. The Special Taxes do not constitute the personal indebtedness of the owners of taxed parcels and no proceedings to collect directly from an owner is permitted. See “SECURITY FOR THE 2018 BONDS - Special Tax Formula” and “APPENDIX A - Rate and Method of Apportionment of Special Tax.”

Pursuant to the Mello-Roos Act, the Resolution of Formation (as defined herein), and the Fiscal Agent Agreement, so long as any 2018 Bonds are outstanding, the City will annually levy the Special Tax against all taxable land within the District in accordance with the proceedings for the authorization and issuance of the 2018 Bonds and to make provision for the collection of the Special Tax in amounts which will be sufficient to pay interest on, principal of and redemption premium (if any) on the 2018 Bonds as such becomes due and payable and to replenish the Reserve Fund (as defined herein) as necessary. See “SECURITY FOR THE 2018 BONDS – Special Taxes” herein.

In connection with the issuance of the 2018 Bonds, the Fiscal Agent will make a deposit to the Reserve Fund (defined herein) from 2018 Bond proceeds in the amount of the Reserve Requirement (described herein), which amount is available for payment of the 2018 Bonds in the event of delinquencies in the payment of the Special Taxes to the extent of such delinquencies. The Reserve Fund will be available for payment of the 2018 Bonds. See “SECURITY FOR THE 2018 BONDS - Reserve Fund.” If there are additional delinquencies after depletion of funds in the Reserve Fund, the City is not obligated to pay the 2018 Bonds or supplement the Reserve Fund.

Additional Bonds [for Refunding Purposes Only]. The maximum authorized indebtedness for the District is \$35,000,000; the 2018 Bonds are the second [[and final]] series of bonds being issued by the District. Additional Bonds (as defined herein) may be issued but only for refunding purposes in accordance with the conditions set forth in the Fiscal Agent Agreement]] (the 2018 Bonds, the Parity Bonds, and any such additional parity bonds [[issued for refunding purposes]], if any, are collectively referred to herein as the “**Bonds**”). See “SECURITY FOR THE 2018 BONDS – Additional Bonds” herein.

Property Subject to the Special Tax. The District is comprised of approximately 148 acres located in the City in the eastern portion of Sacramento County (the “**County**”) and is commonly known as the “Sunridge North Douglas” area, which is a part, but not all, of the Sunrise Douglas Community Plan..

The District has final subdivision map approval for the development of 662 detached residential lots with typical lot sizes projected to range from 3,150 to 5,775 square feet. All of the improvements in the District have been made by Lennar Homes of California, Inc., a California Corporation and/or its affiliate, MS Rialto North Douglas CA, LLC, a Delaware limited liability company (together, “**Lennar**” or the “**Master Developer**”), which has installed infrastructure and mapped 8 large lot “villages” for development. The Master Developer previously sold 165 lots to Woodside 05N, LP, a California limited partnership doing business as Woodside Homes of Northern California, LP (“**Woodside Homes**”). Eight separate residential villages are planned within the development, and home sales commenced in spring of 2015.

Development in the District is ongoing, with 662 parcels currently subject to the Special Tax securing the 2018 Bonds. An additional parcel is currently being used as a temporary roadway and, therefore, has not been included in the foregoing parcel count. As of the January 1, 2017 lien date for the 2017-18 County property tax roll, the 662 parcels in the District were

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owned as follows: Lennar (250 parcels, consisting of 179 fully improved lots, 62 partially improved lots, and 9 completed single-family homes without assessed values), Woodside Homes (74 parcels, consisting of 67 fully improved lots and 7 completed single-family homes without assessed values) and individual homeowners (338 parcels, consisting of 149 completed single-family homes without assessed values and 189 homes with assessed values). Both Lennar and Woodside plan to continue developing homes, although they may sell lots to other merchant builders. See “THE DISTRICT.”

Value of Property in the District. Property in the District is security for the Special Tax. The assessed value of property in the District for Fiscal Year 2017-18 was \$104,741,930. In order to obtain an estimate of value for certain parcels in the District that had not yet been developed, the City authorized the preparation of an appraisal report for such properties. The appraisal sets forth a hypothetical value of the parcels appraised of not less than \$104,572,000 as of January 24, 2018 date of value. The valuation assumes completion of the Facilities funded by the 2015 Bonds and 2018 Bonds (most of which has been completed). The appraised value of the appraised parcels, together with the assessed value of the other parcels in the District, is equal to \$183,975,076. See “VALUE OF PROPERTY WITHIN THE DISTRICT.”

In considering the estimates of value evidenced by the appraisal, it should be noted that the appraisal is based upon a number of standard and special assumptions that affected the estimates as to value, in addition to the assumption of completion of the Facilities. The principal amount of the direct and overlapping debt in the District is \$20,346,903* (including the estimated amount of 2018 Bonds of \$4,920,000*). Consequently, the estimated value of property in the District subject to the Special Tax lien (\$183,975,076), is approximately 9.0* times the principal amount of the direct and overlapping debt in the District. See “VALUE OF PROPERTY WITHIN THE DISTRICT – Value to Special Tax Burden Ratios.”

Risks of Investment. Investment in the 2018 Bonds involves risks that may not be appropriate for some investors. See the section of this Official Statement entitled “BOND OWNERS’ RISKS” for a discussion of special factors that should be considered, in addition to the other matters set forth herein, in considering the investment quality of the 2018 Bonds.

Limited Obligation of the City. The general fund of the City is not liable and the full faith and credit of the City is not pledged for the payment of the interest on, or principal of or redemption premiums, if any, on the 2018 Bonds. The 2018 Bonds are not secured by a legal or equitable pledge of or charge, lien or encumbrance upon any property of the City or any of its income or receipts, except the Special Tax Revenues and amounts in certain funds established under the Fiscal Agent Agreement as described herein. The 2018 Bonds do not constitute an indebtedness of the City within the meaning of any constitutional or statutory debt limitation or restrictions and neither the City Council, the City nor any officer or employee thereof shall be liable for the payment of the interest on or principal of or redemption premiums, if any, on the 2018 Bonds other than from the Special Tax Revenues and amounts in certain funds established under the Fiscal Agent Agreement as described herein.

Summary of Information. Brief descriptions of certain provisions of the Fiscal Agent Agreement and certain other documents are included herein. The descriptions and summaries of documents herein do not purport to be comprehensive or definitive, and reference is made to

* Preliminary; subject to change.

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each such document for the complete details of all its respective terms and conditions, copies of which are available for inspection at the office of the City. All statements herein with respect to certain rights and remedies are qualified by reference to laws and principles of equity relating to or affecting creditors' rights generally. Capitalized terms used in this Official Statement and not otherwise defined herein have the meanings ascribed to such terms in the Fiscal Agent Agreement. See "APPENDIX C – Summary of Certain Provisions of the Fiscal Agent Agreement." The information and expressions of opinion herein speak only as of the date of this Official Statement and are subject to change without notice. Neither delivery of this Official Statement, any sale made hereunder, nor any future use of this Official Statement shall, under any circumstances, create any implication that there has been no change in the affairs of the City or the District since the date hereof.

FINANCING PLAN

The 2018 Bonds are issued to (i) construct and acquire certain public facilities (or pay fees related to public facilities) authorized for the District (referred to herein as the Facilities); (ii) make a deposit into the debt service reserve fund (the "**Reserve Fund**"); and (iii) pay the costs of issuance of the 2018 Bonds.

A summary of the estimated sources and uses of funds associated with the sale of the 2018 Bonds follows:

Estimated Sources of Funds:

Principal Amount of the 2018 Bonds
Plus/less: Net Original Issue Premium/Discount
Total

Estimated Uses of Funds:

Deposit to 2018 Improvements Account
Deposit to 2018 Bond Reserve Account
Costs of Issuance⁽¹⁾
Total

(1) Includes initial fees, expenses and charges of the Fiscal Agent, costs of printing the preliminary and final Official Statements, administrative fees of the City, Underwriter's discount, fees of Bond Counsel and Disclosure Counsel, and other costs of issuance.

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THE 2018 BONDS

Authority for Issuance

The 2018 Bonds are issued pursuant to the Fiscal Agent Agreement, the Resolution adopted by the City Council on _____, 2018, and the Mello-Roos Act.

The District was established and authorized to incur bonded indebtedness in an aggregate principal amount not to exceed \$20,000,000 at a special election in the District held on October 17, 2005 pursuant to the Mello-Roos Act, which amount was increased to \$35,000,000 at a special election in the District held in 2015. Under the provisions of the Mello-Roos Act, since there were fewer than 12 registered voters residing within the District at any point during the 90-day period preceding the adoption of the City's resolution forming the District on October 17, 2005 (the "**Resolution of Formation**"), the sole qualified elector was the developer/landowner who was entitled to cast one vote for each acre or portion of an acre of land owned within the District. The landowners voted to incur the indebtedness and to approve the annual levy of Special Taxes to be collected within the District, for the purpose of paying for the Facilities, including repaying any indebtedness of the District, replenishing the Reserve Fund and paying the administrative expenses of the District. The 2018 Bonds are the second [[and final series of bonds being issued by the District; Additional Bonds (as defined herein) may be issued in the future for refunding purposes, subject to the conditions set forth in the Fiscal Agent Agreement]]. See "SECURITY FOR THE 2018 BONDS - Additional Bonds."

Description of the 2018 Bonds

The 2018 Bonds are being issued as fully registered bonds, registered in the name of Cede & Co. as nominee of The Depository Trust Company ("**DTC**"), and will be available to ultimate purchasers in the denomination of \$5,000 or any integral multiple thereof, under the book-entry system maintained by DTC. Ultimate purchasers of 2018 Bonds will not receive physical certificates representing their interest in the 2018 Bonds. So long as the 2018 Bonds are registered in the name of Cede & Co., as nominee of DTC, references herein to the Owners shall mean Cede & Co., and shall not mean the ultimate purchasers of the 2018 Bonds. Payments of the principal, premium, if any, and interest on the 2018 Bonds will be made directly to DTC, or its nominee, Cede & Co., by U.S. Bank National Association, as the fiscal agent, registrar and transfer agent (the "**Fiscal Agent**") for the 2018 Bonds, so long as DTC or Cede & Co. is the registered owner of the 2018 Bonds. Disbursements of such payments to DTC's Participants is the responsibility of DTC and disbursements of such payments to the Beneficial Owners is the responsibility of DTC's Participants and Indirect Participants, as more fully described herein. See "APPENDIX G - DTC and the Book-Entry Only System."

The 2018 Bonds will be dated as of and bear interest from the date of delivery thereof at the rates and mature in the amounts and years, as set forth on the cover page hereof. The principal of the 2018 Bonds and premiums due upon the redemption thereof, if any, will be payable in lawful money of the United States of America at the principal corporate trust office of the Fiscal Agent in Seattle, Washington, or such other place as designated by the Fiscal Agent, upon presentation and surrender of the 2018 Bonds.

Interest on the 2018 Bonds, computed on the basis of a 360-day year consisting of twelve 30-day months, will be paid in lawful money of the United States of America semiannually on March 1 and September 1 of each year (each an "**Interest Payment Date**"), commencing September 1, 2018. Interest on the 2018 Bonds (including the final interest

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payment upon maturity or earlier redemption) is payable by check of the Fiscal Agent mailed on each Interest Payment Date by first class mail to the registered Owner thereof at such registered Owner's address as it appears on the registration books maintained by the Fiscal Agent at the close of business on the 15th day of the calendar month preceding the Interest Payment Date (the "**Record Date**"), or by wire transfer made on such Interest Payment Date upon written instructions received by the Fiscal Agent on or before the Record Date preceding the Interest Payment Date, of any Owner of \$1,000,000 or more in aggregate principal amount of 2018 Bonds; provided that so long as any 2018 Bonds are in book-entry form, payments with respect to such 2018 Bonds shall be made by wire transfer, or such other method acceptable by the Fiscal Agent, to DTC. See "APPENDIX G – DTC and the Book-Entry Only System."

Each 2018 Bond shall bear interest from the Interest Payment Date next preceding the date of authentication thereof unless (i) it is authenticated on an Interest Payment Date, in which event it shall bear interest from such date of authentication, or (ii) it is authenticated prior to an Interest Payment Date and after the close of business on the Record Date preceding such Interest Payment Date, in which event it shall bear interest from such Interest Payment Date, or (iii) it is authenticated prior to the Record Date preceding the first Interest Payment Date, in which event it shall bear interest from the dated date; provided, however, that if at the time of authentication of a 2018 Bond, interest is in default thereon, such 2018 Bond shall bear interest from the Interest Payment Date to which interest has previously been paid or made available for payment thereon. So long as the 2018 Bonds are registered in the name of Cede & Co., as nominee of DTC, payments of the principal, premium, if any, and interest on the 2018 Bonds will be made directly to DTC, or its nominee, Cede & Co. Disbursements of such payments to DTC's Participants is the responsibility of DTC and disbursements of such payments to the Beneficial Owners is the responsibility of DTC's Participants and Indirect Participants, as more fully described herein. See "APPENDIX G - DTC and the Book-Entry Only System."

Redemption*

Optional Redemption. The 2018 Bonds maturing on or before September 1, 20__ are not subject to optional redemption prior to their respective maturity dates. The 2018 Bonds maturing on or after September 1, 20__ may be redeemed prior to maturity at the option of the City from any source of available funds, as a whole or in part, on any date on or after September 1, 20__, at a redemption price equal to the principal amount of the 2018 Bonds called for redemption, together with accrued interest to the date fixed for redemption, without premium.

Mandatory Redemption from Prepayments. The 2018 Bonds are subject to mandatory redemption from prepayments of the Special Tax by property owners, in whole or in part among maturities as shall be specified by the City and by lot within a maturity, on any Interest Payment Date at the following respective redemption prices (expressed as percentages of the principal amount of the 2018 Bonds to be redeemed), plus accrued interest thereon to the date of redemption:

<u>Redemption Dates</u>	<u>Redemption Price</u>
March 1, 20__ through and including March 1, 20__	
September 1, 20__ and March 1, 20__	
September 1, 20__ and March 1, 20__	
September 1, 20__ and any Interest Payment Date thereafter	

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Mandatory Sinking Fund Redemption. The 2018 Bonds maturing September 1, 20__ and September 1, 20__ (the “**Term Bonds**”) are subject to mandatory sinking payment redemption in part on September 1, 20__ and September 1, 20__, and on each September 1 thereafter to maturity, by lot, at a redemption price equal to one hundred percent (100%) of the principal amount thereof to be redeemed, without premium, in the aggregate respective principal amounts as set forth in the following tables:

September 1, 20__ Term Bonds

Mandatory Redemption Date (September 1)	Sinking Fund Payment
--	---------------------------------

September 1, 20__ Term Bonds

Mandatory Redemption Date (September 1)	Sinking Fund Payment
--	---------------------------------

The amounts in the foregoing table shall be reduced pro rata, in order to maintain substantially uniform debt service, as a result of any prior partial optional redemption or mandatory redemption of the 2018 Bonds.

In lieu of redemption, moneys in the Bond Fund may be used and withdrawn by the Fiscal Agent for purchase of Outstanding 2018 Bonds, upon the filing with the Fiscal Agent of an Officer's Certificate requesting such purchase, at public or private sale as and when, and at such prices (including brokerage and other charges) as such Officer's Certificate may provide, but in no event may 2018 Bonds be purchased at a price in excess of the principal amount thereof, plus interest accrued to the date of purchase.

Redemption Procedure by Fiscal Agent. The Fiscal Agent shall cause notice of any redemption to be mailed by first class mail, postage prepaid, at least 30 days but not more than 60 days prior to the date fixed for redemption, to the Securities Depositories and to one or more Information Services, and to the respective registered Owners of any 2018 Bonds designated for redemption, at their addresses appearing on the 2018 Bond registration books in the Principal Office of the Fiscal Agent; but such mailing shall not be a condition precedent to such redemption and failure to mail or to receive any such notice, or any defect therein, shall not affect the validity of the proceedings for the redemption of such 2018 Bonds.

Such notice shall state the redemption date and the redemption price and, if less than all of the then Outstanding 2018 Bonds are to be called for redemption, shall designate the CUSIP numbers and bond numbers of the 2018 Bonds to be redeemed by giving the individual CUSIP number and number of each 2018 Bond to be redeemed or shall state that all 2018 Bonds between two stated numbers, both inclusive, are to be redeemed or that all of the 2018 Bonds of one or more maturities have been called for redemption, shall state as to any 2018 Bond called in part the principal amount thereof to be redeemed, and shall require that such 2018

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Bonds be then surrendered at the Principal Office of the Fiscal Agent for redemption at the said redemption price, and shall state that further interest on such 2018 Bonds will not accrue from and after the redemption date.

The City has the right to rescind any notice of the redemption of 2018 Bonds. Any notice of redemption shall be cancelled and annulled if for any reason funds will not be or are not available on the date fixed for redemption for the payment in full of the 2018 Bonds then called for redemption, and such cancellation shall not constitute an event of default.

Upon the payment of the redemption price of 2018 Bonds being redeemed, each check or other transfer of funds issued for such purpose shall, to the extent practicable, bear the CUSIP number identifying, by issue and maturity, the 2018 Bonds being redeemed with the proceeds of such check or other transfer.

Whenever provision is made in the Fiscal Agent Agreement for the redemption of less than all of the 2018 Bonds of any maturity, the Fiscal Agent shall select the 2018 Bonds to be redeemed, from all 2018 Bonds or such given portion thereof of such maturity by lot in any manner which the Fiscal Agent in its sole discretion shall deem appropriate. Upon surrender of 2018 Bonds redeemed in part only, the City shall execute and the Fiscal Agent shall authenticate and deliver to the registered Owner, at the expense of the City, a new 2018 Bond or 2018 Bonds, of the same series and maturity, of authorized denominations in aggregate principal amount equal to the unredeemed portion of the 2018 Bond or 2018 Bonds.

Effect of Redemption. From and after the date fixed for redemption, if funds available for the payment of the principal of, and interest and any premium on, the 2018 Bonds so called for redemption shall have been deposited in the Bond Fund, such 2018 Bonds so called shall cease to be entitled to any benefit under the Fiscal Agent Agreement other than the right to receive payment of the redemption price, and no interest shall accrue thereon on or after the redemption date specified in such notice.

Transfer or Exchange of 2018 Bonds

So long as the 2018 Bonds are registered in the name of Cede & Co., as nominee of DTC, transfers and exchanges of 2018 Bonds shall be made in accordance with DTC procedures. See APPENDIX G. Any 2018 Bond may, in accordance with its terms, be transferred or exchanged by the person in whose name it is registered, in person or by his duly authorized attorney, upon surrender of such 2018 Bond for cancellation, accompanied by delivery of a duly written instrument of transfer in a form approved by the Fiscal Agent. Whenever any 2018 Bond or 2018 Bonds shall be surrendered for transfer or exchange, the City shall execute and the Fiscal Agent shall authenticate and deliver a new 2018 Bond or 2018 Bonds, for a like aggregate principal amount of 2018 Bonds of authorized denominations and of the same maturity. The cost for any services rendered or any expenses incurred by the Fiscal Agent in connection with any such transfer or exchange shall be paid by the City. The Fiscal Agent shall collect from the Owner requesting such transfer any tax or other governmental charge required to be paid with respect to such transfer or exchange.

No transfers or exchanges of 2018 Bonds shall be required to be made (i) within 15 days prior to the date established by the Fiscal Agent for selection of 2018 Bonds for redemption or (ii) with respect to a 2018 Bond after such 2018 Bond has been selected for redemption.

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SECURITY FOR THE 2018 BONDS

The 2018 Bonds are secured, on a parity basis with the 2015 Bonds and any other Parity Bonds, by and payable from a first pledge of the proceeds of the **“Special Tax Revenues,”** defined in the Fiscal Agent Agreement as the proceeds of the Facilities Special Tax (as defined in the Special Tax Formula) received by the City, net of the Administrative Expenses Cap, including any scheduled payments and prepayments thereof, interest and proceeds of the redemption or sale of property sold as a result of foreclosure of the lien of the Special Taxes to the amount of said interest, but shall not include any interest in excess of the interest due on the 2018 Bonds or any penalties collected in connection with any such foreclosure. **“Administrative Expenses Cap”** means (i) for fiscal year 2015-16, \$50,000, and (ii) for each subsequent year, an amount equal to the preceding fiscal year’s Administrative Expenses Cap plus an additional 2% of such amount.

The Special Tax Revenues and all moneys deposited into said funds are pledged to the payment of the principal of, and interest and any premium on, the 2018 Bonds as provided in the Fiscal Agent Agreement and in the Mello-Roos Act until all of the 2018 Bonds have been paid and retired or until moneys or Federal Securities (as defined in the Fiscal Agent Agreement) have been set aside irrevocably for that purpose. Property in the District is also subject to a special tax levy component attributable to services provided to property in the District, which is referred to as the “Services Special Tax” in the Special Tax Formula and is not pledged to or available for payment of the 2018 Bonds.

Amounts in the 2018 Costs of Issuance Fund and the 2018 Improvements Account of the Improvement Fund established under the Fiscal Agent Agreement are not pledged to the repayment of the 2018 Bonds. The Facilities are not in any way pledged to pay the debt service on the 2018 Bonds. Any proceeds of condemnation, destruction or other disposition of any Facilities are not pledged to pay the debt service on the 2018 Bonds and are free and clear of any lien or obligation imposed under the Fiscal Agent Agreement.

Special Taxes

A Special Tax applicable to each taxable parcel in the District will be levied and collected according to the tax liability determined by the City through the application of the Special Tax Formula prepared by Goodwin Consulting Group, Inc., Sacramento, California (the **“Special Tax Consultant”**) and set forth in APPENDIX A hereto, for all taxable properties in the District. Interest and principal on the 2018 Bonds is payable from the annual Special Taxes to be levied and collected on such property within the District, from amounts held in certain funds and accounts established under the Fiscal Agent Agreement and from the proceeds, if any, from the sale of such property for delinquency of such Special Taxes.

The Special Taxes are exempt from the property tax limitation of Article XIII A of the California Constitution, pursuant to Section 4 thereof as a “special tax” authorized by a two-thirds vote of the qualified electors. The levy of the Special Taxes was authorized by the City pursuant to the Mello-Roos Act in a maximum amount determined according to the Special Tax Formula approved by the City. See “Special Tax Formula” below and “APPENDIX A - Rate and Method of Apportionment of Special Tax.”

The amount of Special Taxes that the District may levy in any year, from which principal and interest on the 2018 Bonds is to be paid, is limited by the maximum rates approved by the qualified electors within the District which are set forth as the **“Maximum Facilities Special**

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Tax” in the Special Tax Formula. Under the Special Tax Formula, Facilities Special Taxes for the purpose of making payments on the 2018 Bonds will be levied annually in an amount not in excess of the Maximum Facilities Special Tax. The Facilities Special Taxes and any interest earned on the Facilities Special Taxes shall constitute a trust fund for the principal of and interest on the 2018 Bonds pursuant to the Fiscal Agent Agreement and, so long as the amount levied for principal of and interest on these obligations remains unpaid, the Facilities Special Taxes and investment earnings thereon shall not be used for any other purpose, except as permitted by the Fiscal Agent Agreement, and shall be held in trust for the benefit of the owners thereof and shall be applied pursuant to the Fiscal Agent Agreement. Property in the District, other than Final Map Property and Undeveloped Property (as defined in the Special Tax Formula), is also subject to a Maximum Services Special Tax for services provided to property in the District, which is not pledged to or available for payment of the 2018 Bonds. The Special Tax Formula apportions the Facilities Special Tax Requirement and the Services Special Tax Requirement (as defined in the Special Tax Formula and described below) among the taxable parcels of real property within the District according to the rate and methodology set forth in the Special Tax Formula. See “Special Tax Formula” below. See also “APPENDIX A - Rate and Method of Apportionment of Special Tax.”

The City may levy the Special Tax at the Maximum Facilities Special Tax rate authorized by the qualified electors within the District as set forth in the Special Tax Formula if conditions so require and the City has covenanted to annually levy the Special Taxes in an amount at least sufficient to pay the Facilities Special Tax Requirement (as defined below). Because each Special Tax levy for payment of the 2018 Bonds is limited to the Maximum Facilities Special Tax rates authorized as set forth in the Special Tax Formula, no assurance can be given that, in the event of Special Tax delinquencies, the amount of the Facilities Special Tax Requirement will in fact be collected in any given year. See “BOND OWNERS’ RISKS - Collection of Special Taxes” herein. The Special Taxes are collected for the City by the County in the same manner and at the same time as *ad valorem* property taxes.

In addition to the Maximum Facilities Special Tax rate limitation in the Special Tax Formula, Section 53321(d) of the Mello-Roos Act provides that the special tax levied against any parcel for which an occupancy permit for private residential use has been issued may not be increased as a consequence of delinquency or default by the owner of any other parcel within a community facilities district by more than 10% above the amount that would have been levied in such fiscal year had there never been any such delinquencies or defaults.

The authorized levy of a special tax levy attributable to services provided to property in the District, referred to as the “Services Special Tax” in the Special Tax Formula, may be levied up to the “Maximum Service Special Tax” rate described in the Special Tax Formula. The Services Special Tax is not pledged to or available for payment of the 2018 Bonds.

Special Tax Formula

The Special Tax authorized under the Mello-Roos Act applicable to land within the District will be levied and collected according to the tax liability determined by the City through the application of the appropriate amount or rate as described in the Special Tax Formula (defined terms set forth below in this section have the meanings set forth in the Special Tax Formula) set forth in “APPENDIX A - Rate and Method of Apportionment of Special Tax.” The Special Tax will be levied each year from parcels within the District in an amount at least sufficient to pay debt service on outstanding Bonds and administrative expenses of the District. The Special Tax is expected to be collected at the same time and in the same manner as *ad*

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valorem property taxes. The City reserves the right to collect the taxes in another manner if required to meet annual obligations of the District.

Each year, the City will determine the Facilities Special Tax Requirement of the District for the upcoming fiscal year. The “**Facilities Special Tax Requirement**” is defined in the Special Tax Formula as the amount necessary in any fiscal year (i) to pay principal and interest on Bonds which are due in the calendar year which begins in such fiscal year, (ii) to create or replenish reserve funds to the extent such replenishment was not included in the computation of Facilities Special Tax Requirement in a previous fiscal year, (iii) to cure any delinquencies in the payment of principal or interest on Bonds which have occurred in the prior fiscal year, (iv) to pay Administrative Expenses that have not been included in the Services Special Tax Requirement, and (v) to pay a portion of the costs, as determined by the City, of Authorized Facilities. The Facilities Special Tax Requirement may be reduced in any fiscal year by (i) interest earnings on, or surplus balances in, funds and accounts for the Bonds to the extent that such earnings or balances are available to apply against debt service pursuant to the Indenture, Bond resolution, or other legal document that set forth these terms, (ii) Capitalized Interest, (iii) proceeds from the collection of penalties associated with delinquent Special Taxes, and (iv) any other revenues available to pay debt service on the Bonds as determined by the Administrator.

The City will also levy the “**Services Special Tax**” (as defined in the Special Tax Formula) on each parcel of Developed Property, which tax is authorized to be used for police services of benefit to property in the District. The Maximum Services Special Tax for Developed Property in Fiscal Year 2017-18 is \$346.26 per Residential Unit and, for Non-Residential Property, \$0.02077 per square foot of gross Parcel area. These amounts shall, on each July 1, commencing on July 1, 2015, be escalated by the increase, if any, in the United States Department of Labor Consumer Price Index (the “**CPI**”) for the San Francisco- Oakland-San Jose Area for All Urban Consumers. The CPI used shall be as determined by the Bureau of Labor Statistics from April to April, beginning with the period from April 2014 to April 2015. The Services Special Tax is not pledged to or available for payment of the 2018 Bonds.

Parcels Subject to the Special Tax. The City will prepare a list of the parcels subject to the Special Tax using the records of the City and the County Assessor. The City has the authorization to tax all parcels within the District except tax-exempt parcels as described in the Special Tax Formula. Taxable parcels that are acquired by a public agency after the District is formed will remain subject to the Special Tax unless a “trade” resulting in no loss of Special Tax revenue can be made, as described in the Special Tax Formula.

Assignment of Maximum Facilities Special Tax. *Defined terms in this subsection have the meaning ascribed to them in the Special Tax Formula.* The Special Tax Formula describes in detail the precise method for assigning the Maximum Facilities Special Tax to parcels within the District, which generally provides that each year the City will use the definitions contained in the Special Tax Formula to classify each parcel as tax-exempt or taxable.

On or about July 1 of each Fiscal Year, the City shall identify the current Assessor’s Parcel numbers for all Parcels of Taxable Property. The City shall also determine: (i) whether each Assessor’s Parcel of Taxable Property is Developed Property, Final Map Property or Undeveloped Property, (ii) the Zoning Designation for each Parcel of Final Map Property and Developed Property, and (iii) the Facilities Special Tax Requirement and Services Special Tax Requirement. In addition, the City shall, on an ongoing basis, monitor whether changes in land use have been proposed that will affect the Expected Maximum Facilities Special Tax

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Revenues. If the Expected Maximum Facilities Special Tax Revenues will be reduced pursuant to a proposed land use change, the City shall apply the steps set forth in the Special Tax Formula. In any Fiscal Year, if it is determined that (i) a parcel map for a portion of property in the District was recorded after January 1 of the prior Fiscal Year (or any other date after which the Assessor will not incorporate the newly-created Parcels into the then current tax roll), (ii) because of the date the parcel map was recorded, the Assessor does not yet recognize the new Parcels created by the parcel map, and (iii) one or more of the newly-created Parcels meets the definition of Developed Property, the City shall calculate the Special Taxes for the property affected by recordation of the parcel map by determining the Special Taxes that applies separately to each newly-created Parcel, then applying the sum of the individual Special Tax to the Parcel that was subdivided by recordation of the parcel map.

Once the Special Tax Requirement has been determined for a particular fiscal year, the Special Tax will be levied according to the following steps:

(1) If, in any Fiscal Year, the City determines that there are Authorized Facilities that have not yet been funded, the Maximum Facilities Special Tax may be levied on all Parcels of Developed Property. If all Authorized Facilities have been funded, the Special Tax shall be levied Proportionately on each Parcel of Developed Property up to 100% of the Maximum Facilities Special Tax for each Parcel.

(2) If additional revenue is needed after Step 1 in order to meet the Facilities Special Tax Requirement after Capitalized Interest has been applied to reduce the Facilities Special Tax Requirement, the Facilities Special Tax shall be levied Proportionately on each Parcel of Final Map Property up to 100% of the Maximum Facilities Special Tax for each Parcel.

(3) If additional revenue is needed after Step 2 in order to meet the Facilities Special Tax Requirement after Capitalized Interest has been applied to reduce the Facilities Special Tax Requirement, the Facilities Special Tax shall be levied Proportionately on each Parcel of Undeveloped Property up to 100% of the Maximum Facilities Special Tax for each Parcel.

(4) If additional revenue is needed after Step 3, the Facilities Special Tax shall be levied Proportionately on each Parcel of Public Property, exclusive of property exempt from the Special Tax pursuant to Section G below, up to 100% of the Maximum Facilities Special Tax for each.

The City and the Master Developer have agreed in the Acquisition Agreement that the City will levy and collect the Maximum Facilities Special Tax against all taxable properties and annually pay the Master Developer, after September 1st of each year, payments of excess Maximum Facilities Special Taxes collected for the earlier of a period of ten years commencing from the first year the Special Tax was levied in the District or the date when the Master Developer has been reimbursed in full for costs of the Facilities paid by the Master Developer.

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The following table shows the Maximum Facilities Special Tax for Fiscal Year 2018-19, calculated as set forth in the Facilities Special Tax Formula.

Development Status	Land Use	Zoning Designation	FY 2018-19 Maximum Facilities Special Tax ⁽¹⁾
Developed and Final Map Property	Single-Family Detached Property	LDR/RD-5	\$1,953.34 per SFD Lot
	Single-Family Detached Property	LDR/RD-7	\$1,785.18 per SFD Lot
	Single-Family Detached Property	LDR/RD-10	\$1,177.18 per SFD Lot
	Other Taxable Residential Property	All Others	\$12,547.99 per Acre
	Non-Residential Property	All Commercial and Industrial Designations	\$12,547.99 per Acre
Undeveloped Property	N/A	N/A	\$12,547.99 per Acre

(1) On each July 1, the Maximum Facilities Special Taxes increases by two percent of the amount in effect in the previous fiscal year.
Source: Goodwin Consulting Group, Inc.

In addition to the Maximum Facilities Special Tax rate limitation in the Special Tax Formula, Section 53321(d) of the Mello-Roos Act provides that the special tax levied against any parcel for which an occupancy permit for private residential use has been issued may not be increased as a consequence of delinquency or default by the owner of any other parcel within a community facilities district by more than 10% above the amount that would have been levied in such fiscal year had there never been any such delinquencies or defaults.

Termination of the Facilities Special Tax. The Facilities Special Tax will be levied until all Bonds have been repaid and all authorized facilities have been funded; however, Facilities Special Taxes (other than the Services Special Tax) cannot be levied under any circumstance after fiscal year 2055-56.

Prepayment of the Facilities Special Tax. The Facilities Special Tax obligation assigned to a particular parcel within the District can be prepaid, which will release the parcel making the prepayment from the Mello-Roos special tax lien. Section H of the Facilities Special Tax Formula sets forth a detailed formula by which the prepayment for a parcel can be calculated. Proceeds of such prepayment will be used to redeem a portion of the Bonds. See "THE 2018 BONDS - Redemption."

Special Tax Fund

When received, the Special Tax Revenues are required under the Fiscal Agent Agreement to be deposited into a Special Tax Fund to be held by the City in trust for the benefit of the City and the Owners of the 2018 Bonds. Within the Special Tax Fund, the City will establish and maintain two accounts, (i) the Debt Service Account, to the credit of which the City will deposit, immediately upon receipt, all Special Tax Revenue, and (ii) the Surplus Account, to the credit of which the City will deposit surplus Special Tax Revenue as described below. Moneys in the Special Tax Fund will be disbursed as provided below and, pending any disbursement, will be subject to a lien in favor of the Owners of the 2018 Bonds. From time to time, the City may withdraw from the Debt Service Account or the Surplus Account of the Special Tax Fund amounts needed to pay the City administrative expenses; provided that such transfers will not be in excess of the portion of the Special Tax Revenues collected by the City that represent levies for administrative expenses.

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All Special Tax Revenue will be deposited in the Debt Service Account upon receipt. No later than 10 Business Days prior to each Interest Payment Date, the City will withdraw from the Debt Service Account of the Special Tax Fund and transfer (i) to the Fiscal Agent for deposit in the Reserve Fund, an amount which when added to the amount then on deposit therein, is equal to the Reserve Requirement, and (ii) to the Fiscal Agent for deposit in the Bond Fund an amount, taking into account any amounts then on deposit in the Bond Fund, such that the amount in the Bond Fund equals the principal, premium, if any, and interest due on the Bonds on the next Interest Payment Date. At such time as deposits to the Debt Service Account equal the principal, premium if any, and interest becoming due on the Bonds for the current Bond Year and the amount needed to restore the balance of the Reserve Fund to the Reserve Requirement, the amount in the Debt Service Account in excess of such amount may, at the discretion of the City, be transferred to the Surplus Account, which will occur on or after September 15th of each year.

Moneys in the Surplus Account may, at the City's discretion, be transferred to the Improvement Fund to pay for costs of the Facilities, to pay the principal of, premium, if any, and interest on the Bonds or to replenish the Reserve Fund to the amount of the Reserve Requirement, but are not pledged to payment of the Bonds. See "Assignment of Maximum Facilities Special Tax" above."

Deposit and Use of Proceeds of 2018 Bonds

The 2018 Bonds are additionally secured by amounts generated from proceeds of the 2018 Bonds, together with interest earnings thereon pledged under the Fiscal Agent Agreement. The proceeds of the initial purchase of the 2018 Bonds shall be paid to the Fiscal Agent, who shall deposit such proceeds in the 2018 Costs of Issuance Fund, the 2018 Improvements Account of the Improvement Fund, and the 2018 Bond Reserve Account of the Reserve Fund established under the Fiscal Agent Agreement. See APPENDIX C for information on use of the moneys, including investment earnings thereon, in the various funds established under the Fiscal Agent Agreement. See also "- Reserve Fund" and "-Improvement Fund" below.

Delinquent Payments of Special Tax; Covenant for Superior Court Foreclosure

The Special Tax will be collected in the same manner and the same time as *ad valorem* property taxes, except at the City's option, the Special Taxes may be billed directly to property owners. In the event of a delinquency in the payment of any installment of Special Taxes, the City is authorized by the Mello-Roos Act to order institution of an action in superior court to foreclose the lien therefore.

The City has covenanted in the Fiscal Agent Agreement with and for the benefit of the Owners of the 2018 Bonds that it will annually on or before September 1 of each year review the public records of the County relating to the collection of the Special Tax in order to determine the amount of the Special Tax collected in the prior fiscal year, and if the City determines on the basis of such review that the amount so collected is deficient by more than five percent (5%) of the total amount of the Special Tax levied in such fiscal year, it will within thirty (30) days thereafter institute foreclosure proceedings as authorized by the Mello-Roos Act in order to enforce the lien of the delinquent installment of the Special Tax against each separate lot or parcel of land in the District for which such installment of the Special Tax is delinquent, and will diligently prosecute and pursue such foreclosure proceedings to judgment and sale; *provided*,

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that if the City determines on the basis of such review that (a) the amount so collected is deficient by less than 5% of the total amount of the Special Tax levied in the District in such fiscal year, but that property owned by any single property owner in the District is delinquent by more than \$5,000 with respect to the Special Tax due and payable by such property owner in such fiscal year, or (b) that property owned by any single property owner in the District is delinquent cumulatively by more than \$3,000 with respect to the current and past Special Tax due (irrespective of the total delinquencies in the District) then the City will institute, prosecute and pursue such foreclosure proceedings in the time and manner provided in the Fiscal Agent Agreement against each such property owner.

Under the Mello-Roos Act, foreclosure proceedings are instituted by the bringing of an action in the superior court of the county in which the parcel lies, naming the owner and other interested persons as defendants. The action is prosecuted in the same manner as other civil actions. In such action, the real property subject to the special taxes may be sold at a judicial foreclosure sale for a minimum price which will be sufficient to pay or reimburse the delinquent Special Taxes.

The owners of the 2018 Bonds benefit from the Reserve Fund established pursuant to the Fiscal Agent Agreement; however, if delinquencies in the payment of the Special Taxes with respect to the 2018 Bonds are significant enough to completely deplete the Reserve Fund, there could be a default or a delay in payments of principal and interest to the owners of the 2018 Bonds pending prosecution of foreclosure proceedings and receipt by the City of the proceeds of foreclosure sales. Additionally, it is possible that no bids are received at a foreclosure sale. Provided that it is not levying the Special Tax at the Maximum Facilities Special Tax rates set forth in the Special Tax Formula, the City may adjust the Facilities Special Taxes levied on all property within the District subject to the Facilities Special Tax to provide an amount required to pay debt service on the 2018 Bonds and to replenish the Reserve Fund, provided however such adjustment may not exceed the Maximum Facilities Special Tax or include an increase as a consequence of delinquency or default by the owner of any other parcel within a community facilities district by more than 10% above the amount that would have been levied in such fiscal year had there never been any such delinquencies or defaults.

Under current law, a judgment debtor (property owner) has at least 140 days from the date of service of the notice of levy in which to redeem the property to be sold. If a judgment debtor fails to redeem and the property is sold, his or her only remedy is an action to set aside the sale, which must be brought within 90 days of the date of sale. If, as a result of such an action a foreclosure sale is set aside, the judgment is revived and the judgment creditor is entitled to interest on the revived judgment as if the sale had not been made (California Code of Civil Procedure Section 701.680).

Foreclosure by court action is subject to normal litigation delays, the nature and extent of which are largely dependent upon the nature of the defense, if any, put forth by the debtor and the condition of the calendar of the superior court of the county. Such foreclosure actions can be stayed by the superior court on generally accepted equitable grounds or as the result of the debtor's filing for relief under the Federal bankruptcy laws. The Mello-Roos Act provides that, upon foreclosure, the Special Tax lien will have the same lien priority as is provided for *ad valorem* taxes and special assessments. See "APPRAISAL OF PROPERTY WITH THE DISTRICT - Priority of Lien."

Teeter Plan. In 1949, the California Legislature enacted an alternative method for the distribution of property taxes to local agencies. This method, known as the "Teeter Plan," is

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found in Sections 4701-4717 of the California Revenue and Taxation Code. Upon adoption and implementation of this method by a county board of supervisors, local agencies for which the county collects property taxes and certain other public agencies and taxing areas located in the county receive annually the full amount of their shares of property taxes and other impositions collected on the secured roll, including delinquent property taxes which have yet to be collected. While the county bears the risk of loss on unpaid delinquent taxes, it retains the penalties associated with delinquent taxes when they are paid. In turn, the Teeter Plan provides participating local agencies with stable cash flow and the elimination of collection risk.

The Board of Supervisors of Sacramento County has adopted the Teeter Plan, and the County elects to apply its Teeter Plan to the collection of the Special Taxes annually. As such, the Teeter Plan has been applicable since the initial year of a Special Tax levy, but no assurance can be given that it will continue in any or all of the years that the 2018 Bonds are outstanding. To the extent that the County's Teeter Plan continues in existence and is carried out as adopted, and to the extent the County does not discontinue the Teeter Plan with respect to the City or the District, the County's Teeter Plan may help protect owners of the 2018 Bonds from the risk of delinquencies in the payment of Special Taxes. *However, there can be no assurance that the County will not modify or eliminate its Teeter Plan, or choose to remove the District from its Teeter Plan permanently in any year while the 2018 Bonds are outstanding.*

Once adopted, a county's Teeter Plan will remain in effect in perpetuity unless the board of supervisors orders its discontinuance or unless, prior to the commencement of a fiscal year, a petition for discontinuance is received and joined in by resolutions of the governing bodies of not less than two-thirds of the participating districts in the county. An electing county may, however, decide to discontinue the Teeter Plan with respect to any levying agency in the county if the board of supervisors, by action taken not later than July 15 of a fiscal year, elects to discontinue the procedure with respect to such levying agency and the rate of secured tax delinquencies in that agency in any year exceeds 3% of the total of all taxes and assessments levied on the secured roll by that agency.

Reserve Fund

Under the Fiscal Agent Agreement, the Fiscal Agent established the Reserve Fund, (the "**Reserve Fund**"), which is available for payment of the 2018 Bonds (and other Bonds, including the Parity Bonds) in the event of delinquencies in the payment of the Special Taxes to the extent of such delinquencies.

The City is required to maintain on deposit in the Reserve Fund an amount, when combined with amounts previously deposited therein, that is equal to the at all times that the Bonds are outstanding. The "**Reserve Requirement**" is defined as an amount equal to the lesser of (a) Maximum Annual Debt Service on the Outstanding Bonds, (b) 125% of average annual Debt Service, or (c) ten percent (10%) of the original principal amount of the Bonds.

On the date of delivery of the 2018 Bonds, the Fiscal Agent will establish within the Reserve Fund a subaccount designated as the "**2018 Bond Reserve Account**" and will deposit an amount of proceeds into the 2018 Bond Reserve Account so that the amount therein, when combined with the existing parity Reserve Fund balance, equals the Reserve Requirement.

All amounts deposited in the Reserve Fund will be used and withdrawn by the Fiscal Agent, on a pro-rata basis among all series of Bonds, solely for the purpose of making transfers to the Bond Fund in the event of any deficiency at any time in the Bond Fund of the amount then

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required for payment of the principal of, and interest on, the Bonds. Whenever a transfer is made from the Reserve Fund to the Bond Fund due to a deficiency in the Bond Fund, the Fiscal Agent will provide written notice thereof to the City. If there are additional delinquencies after depletion of funds in the Reserve Fund, the City is not obligated to pay the Bonds or supplement the Reserve Fund. The Reserve Fund will be increased from proceeds of any Additional Bonds (as defined on the following page) and be available on a parity basis with any Additional Bonds, for payment of the Bonds and such Additional Bonds.

Whenever, on the Business Day prior to any Interest Payment Date, the amount in the Reserve Fund exceeds the then applicable Reserve Requirement, the Fiscal Agent will transfer an amount equal to the excess from the Reserve Fund to the Bond Fund or the Improvement Fund as provided below, except that investment earnings on amounts in the Reserve Fund may be withdrawn from the Reserve Fund for purposes of making payment to the Federal government to comply with rebate requirements.

Moneys in the Reserve Fund will be invested and deposited in accordance with the Fiscal Agent Agreement. Interest earnings and profits resulting from the investment of moneys in the Reserve Fund and other moneys in the Reserve Fund will remain therein until the balance exceeds the Reserve Requirement; any amounts in excess of the Reserve Requirement will be transferred to the Improvement Fund, if the Facilities have not been completed, or if the Facilities have been completed, to the Bond Fund to be used for the payment of the principal of and interest on the Bonds in accordance with the Fiscal Agent Agreement.

The City has the right at any time to cause the Fiscal Agent to release funds from the Reserve Fund, in whole or in part, by tendering to the Fiscal Agent an irrevocable standby or direct-pay letter of credit or surety bond issued by a commercial bank or insurance company (a **"Qualified Reserve Fund Credit Instrument"**), provided certain conditions are met, including that the long-term credit rating of such bank or insurance company is rated "AA" or higher by S&P or Moody's.

Whenever the balance in the Reserve Fund exceeds the amount required to redeem or pay the Outstanding Bonds, including interest accrued to the date of payment or redemption and premium, if any, due upon redemption, and make any other transfer required under the Fiscal Agent Agreement, the Fiscal Agent will transfer the amount in the Reserve Fund to the Bond Fund to be applied, on the next succeeding Interest Payment Date, to the payment and redemption of all of the Outstanding Bonds. If the amount so transferred from the Reserve Fund to the Bond Fund exceeds the amount required to pay and redeem the Outstanding Bonds, the balance in the Reserve Fund will be transferred to the City, after payment of any amounts due the Fiscal Agent, to be used for any lawful purpose of the City.

Improvement Fund

Under the Fiscal Agent Agreement, the Fiscal Agent established an Improvement Fund, which is held and withdrawn by the Fiscal Agent to pay the costs of the Facilities. On the date of delivery of the 2018 Bonds, the Fiscal Agent will establish within the Improvement Fund a subaccount designated as the **"2018 Improvements Account."** Disbursements from the 2018 Improvements Account will be made by the Fiscal Agent in accordance with written requests of the City.

Before any payment from the Improvement Fund shall be made, the City shall file or cause to be filed with the Fiscal Agent a written request of the City for disbursement of moneys

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from such fund. Such withdrawals shall be implemented by the City pursuant to the terms and requirements of the Acquisition Agreement (described below). The Fiscal Agent need not make any such payment if it has received notice of any lien, right to lien or attachment upon, or claim affecting the right to receive payment of, any of the moneys to be so paid, that has not been released or will not be released simultaneously with such payment. The Fiscal Agent shall not incur any liability for any disbursement from the Improvement Fund made in reliance upon any requisition. When the City determines that all of the costs of the Facilities to be financed with proceeds of the Bonds have been paid, the City shall provide written notification of such determination to the Fiscal Agent and direct the Fiscal Agent to transfer any remaining balance in any Improvement Fund into the Bond Fund. See "THE FACILITIES - Acquisition by the City."

Additional Bonds

No Additional Parity Bonds Except for Refunding Purposes. The District is authorized to issue up to \$35 million of bonds (not including refunding bonds), of which the 2018 Bonds represent the second and final series. In addition to the 2018 Bonds and Parity Bonds, the City may authorize the issuance of one or more additional series of bonds ("**Additional Bonds**") payable from Special Taxes and secured by the Special Taxes upon compliance by the City with the conditions set forth in the Fiscal Agent Agreement, so long as the Additional Bonds are issued for the purpose of refunding all or a portion of the Bonds.

Subordinate Bonds. The District may issue bonds that are junior and subordinate to the payment of the principal, premium, interest, and Reserve Fund Requirements for the Bonds and which subordinated obligations are payable as to principal, premium, interest, and reserve fund requirements, if any, from Special Taxes only after the prior payment of all amounts then required to be paid from Special Taxes for principal, premium, interest and reserve fund requirements for the bonds, as the same become due and payable and at the times and in the manner as required in the Fiscal Agent Agreement.

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DEBT SERVICE SCHEDULES

The annual debt service on the 2018 Bonds based on the interest rates and maturity schedule set forth on the cover of this Official Statement is set forth below (assuming no early redemptions).

**Sunridge North Douglas Community Facilities District No. 2005-1
Special Tax Bonds Series 2018
Debt Service**

Period Ending Sept. 1	2018 Bonds Principal	2018 Bonds Interest	2018 Bonds Total Debt Service
Total			

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The combined annual debt service schedule for the 2018 Bonds and the Parity Bonds is shown below.

**Sunridge North Douglas Community Facilities District No. 2005-1
Debt Service Schedule for the 2018 Bonds and Parity Bonds**

Bond Year Ending (Sept. 1)	2018 Bonds Debt Service	Parity Bonds Debt Service	Total Bond Debt Service
2018		\$757,706.26	
2019		774,406.26	
2020		785,506.26	
2021		804,706.26	
2022		817,906.26	
2023		835,306.26	
2024		851,706.26	
2025		872,106.26	
2026		888,606.26	
2027		903,106.26	
2028		921,325.00	
2029		943,012.50	
2030		957,900.00	
2031		981,100.00	
2032		997,700.00	
2033		1,017,281.26	
2034		1,040,212.50	
2035		1,060,562.50	
2036		1,059,000.00	
2037		1,061,500.00	
2038		1,057,250.00	
2039		1,061,500.00	
2040		1,058,750.00	
2041		1,059,250.00	
2042		1,057,750.00	
2043		1,059,250.00	
2044		1,058,500.00	
2045		1,060,500.00	
Total		\$27,543,812.62	

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On September 6, 2005, the City Council adopted a Resolution of Intention to form the District under the Mello-Roos Act, to levy a special tax and to incur bonded indebtedness for the purpose of financing the Facilities and making contributions to certain public facilities. After conducting a noticed public hearing, on October 17, 2005, the City Council adopted the Resolution of Formation, which established the District, set forth the Special Tax Formula within the District and set forth the necessity to incur bonded indebtedness in a total amount not to exceed \$20,000,000. On the same day, an election was held within the District in which eligible landowner voters in the District, approved the proposed bonded indebtedness and the levy of the Special Tax. The \$20,000,000 authorization was increased to \$35,000,000 in 2015 by a vote of eligible landowner voters. See "OWNERSHIP OF PROPERTY WITHIN THE DISTRICT" below.

All of the property in the District was formerly owned by MS Rialto North Douglas CA LLC, a Delaware limited liability company, an affiliate of Lennar Homes of California, Inc. Under an option agreement, Lennar Homes of California, Inc. had options to acquire undeveloped lots from time to time, which it has exercised as homebuilding commences on the lots. To date, Lennar Homes of California Inc. has exercised its purchase option with respect to 484 lots, some of which represent recently closed sales of new homes to homeowners, as well as 165 lots that were sold to Woodside 05N, LP, a California limited partnership doing business as Woodside Homes of Northern California, LP. The remainder of the 251 lots presently not owned by Lennar Homes of California Inc. or by individual homeowners remain under MS Rialto ownership and are subject to options for purchase by Lennar Homes of California, Inc.

Development in the District is ongoing, with 662 parcels currently subject to the Special Tax securing the 2018 Bonds. An additional parcel is currently being used as a temporary roadway and, therefore, has not been included in the foregoing parcel count. As of the January 1, 2017 lien date for the 2017-18 County property tax roll, the 662 parcels in the District were owned as follows: Lennar (250 parcels, consisting of 179 fully improved lots, 62 partially improved lots, and 9 completed single-family homes without assessed values), Woodside Homes (74 parcels, consisting of 67 fully improved lots and 7 completed single-family homes without assessed values) and individual homeowners (338 parcels, consisting of 149 completed single-family homes without assessed values and 189 homes with assessed values). Both Lennar and Woodside plan to continue developing homes, although they may sell lots to other merchant builders. See "OWNERSHIP OF PROPERTY IN THE DISTRICT."

Description and Location

The District is comprised of the North Douglas project, which is located within the Sunrise Douglas Community Plan on the northeast corner of Douglas Road and Americanos Boulevard. Property within the District is comprised of approximately 130 gross acres designated for the development of 662 single-family residential lots in accordance with the Sunrise Douglas Community Plan. Approximately 2.8 acres is a water tank site that is not subject to the Special Tax. The development plan also includes a public park that is not to be subject to a Special Tax. The District contains 119.1 net acres, excluding the tax-exempt areas, and is mostly flat.

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The District is located approximately 15 miles east of the Sacramento Central Business District, south of U.S. Highway 50, in the City limits. The District is north of Douglas Road and east of the newly constructed Americanos Boulevard, which provides access and frontage to the Property.

The property in the District is situated within the Sunrise Douglas Community Plan. The plan area provides a mix of uses organized around the neighborhood unit. It is primarily residential but is supplemented with commercial and office uses. Housing types consist mostly of single-family residential units but also include multi-family garden apartments, townhouses, and condominiums.

The nearby "Anatolia" master planned community and the approximately 1,300-unit Sunridge Park development, where home construction and sales have also been underway, are adjacent to (and outside of) the District. Both of these projects are primarily built-out with single family homes in place.

The greater Rancho Cordova neighborhood is a mature suburban area, which encompasses all types of land uses, including single-family and multifamily residential, retail, office and industrial, and has experienced continued growth since the mid 1980's. This area currently is a substantial suburban office market within the Sacramento region, as well as a major employment center, most of which is located along U.S. Highway 50 which traverses the City. For certain demographic information relating to the City, see "APPENDIX D - Sacramento County and City of Rancho Cordova Demographic Information."

Environmental Matters

Water Supply. A local water issue was the subject of consideration during the formation process undertaken for the Sunrise Douglas Community Plan. The water issue began in 1999 when the State Department of Health Services indicated it would not allow permits for the construction of housing in the Sunrise-Douglas area, based on the wells proposed for the local project area. Five wells on the former Mather Air Force Base and other nearby areas were contaminated due to past rocket testing and chemical manufacturing by Aerojet and Boeing in the area. In July 2002, the North Vineyard Well Field plan was approved. The water supply plan included the construction of a well field to extract groundwater from the basin of an underlying Zone 40, at a location sufficiently down-gradient to significantly reduce or eliminate the possibility of contamination to the well field by known contaminant plumes. The Sacramento County Water Agency ("**SCWA**") provides water supply to the Specific Plan Area and conditions of the Specific Plan rezoning require that the SCWA Board of Directors make certain findings regarding the availability of water prior to approval of any tentative map. The City reports that development in the District is not negatively impacted by the availability of water.

County General Plan Policy CO-20. Sacramento County General Plan Policy CP-20, adopted in 1993, prohibits granting entitlements in specific General Plan Urban Growth Areas unless agreements and financing for supplemental non-groundwater water supplies are in place. The number of EDUs available for approval in said Urban Growth Areas is based on the supplemental water supplies acquired and the number of existing entitlements. Under the current total CO-20 entitlement limit of 12,300 equivalent dwelling units, there are sufficient EDUs for the anticipated development of the District. See "BOND OWNERS' RISKS - California Drought" for information relating to the California drought.

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Flood Hazard Map Information. The District is located in Flood Zone X, described as areas outside of the 100 and 500-year flood plains (less than .2% annual chance flooding in any given year - flood insurance not required). This information is according to the Federal Emergency Management Agency Flood Map, Community Panel No. 060262-0330D, revised July 6, 1998. The District is not subject to the Central Valley Flood Protection Plan (SB 5).

Seismic Conditions. According to the California Seismic Safety Commission, the District is located within Zone 3, areas of moderate seismic activity. Zone 3 is considered to be the lowest risk zone in California. In addition, the District is not located within a Fault-Rupture Hazard Zone (formerly referred to as an Alquist-Priolo Special Study Zone), as defined by Special Publication 42 of the California Department of Conservation, Division of Mines and Geology.

Development in the District

Lennar Homes of California, Inc. and/or MS Rialto North Douglas CA LLC (together, the “Lennar” or the “Master Developer”) and Woodside Homes of Northern California, LP (“Woodside Homes”) have provided the following information with respect to development within the District. No assurance can be given that all information is complete. No assurance can be given that development of the property will be completed, or that it will be completed in a timely manner. Since the ownership of the parcels is subject to change, the development plans outlined below may not be continued by the subsequent owner if the parcels are sold, although development by any subsequent owner will be subject to the Development Agreement and the policies and requirements of the City. No assurance can be given that the plans or projections detailed below will actually occur.

The Master Developer and Woodside Homes are homebuilders, and each plans for development within the District to be consistent with the current approved land uses, which primarily consist of low density residential neighborhoods. Residential lots may be sold to other merchant homebuilders in the future. Permitted land uses are configured to reinforce the neighborhood identity and sense of community.

The District is planned for the development of 662 detached residential lots within 8 villages, with typical lot sizes ranging from 3,150 to 5,775 square feet. As of the January 1, 2017 lien date for the 2017-18 County property tax roll, the 662 parcels in the District were owned as follows: Lennar (250 parcels, consisting of 179 fully improved lots, 62 partially improved lots, and 9 completed single-family homes without assessed values), Woodside Homes (74 parcels, consisting of 67 fully improved lots and 7 completed single-family homes without assessed values) and individual homeowners (338 parcels, consisting of 149 completed single-family homes without assessed values and 189 homes with assessed values).

A 7.9-acre site, designated for a neighborhood park, a 2.8-acre parcel owned by the Sacramento County Water Agency for a water tank, and three additional lots are within the boundaries of the District but are not subject to the Lien of the Special Tax (because they are being used for roadways). Construction of the water tank and the neighborhood park has been completed. To the extent the District includes land to be used for public/quasi-public uses, such as parks, such land will not be subject to the Special Tax.

Entitlements. The North Douglas property has land-use entitlements for the contemplated 662 single-family residences and 3 parcels with roadway use. The Property obtained tentative map approval in June 2004 and final map approval in April 2006. The

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following table shows the current and planned configuration of the 8 villages in the District (including the 3 lots with roadway use).

<u>Tentative Map Designation</u>	<u>Proposed Land Use</u>	<u>Net Acreage</u>	<u>No. of Lots</u>	<u>Typical Lot Size</u>	<u>Density (Units/Acre)</u>	<u>Expected Developer</u>
Village 1 ⁽²⁾	Single Fam	16.3	88	5,775	5.4	Lennar
Village 2 ⁽³⁾	Single Fam	14.4	80	5,775	5.6	Woodside ⁽¹⁾
Village 3	Single Fam	14.2	72	5,775	5.1	Lennar ⁽¹⁾
Village 4	Single Fam	16.1	82	5,775	5.1	Woodside ⁽¹⁾
Village 5	Single Fam	16.3	77	5,775	4.7	Lennar ⁽¹⁾
Village 6	Single Fam	15.0	75	4,725	5.0	Lennar
Village 7 ⁽⁴⁾	Single Fam	19.5	129	4,725	6.6	Lennar
Village 8	Single Fam	7.3	62	3,150	8.5	Lennar
Lot A	Park	7.9	-	-	-	N/A
TOTAL		127.0	665			

(1) Lennar owns one lot in Village 2 (Lot 70), Woodside owns 5 lots in Village 3, Lennar owns 5 lots in Village 4, and Woodside owns 4 lots in Village 5. Model homes have been completed on 3 of the 4 lots owned by Woodside in Village 5; the fourth is a parking lot for the models.

(2) Lot 70, within Village 1, was sold to the City for future roadway access and is not a taxable lot.

(3) Lot 80, within Village 2, is providing temporary roadway access and is, therefore, not currently taxable.

(4) Lot 90, within Village 7, is subject to an irrevocable offer of dedication in favor of the City for a future street dedication.

Infrastructure and Utilities. The Master Developer has completed construction of most of the infrastructure improvements in the District. Phase 2 of the Douglas Road improvements, expected to be acquired by the City with proceeds of the 2018 Bonds, is the last major improvement to be completed. Mass grading and construction of the project's backbone infrastructure, funded by the Master Developer, commenced in spring 2006 and has been completed. All on-site infrastructure for development of Villages 1-7 was completed in 2015; water and sewer off-site construction has also been completed. See "THE FACILITIES" below.

Lennar Development. As of January 2, 2018 date of value of the appraisal, Lennar owns 250 lots in the District, consisting of 179 fully improved lots, 62 partially improved lots and 9 completed single-family homes.. Within its "Kensington Estates at Somerset Ranch" neighborhood, Lennar is offering five floorplans that range in size from 1,950 to 3,427 square feet and in price from \$394,990 to \$515,990. Within its "Highland Grove at Somerset Ranch" neighborhood, Lennar offers four floorplans that range in size from 1,603 to 2,631 square feet and in price from \$374,990 to \$433,990.

Woodside Homes Development. As of the January 2, 2018 date of value of the appraisal, Woodside Homes owns 74 lots in the District, consisting of 67 fully improved lots and 7 completed single-family homes. Within its "Camden at Somerset Ranch" neighborhood, Woodside Homes is offering five floorplans that range in size from 1,870 to 3,207 square feet and in price from \$399,990 to \$479,990.

Development Agreement

General. The City and James D. Werdinger and Christina Werdinger Revocable Trust and the Archel C. and Mary W. Cupp Trust (collectively, the "**Trusts**") entered into a Development Agreement for the project dated November 1, 2004. The Trusts subsequently assigned their interest in the Development Agreement to U.S. Homes/KB North Douglas, LLC, a Delaware limited liability company ("**KB**"), which then entered into an amendment of the

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Development Agreement on April 17, 2006. KB subsequently assigned its interest in the Development Agreement to MS Rialto, which entered into an amendment of the Development Agreement dated July 21, 2014, (the “**Development Agreement**”), all in accordance with Sections 65864 through 65869.5 of the California Government Code, as implemented through City ordinance. Development of property in the District is subject to the Development Agreement as well as the Sunrise Douglas Community Plan. The Development Agreement creates a binding contract which sets forth the needed infrastructure improvements, park dedication requirements, timing and method for financing improvements and other specific performance obligations of the City and the developers in the District for development of Sunridge North Douglas, including the terms, conditions, rules, regulations, entitlements, vested rights and other provisions relating to the development according to the existing entitlements. Included are provisions relating to infrastructure improvements, public dedication requirements, landscaping amenities and other obligations of the parties. The Development Agreement runs with the property, and may be modified only by mutual consent of the City and the successors to the original party thereto, and in a manner consistent with the existing entitlements. With the Development Agreement in place, subject to compliance with the terms of the Development Agreement, construction of homes within the District may occur upon City approval of subdivision maps, satisfaction of certain design requirements and conditions of such maps and issuance of building permits. The Development Agreement will be binding on the all successor owner-developers of property in the District, if any.

The Development Agreement also sets forth the responsibility of the Master Developer and its successors for a portion of the costs of certain public improvements required for its development. Funding of the Facilities with Bond proceeds will satisfy a portion, but not all, of the relevant obligations of the District for infrastructure improvements required by the Development Agreement. The improvements not funded from Bond proceeds or Special Taxes will be funded by the Master Developer or others as merchant homebuilders. See “THE FACILITIES” below.

Utilities

Public utilities, including electricity, natural gas, water, and telephone service, are available at the perimeter of the District and will be extended as site development is completed, including in connection with construction of the Facilities. The public utilities and other services that will serve the District include the following.

<i>Water:</i>	Sacramento County Water Agency
<i>Sewer:</i>	Sacramento County Sanitation District No. 1
<i>Drainage:</i>	City of Rancho Cordova
<i>Electricity:</i>	Sacramento Municipal Utility District
<i>Gas:</i>	Pacific Gas & Electric
<i>Telephone:</i>	Frontier Communications and AT&T
<i>School District:</i>	Folsom Cordova Unified School District
<i>Fire District:</i>	Sacramento Metro Fire District

Map

The following page shows a map of the District.

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[Insert District map]

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THE FACILITIES

The proceeds of the 2018 Bonds will be used for a portion of the cost of the public improvements (and/or fees) eligible to be financed with the proceeds of the Bonds (the “**Facilities**,” as described below).

Eligible Facilities

The Facilities eligible to be financed by the District are set forth in the Resolution of Intention and consist of roadway improvements, including roadway design, project management, grading, and construction of roadways, including curbs, gutters, sidewalks, pavement, street lighting, dry utilities, soundwalls and landscaping, as well as drainage facilities, park improvements and other miscellaneous improvements. Authorized Facilities also include joint trench utilities, sanitary sewer facilities, water facilities and other capital improvements for which developer impact fees are payable to the City for development within the District, as well as incidental expenses as authorized by the Mello-Roos Act.

Acquisition by the City

The City and MS Rialto have entered into a Funding, Construction and Acquisition Agreement dated July 21, 2014 and amended by a First Amendment dated April 28, 2015 (together, the “**Acquisition Agreement**”) which provides that MS Rialto (or successors) will construct (or cause to be constructed or funded) the Facilities. As components of the Facilities are completed, proceeds of a portion of the 2018 Bonds will be used to pay all or a part of the purchase price of various Facilities pursuant to the terms of the Acquisition Agreement. The portion of the cost of construction of the Facilities, which will not be provided from 2018 Bond proceeds, will be the responsibility of the Master Developer or merchant homebuilders.

Certain of the Facilities include certain park and recreation facilities to be owned by the Cordova Recreation and Park District, and certain water facilities to be owned by the Sacramento County Water Agency. As to each entity, the City has entered into a separate Joint Community Facilities Agreement which provides that if such applicable facilities are constructed in accordance with required specifications and standards, each entity will accept such facilities for operation and maintenance, and the City will pay for such acquisition costs under appropriate conditions and subject to acquisition terms agreed upon by the City.

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OWNERSHIP OF PROPERTY WITHIN THE DISTRICT

Unpaid Special Taxes do not constitute a personal indebtedness of the owners of the parcels within the District. There is no assurance that an owner or any subsequent owners have the ability to pay the Special Taxes or that, even if they have the ability, they will choose to pay such taxes. An owner may elect to not pay the Special Taxes when due and cannot be legally compelled to do so. Neither the City nor any Bondowner will have the ability at any time to seek payment directly from the owners of property within the District of the Special Tax or the principal or interest on the 2018 Bonds, or the ability to control who becomes a subsequent owner of any property within the District.

The Master Developer and Woodside Homes have provided the respective information set forth under the heading "OWNERSHIP OF PROPERTY WITHIN THE DISTRICT" below. No assurance can be given that all information is complete. No assurance can be given that development of the property will be completed, or that it will be completed in a timely manner. The Special Taxes are not personal obligations of the developers or of any subsequent landowners; the 2018 Bonds are secured only by the Special Taxes and moneys available under the Fiscal Agent Agreement. See "SECURITY FOR THE 2018 BONDS" and "BOND OWNERS' RISKS" herein.

Lennar. Lennar Homes of California, Inc. is a wholly-owned subsidiary of Lennar Corporation, a Delaware corporation ("**Lennar Corporation**"), with headquarters in Miami, Florida. Lennar Corporation is a diversified real estate company, publicly traded on the New York Stock Exchange under the symbol LEN and presided over by Chief Executive Officer Stuart Miller. Lennar Corporation started as a Dade County, Florida homebuilder in 1954 and currently reports that it is one of the largest homebuilders in the United States. The year 2018 marked the 21st year that Lennar Corporation has operated in the Sacramento area.

Lennar Corporation is subject to the informational requirements of the Securities Exchange Act of 1934, as amended, and in accordance therewith files reports, proxy statements and other information with the SEC. Such filings, particularly the Annual Report on Form 10-K and its most recent Quarterly Report on Form 10-Q, may be inspected and copied at the public reference facilities maintained by the SEC at 450 Fifth Street, N.W., Washington, D.C. 20549 at prescribed rates. Such files can also be accessed over the Internet at the SEC's website at www.sec.gov. Copies of such material can be obtained from the public reference section of the SEC at 450 Fifth Street, N.W., Washington, D.C. 20549 at prescribed rates. In addition, the aforementioned material may also be inspected at the office of the NYSE at 20 Broad Street, New York, New York 10005. Additionally, Lennar Corporation provides investor relations information on its website.

For further information on Lennar, see its Internet homepage located at www.lennar.com. The website address is given for reference and convenience only, and the information on the website may be incomplete or inaccurate and has not been reviewed by the City or the Underwriter. Nothing on this website is a part of this Official Statement or incorporated into this Official Statement by reference and no representation is made in this Official Statement as to the accuracy or adequacy of the information contained on the internet site.

As used in this Official Statement, "**MS Rialto**" is MS Rialto North Douglas CA, LLC, a Delaware limited liability company. In November 2007, Lennar Corporation sold a portfolio of land consisting of approximately 11,000 homesites in 32 communities located throughout the

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country to a strategic land investment venture identified as MSR Holding Company, LLC, a Delaware limited liability company ("**MSR Holding**"). The purpose and business of MSR Holding include the following: (i) acquiring, owning, managing, financing, refinancing, selling, and otherwise disposing of its landholding subsidiaries, and (ii) acquiring, owning, constructing, developing, improving, operating, financing, refinancing, mortgaging, securitizing, leasing, renting, selling, and otherwise dealing with and disposing of the development projects and land assets held by its landholding subsidiaries.

No information is provided in this Official Statement regarding the identity or financial status of any of the members of MS Rialto or MSR Holding. While MS Rialto's members or parent entities have made capital contributions to MS Rialto in the past, there can be no assurance whatsoever of their willingness or ability to do so in the future. None of MS Rialto's members or parent entities has any obligation to make any additional capital contribution to MS Rialto or otherwise provide funds to MS Rialto for development activities, payment of debt service on its loans, payment of Special Taxes with respect to its property in the District, or any other costs in connection with MS Rialto's ownership of property in the District.

Woodside Homes. Woodside 05N, LP, a California limited partnership (previously defined as "Woodside"), is wholly owned by Woodside Homes Group, LLC, a Nevada limited liability company ("Woodside Homes Group"), directly or through its wholly owned subsidiaries. Woodside is owned 99% directly by Woodside Homes Group, as a limited partner. The remaining 1% interest is owned by WDS GP, Inc., a California corporation, as its general partner, which is wholly owned by Woodside Homes of California, Inc., a California corporation, which in turn is wholly owned by Woodside Homes Group. The parent of Woodside Homes Group is Woodside Homes Company, LLC, a Delaware limited liability company. The ultimate parent of Woodside Homes Company, LLC, is Sekisui House Ltd.

Woodside Homes Group and its subsidiaries were reorganized effective December 31, 2009, under Chapter 11 of the U.S. Bankruptcy Code, following the bankruptcy petitions that were filed on or about August 20, 2008, in the United States Bankruptcy Court for the Central District of California (Riverside Division). The bankruptcy cases for the reorganized Woodside Homes Group entities were closed in August 2011. As of that date, pre-bankruptcy liability related to these entities had all been resolved, settled, or discharged in the bankruptcy process.

Woodside Homes Group's subsidiaries engage in the design, construction, and sale of single-family homes in Arizona, California, Nevada, Texas, and Utah under the brand name of "Woodside Homes." Upon emergence from bankruptcy on December 31, 2009, the parent of Woodside Homes Group became PH Holding, LLC, a Delaware limited liability company, which later changed its name to Woodside Homes Company, LLC.

Information on Woodside Homes, including current home offerings, is available on the internet from its website at www.woodsidehomes.com. The website address is given for reference and convenience only, the information on the websites may be incomplete or inaccurate and has not been reviewed by the City or the Underwriter. Nothing on the website is a part of this Official Statement or incorporated into this Official Statement by reference.

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Projected Top Taxpayers. The following table sets forth the projected top taxpayers in the District, as well as the appraised value and designation of their properties under the Special Tax Formula.

**City of Rancho Cordova
Sunridge North Douglas CFD No. 2005-1
Projected FY 2018-19 Top Taxpayers**

Owner⁽¹⁾	No. of Parcels⁽²⁾	Acres	Appraised Value^{(3)*}	Projected FY 2017-18 Facilities Special Tax Levy^{(4)*}	% of Projected Facilities Special Tax Levy*
<u>Lennar Corporation</u>					
Developed Property	59	8.9	\$9,270,407	\$110,370	9.1%
Final Map Property	191	24.4	17,571,593	317,062	26.2
Subtotal	250	33.3	\$26,842,000	\$427,433	35.3%
<u>Woodside Homes</u>					
Developed Property	21	3.1	\$4,725,000	\$41,020	3.4%
Final Map Property	53	8.2	7,160,000	103,527	8.5
Subtotal	74	11.3	\$11,885,000	\$144,547	11.9%
<u>Individual Homeowners</u>					
Developed Property	338	46.6	\$145,248,076	\$638,873	52.8%
Total	662	91.2	\$183,975,076	\$1,210,853	100.0%

* Preliminary; subject to change

(1) Based on the ownership information presented in the Appraisal.

(2) Does not include one parcel acquired by the City and two more that may be acquired by the City in the future.

(3) Represents an allocation of the market values reported in the Appraisal. The allocated values are not indicative of the market values of the villages or the individual lots.

(4) Equal to the Maximum Facilities Special Tax that can be levied in fiscal year 2018-19 on Developed Property and Final Map Property.

(5) Includes the \$14,135,000 outstanding principal amount of the Series 2015 Special Tax Bonds and the \$[4,920,000]* estimated principal amount of the Series 2018 Special Tax Bonds.

(6) Includes the overlapping debt liens listed under "Direct and Overlapping Tax and Assessment Debt" in the overlapping debt report prepared by California Municipal Statistics, Inc. Does not include overlapping debts for one parcel acquired by the City and two more that may be acquired by the City in the future. Does not include any PACE liens secured by assessments or special taxes on the property. [To be updated with new Cal Muni report.]

Sources: Integra Realty Resources - Sacramento; Piper Jaffray & Co.; Goodwin Consulting Group, Inc.

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VALUE OF PROPERTY WITHIN THE DISTRICT

Assessed Values

In connection with valuing property in the District, the City has obtained the 2017-18 County assessed valuation of taxable property in the District. The “full cash” assessed values of all of the taxable parcels in the District has been established by the County Assessor for fiscal year 2017-18 in the amount of \$104,741,930.

Throughout this section of the Official Statement, the “full cash” assessed value of property in the District is presented. Article XIII A of the California Constitution (Proposition 13) defines “full cash value” to mean “the county assessor’s valuation of real property as shown on the 1975-76 bill under ‘full cash value’, or, thereafter, the appraised value of real property when purchased or newly constructed or when a change in ownership has occurred after the 1975 assessment,” subject to exemptions in certain circumstances of property transfer or reconstruction. The “full cash value” is subject to annual adjustment to reflect increases, not to exceed 2% for any year, or decreases in the consumer price index or comparable local data, or to reflect reductions in property value caused by damage, destruction or other factors.

Under Article XIII A, real property is reappraised only when a change in ownership occurs, or when new construction takes place. Generally, a change in ownership is a sale or transfer of property, while new construction is any improvement to property which is not considered normal maintenance. Except for these two instances, property assessments cannot be increased by more than 2% annually. Revenue and Taxation Code Section 51 requires the assessor to enroll the lower of either the property’s Factored-Base-Year Value (established under Proposition 13) or its market value as of the lien date (January 1). This reduction is temporary and the assessor is required to review the market value of the property each lien date after the reduction until such time as the Factored-Base-Year Value is less than or equal to the market value. When the Factored-Base-Year Value is again enrolled, the property is no longer subject to the annual review, and will receive indexing not to exceed 2% per year.

Assessed Value History. The table below shows a history of assessed values of the property in the District, as well as building permits issued for new construction, as shown.

**City of Rancho Cordova
Sunridge North Douglas CFD No. 2005-1
Assessed Valuation History⁽¹⁾**

Fiscal Year	Land Assessed Value	Improvement Assessed Value	Total Assessed Value	No. of Permits⁽²⁾
2015-16	\$16,680,130	\$0	\$16,680,130	34
2016-17	21,778,536	16,386,753	38,165,289	175
2017-18	33,415,570	71,326,360	104,741,930	355

(1) Does not include one parcel acquired by the City and two more that may be acquired by the City in the future. Also does not include the park parcel, which was assessed by the County in prior fiscal years.

(2) Represents the number of parcels for which a building permit for new construction was issued prior to June 1 of the prior fiscal year.

Sources: Sacramento County Assessor’s Office; Goodwin Consulting Group, Inc.

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The Appraisal

General. The City ordered preparation of an appraisal report dated February 2, 2018 (the “**Appraisal**”), of the estimated value of the taxable land within the District as of a January 24, 2018 date of value. The Appraisal was prepared by Integra Realty Resources - Sacramento, Sacramento, California (the “**Appraiser**”). The Appraisal is set forth in APPENDIX B hereto. The description herein of the Appraisal is intended for limited purposes only; the Appraisal should be read in its entirety. The conclusions reached in the Appraisal are subject to certain assumptions, conditions and qualifications which are set forth in the Appraisal.

Value Estimates. The appraised valuation excludes the value of all portions of the property in the District designated for public and quasi-public purposes in the Sunrise Douglas Community Plan and assumes completion only of infrastructure funded by the 2018 Bonds and accounts for the impact of the lien of the Special Tax. The following estimate represents the hypothetical market value of the property to be subject to the Special Tax, assuming all improvements to be financed by the 2018 Bonds are in place and available for use. The value estimate for the property as of the January 24, 2018 date of value, using the methodologies described in the Appraisal and subject to the limiting conditions and special assumptions set forth in the Appraisal, is not less than \$183,975,076.

The properties appraised included the underlying land and value of finished homes, and consideration was given to permits pulled for homes under construction; however, the valuation gives no consideration to partially completed homes. The Appraiser’s valuation process employed the sales comparison approach and extraction technique to estimate the market value of the benchmark large lot (5,775 SF) and small lot (3,150 SF) categories. In the sales comparison approach, adjustments were applied to the prices of comparable bulk lot transactions, and a market value for this benchmark lot category was concluded. Then, as a support of reasonableness, the Appraiser utilized an extraction analysis, which was reconciled with the sales comparison approach conclusion. Adjustments were then applied to determine values for each residential lot category (by ownership).

In the Appraisal, homes categorized as finished have either been sold to homeowners, are in the process of being marketed and sold, or are used as model homes. As a condition of the assignment, for the value of the remaining finished homes the Appraiser utilized the sales comparison approach to analyze the smallest floor plan of both homebuilders to estimate a “not less than” value of the remaining finished homes (by ownership). The Appraiser also excluded any contributory value of unfinished homes, but considered the value of permits and fees paid for lots with construction underway or not yet begun. Given that Lennar Corporation still held 241 residential lots within the District, the subdivision development method (or discounted cash flow analysis) was used to determine the bulk market value of the Lennar Corporation ownership group. Finally, the bulk market values were summed, along with the assessed values of sold homes, to provide an estimate of the aggregate value of the District.

Assumptions and Limiting Conditions. In considering the estimate of value evidenced by the Appraisal, the Appraisal is based upon a number of standard and special assumptions which affect the estimates as to value, including, among others, the following.

- The off-site improvements to be funded by the Master Developer and the Bonds will ultimately serve future developments in the area outside the District. Consequently, the Master Developer will receive fee credits from the City of Rancho Cordova upon obtaining building permits. The Appraiser has relied on the most recent fee credit estimates to derive a

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revenue estimate for the property in the District. It is assumed these fee credits will not change significantly. If, at some future date, the credits are higher or lower than projected, the market value provided in the Appraisal could be positively or negatively affected.

- The valuation is not a bulk sale value estimate and assumes completion of the Facilities funded by the Bonds (but not any Additional Bonds) and accounts for the impact of the lien of the Special Tax securing the Bonds.

- The value estimate assumes that the transfer would reflect a cash transaction or terms considered to be equivalent to cash. The estimate is also premised on an assumed sale after reasonable exposure in a competitive market under all conditions requisite to a fair sale, with buyer and seller each acting prudently, knowledgeably, for their own self-interest, and assuming that neither is under undue stress.

- The valuation analysis is based on developer-provided site development cost projections for the subject property. In comparing these costs with the in-tract costs for other residential developments, the Appraiser noted it appeared the budgeted costs are reasonable. Any significant variations from the cost projections used in this analysis could have an impact on the values concluded.

- The valuation analysis did not include review of a current title report of all properties to determine any possible conditions of title affecting the properties appraised. The Appraiser accepts no responsibility for matters pertaining to title.

- The Appraiser has also assumed that there is no hazardous material on or in the property that would cause a loss in value. Should future conditions and events involving hazardous material reduce the level of permitted development or delay the completion of any projected development, the value of the undeveloped land would likely be reduced from that estimated by the Appraiser. See "BOND OWNERS' RISKS - Land Values" and "- Hazardous Substances" below. See "APPENDIX B - The Appraisal" hereto for a description of certain assumptions made by the Appraiser. Accordingly, because the Appraiser arrived at an estimate of current market value based upon certain assumptions which may or may not be fulfilled, no assurance can be given that should the parcels become delinquent due to unpaid Special Taxes, and be foreclosed upon and offered for sale for the amount of the delinquency, that any bid would be received for such property or, if a bid is received, that such bid would be sufficient to pay such delinquent Special Taxes.

Limitations of Appraisal Valuation. Property values may not be evenly distributed throughout the District; thus, certain parcels may have a greater value than others. This disparity is significant because in the event of nonpayment of the Special Tax, the only remedy is to foreclose against the delinquent parcel.

No assurance can be given that the foregoing valuation can or will be maintained during the period of time that the Bonds are outstanding in that the City has no control over the market value of the property within the District or the amount of additional indebtedness that may be issued in the future by other public agencies, the payment of which, through the levy of a tax or an assessment, may be on a parity with the Special Taxes. See "Priority of Lien" below.

For a description of certain risks that might affect the assumptions made in the Appraisal, see "BOND OWNERS' RISKS" herein.

ATTACHMENT 4

Value to Special Tax Burden Ratios

The Appraisal sets forth the estimated bulk sale market value, subject to the Special Tax lien, of all taxable property within the District to be not less than \$183,975,076 subject to the limiting conditions stated therein. (See “– The Appraisal” above and APPENDIX B hereto.) The principal amount of the direct and overlapping debt in the District is \$1,291,903* (including the estimated amount of 2018 Bonds of \$[4,920,000]*). Consequently, the estimated value of property in the District subject to the Special Tax lien (\$183,975,076), is approximately 9.0* times the principal amount of the direct and overlapping debt in the District.

In comparing the value of the real property within the District to the principal amount of the 2018 Bonds and other direct and overlapping debt for the District, it should be noted that only the real property upon which there is a delinquent Special Tax can be foreclosed upon, and the real property within the District cannot be foreclosed upon as a whole to pay delinquent Special Taxes of the owners of such parcels within the District unless all of the property is subject to a delinquent Special Tax. In any event, individual parcels may be foreclosed upon separately to pay delinquent Special Taxes levied against such parcels.

Other public agencies whose boundaries overlap those of the District could, without the consent of the City and in certain cases without the consent of the owners of the land within the District, impose additional taxes or assessment liens on the land within the District. The purpose would be to finance additional regional or local public improvements or services. The lien created on the land within the District through the levy of such additional taxes or assessments may be on a parity with the lien of the Special Tax. In addition, construction loans may be obtained by the developers of property in the District or home loans may be obtained by ultimate homeowners. The deeds of trust securing such debt on property within the District, however, will be in a junior position to the lien of the Special Tax.

* Preliminary; subject to change.

Value-to-lien Ratios for Projected Top Taxpayers. The following table sets forth the value-to-lien ratios for the projected top taxpayers in the District.

**City of Rancho Cordova
Sunridge North Douglas CFD No. 2005-1
Projected FY 2016-17 Top Taxpayers**

Owner ⁽¹⁾	No. of Parcels ⁽²⁾	Acres	Appraised Value ^{(3)*}	Projected FY 2017-18 Facilities Special Tax Levy ^{(4)*}	% of Projected Facilities Special Tax Levy*	CFD Bonds ^{(5)*}	Overlapping Debt ^{(6)*}	Total Debt*	Average Appraised Value-to-Lien*
<u>Lennar Corporation</u>									
Developed Property	59	8.9	\$9,270,407	\$110,370	9.1%	\$1,736,882	\$109,520	\$1,846,402	5.0 : 1
Final Map Property	191	24.4	17,571,593	317,062	26.2	4,989,563	104,596	5,094,159	3.4 : 1
Subtotal	250	33.3	\$26,842,000	\$427,433	35.3%	\$6,726,445	\$214,116	\$6,940,561	3.9 : 1
<u>Woodside Homes</u>									
Developed Property	21	3.1	\$4,725,000	\$41,020	3.4%	\$645,528	\$56,807	\$702,334	6.7 : 1
Final Map Property	53	8.2	7,160,000	103,527	8.5	1,629,189	33,187	1,662,375	4.3 : 1
Subtotal	74	11.3	\$11,885,000	\$144,547	11.9%	\$2,274,716	\$89,994	\$2,364,710	5.0 : 1
<u>Individual Homeowners</u>									
Developed Property	338	46.6	\$145,248,076	\$638,873	52.8%	\$10,053,839	\$987,794	\$11,041,632	13.2 : 1
Total	662	91.2	\$183,975,076	\$1,210,853	100.0%	\$19,055,000	\$1,291,903	\$20,346,903	9.0 : 1

* Preliminary; subject to change

(1) Based on the ownership information presented in the Appraisal.

(2) Does not include one parcel acquired by the City and two more that may be acquired by the City in the future.

(3) Represents an allocation of the market values reported in the Appraisal. The allocated values are not indicative of the market values of the villages or the individual lots.

(4) Equal to the Maximum Facilities Special Tax that can be levied in fiscal year 2018-19 on Developed Property and Final Map Property.

(5) Includes the \$14,135,000 outstanding principal amount of the Series 2015 Special Tax Bonds and the \$[4,920,000]* estimated principal amount of the Series 2018 Special Tax Bonds.

(6) Includes the overlapping debt liens listed under "Direct and Overlapping Tax and Assessment Debt" in the overlapping debt report prepared by California Municipal Statistics, Inc. Does not include overlapping debts for one parcel acquired by the City and two more that may be acquired by the City in the future. Does not include any PACE liens secured by assessments or special taxes on the property. [To be updated with new Cal Muni report.]

Sources: Integra Realty Resources - Sacramento; Piper Jaffray & Co.; Goodwin Consulting Group, Inc.

ATTACHMENT 4

Value-to-lien Ratios by Development Status. The following table shows the projected status of development by village in the District for fiscal year 2018-19.

**City of Rancho Cordova
Sunridge North Douglas CFD No. 2005-1
Projected Status of Development for Fiscal Year 2018-19**

Development Status ⁽¹⁾	No. of Parcels ⁽²⁾	Acres	Appraised Value ^{(3)*}	FY 2018-19 Facilities Special Tax Levy ^{(4)*}	% of FY 2018-19 Facilities Special Tax Levy*	CFD Bonds ^{(5)*}	Overlapping Debt ^{(6)*}	Total Debt*	Average Appraised Value-to-Lien*
Developed Property									
Village 1	78	11.4	\$34,095,065	\$152,361	12.6%	\$2,397,674	\$245,566	\$2,643,239	12.9 : 1
Village 2	79	11.5	34,880,340	154,314	12.7	2,428,413	357,969	2,786,382	12.5 : 1
Village 3	13	2.2	3,126,585	25,393	2.1	399,612	7,709	407,321	7.7 : 1
Village 4	25	3.7	6,545,000	48,834	4.0	768,485	14,711	783,196	8.4 : 1
Village 5	67	10.9	24,785,170	130,874	10.8	2,059,540	160,422	2,219,963	11.2 : 1
Village 6	28	3.5	3,473,651	49,985	4.1	786,607	16,795	803,402	4.3 : 1
Village 7	128	15.3	52,337,671	228,503	18.9	3,595,917	350,948	3,946,865	13.3 : 1
Subtotal	418	58.6	\$159,243,483	\$790,263	65.3%	\$12,436,248	\$1,154,120	\$13,590,368	11.7 : 1
Final Map Property									
Village 1	9	1.6	\$742,033	\$17,580	1.5%	\$276,655	\$5,006	\$281,661	2.6 : 1
Village 3	59	9.1	5,440,440	115,247	9.5	1,813,625	34,970	1,848,595	2.9 : 1
Village 4	57	8.9	7,462,241	111,340	9.2	1,752,146	33,546	1,785,693	4.2 : 1
Village 5	10	1.7	1,140,033	19,533	1.6	307,394	8,301	315,695	3.6 : 1
Village 6	47	6.0	4,835,062	83,903	6.9	1,320,376	28,192	1,348,568	3.6 : 1
Village 8	62	5.3	5,111,784	72,985	6.0	1,148,556	27,767	1,176,323	4.3 : 1
Subtotal	244	32.6	\$24,731,593	\$420,590	34.7%	\$6,618,752	\$137,783	\$6,756,534	3.7 : 1
Undeveloped Property	0	0.0	\$0	\$0	0.0%	\$0	\$0	\$0	N/A
Total	662	91.2	\$183,975,076	\$1,210,853	100.0%	\$19,055,000	\$1,291,903	\$20,346,903	9.0 : 1

* Preliminary; subject to change

(1) Based on the status of development in the District as of December 31, 2017.

(2) Does not include one parcel acquired by the City and two more that may be acquired by the City in the future.

(3) Represents an allocation of the market values reported in the Appraisal. The allocated values are not indicative of the market values of the villages or the individual lots.

(4) Equal to the Maximum Facilities Special Tax that can be levied in fiscal year 2018-19 on Developed Property and Final Map Property.

(5) Includes the \$14,135,000 outstanding principal amount of the Series 2015 Special Tax Bonds and the \$[4,920,000]* estimated principal amount of the Series 2018 Special Tax Bonds.

(6) Includes the overlapping debt liens listed under "Direct and Overlapping Tax and Assessment Debt" in the overlapping debt report prepared by California Municipal Statistics, Inc. Does not include overlapping debts for one parcel acquired by the City and two more that may be acquired by the City in the future. Does not include any PACE liens secured by assessments or special taxes on the property. [To be updated with new Cal Muni Report]

Sources: Integra Realty Resources - Sacramento; Piper Jaffray & Co.; Goodwin Consulting Group, Inc.

ATTACHMENT 4

Value-to-lien Ratios By Category. The following table sets forth the value-to-lien ratios by category for parcels in the District.

**City of Rancho Cordova
Sunridge North Douglas CFD No. 2005-1
Appraised Value-to-Lien Ratio Ranges**

Appraised Value-to-Lien Category	No. of Parcels ⁽¹⁾	Acres	Appraised Value ^{(2)*}	Projected FY 2018-19 Facilities Special Tax Levy ^{(3)*}	% of Projected Facilities Special Tax Levy	CFD Bonds ^{(4)*}	Overlapping Debt ^{(5)*}	Total Debt*	Average Appraised Value-to-Lien*
15.0 : 1 to 20.0 : 1	21	2.9	\$9,943,203	\$39,675	3.3%	\$624,357	\$12,908	\$637,265	15.6 : 1
10.0 : 1 to 15.0 : 1	290	40.6	125,541,152	548,980	45.3	8,639,212	553,470	9,192,682	13.7 : 1
5.0 : 1 to 10.0 : 1	62	8.6	20,268,721	118,080	9.8	1,858,210	560,183	2,418,393	8.4 : 1
3.0 : 1 to 5.0 : 1	174	22.3	18,740,465	286,714	23.7	4,511,980	96,924	4,608,905	4.1 : 1
2.0 : 1 to 3.0 : 1	115	16.8	9,481,535	217,403	18.0	3,421,241	68,417	3,489,658	2.7 : 1
Totals	662	91.2	\$183,975,076	\$1,210,853	100.0%	\$19,055,000	\$1,291,903	\$20,346,903	9.0 : 1

* Preliminary; subject to change.

(1) Does not include one parcel acquired by the City and two more that may be acquired by the City in the future.

(2) Represents an allocation of the market values reported in the Appraisal. The allocated values are not indicative of the market values of the villages or the individual lots.

(3) Equal to the Maximum Facilities Special Tax that can be levied in fiscal year 2018-19 on Developed Property and Final Map Property.

(4) Includes the \$14,135,000 outstanding principal amount of the Series 2015 Special Tax Bonds and the \$[4,920,000]* estimated principal amount of the Series 2018 Special Tax Bonds.

(5) Includes the overlapping debt liens listed under "Direct and Overlapping Tax and Assessment Debt" in the overlapping debt report prepared by California Municipal Statistics, Inc. Does not include overlapping debts for one parcel acquired by the City and two more that may be acquired by the City in the future. Does not include any PACE liens secured by assessments or special taxes on the property. [To be updated with new Cal Muni Report.]

Sources: Integra Realty Resources - Sacramento; Piper Jaffray & Co.; Goodwin Consulting Group, Inc.

Priority of Lien

The principal of and interest on the 2018 Bonds are payable from the Special Tax authorized to be collected within the District, and payment of the Special Tax is secured by a lien on certain real property within the District. Such lien is co-equal to and independent of the lien for general taxes and any other liens imposed under the Mello-Roos Act, regardless of when they are imposed on the property in the District. The imposition of additional special taxes, assessments and general property taxes will increase the amount of independent and co-equal liens which must be satisfied in foreclosure. The City, the County and certain other public agencies are authorized by the Mello-Roos Act to form other community facilities districts and improvement areas and, under other provisions of State law, to form special assessment districts, either or both of which could include all or a portion of the land within the District.

Property in the District is subject to the Services Special Tax (described in the Special Tax Formula attached as APPENDIX A) for police services. The City expects to levy the "Maximum Services Special Tax" (as defined in the Special Tax Formula) on each parcel of Developed Property, which tax is authorized to be used for police services of benefit to property in the District. The Maximum Services Special Tax is \$[317.13] per Residential Unit, subject to annual escalation on and after July 1, 2017.

There can be no assurance that the developers will not petition for the formation of other community facilities districts and improvement areas or for a special assessment district or districts and that parity special taxes or special assessments will not be levied by the County or some other public agency to finance additional public facilities, however no other special districts are currently contemplated by the City or the developers.

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Private liens, such as deeds of trust securing loans obtained by developers of land in the District, may be placed upon property in the District at any time. Under California law, the Special Taxes have priority over all existing and future private liens imposed on property subject to the lien of the Special Taxes.

Set forth below is a statement of direct and overlapping public bonded debt (the **“Overlapping Debt Report”**) prepared by California Municipal Statistics, Inc. as of May 1, 2017. [To be updated with new Cal Muni report.] The Overlapping Debt Report includes only such information as has been reported to California Municipal Statistics, Inc. by the issuers of the debt described therein and by others. The Overlapping Debt Report is included for general informational purposes only. Neither the City nor the District makes any representation as to its completeness or accuracy.

The first column in the table names each public agency which has outstanding bonded debt as of the date of the report and whose territory overlaps the District in whole or in part. The second column shows the assessed value of the area common to the District and the other public agency (overlapping territory), as a percentage of the total assessed value of the other public agency. This percentage, multiplied by the total outstanding bonded debt of each overlapping agency (which is not shown in the table) produces the amount shown in the third column, which is the apportionment of each overlapping agency’s outstanding debt to taxable property in the District.

ATTACHMENT 4

**City of Rancho Cordova
Sunridge North Douglas Community Facilities District No. 2005-1
Direct and Overlapping Indebtedness
As of May 1, 2017**

2016-17 Local Secured Assessed Valuation: \$38,218,730

<u>DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT:</u>	<u>% Applicable</u>	<u>Debt 5/1/17</u>
Los Rios Community College District	0.022%	\$ 75,077
Folsom-Cordova Unified School District School Facilities Improvement District No. 1	0.583	143,533
Folsom-Cordova Unified School District School Facilities Improvement District No. 3	2.282	1,075,106
City of Rancho Cordova Community Facilities District No. 2005-1	100.000	14,225,000⁽¹⁾
TOTAL DIRECT AND OVERLAPPING TAX AND ASSESSMENT DEBT		\$15,518,716
 <u>OVERLAPPING GENERAL FUND DEBT:</u>		
Sacramento County General Fund Obligations	0.027%	\$ 63,499
Sacramento County Pension Obligation Bonds	0.027	253,883
Sacramento County Board of Education Certificates of Participation	0.027	1,526
Los Rios Community College District Certificates of Participation	0.022	210
Folsom-Cordova Unified School District Certificates of Participation	0.204	25,153
City of Rancho Cordova Certificates of Participation	0.507	83,110
Sacramento Metropolitan Fire General Fund Obligations	0.064	6,126
Sacramento Metropolitan Fire Pension Obligation Bonds	0.064	35,413
TOTAL OVERLAPPING GENERAL FUND DEBT		\$468,920
 COMBINED TOTAL DEBT		 \$15,987,636⁽²⁾

Ratios to 2016-17 Local Secured Assessed Valuation:

Direct Debt (\$14,225,000)	37.22%
Total Direct and Overlapping Tax and Assessment Debt	40.61%
Combined Total Debt	41.83%

(1) Excludes the 2018 Bonds.

(2) Excludes tax and revenue anticipation notes, enterprise revenue, mortgage revenue and non-bonded capital lease obligations.

Source: California Municipal Statistics.

ATTACHMENT 4

Estimated Tax Burden on a Single-Family Home

The following table sets forth the estimated total tax burden on a single-family home in two different zoning areas, based on tax rates for Fiscal Year 2017-18.

**City of Rancho Cordova
Sunridge North Douglas CFD No. 2005-1
Sample FY 2017-18 Tax Billings**

	<u>Zoning Designation:</u>	<u>RD-5</u>	<u>RD-7</u>
Net Taxable Value		Amount	Amount
Average Assessed Value ⁽¹⁾		\$410,000.00	\$361,000.00
Less: Homeowner's Exemption		(7,000.00)	(7,000.00)
Net Taxable Value		\$403,000.00	\$354,000.00
Ad Valorem Property Taxes	Rate	Amount	Amount
Base Property Tax	1.0000%	\$4,030.00	\$3,540.00
Los Rios College General Obligation Bond	0.0130%	52.39	46.02
Folsom Cordova Imp. 1	0.0566%	228.10	200.36
Folsom Cordova Imp. 3	0.1878%	756.83	664.81
Total Ad Valorem Property Taxes	1.2574%	\$5,067.32	\$4,451.20
Parcel Charges, Assessments, and Special Taxes⁽²⁾		Amount	Amount
Water and Drainage Studies - SCWA 13		\$6.92	\$6.92
Sunridge CFD		396.98	396.98
Transit Services District Zone 2		107.02	85.62
Rancho Cordova Lighting District 2012-1		2.56	2.56
Rancho Cordova CFD 2014-2		40.46	40.46
North Douglas CFD No. 2005-1 (Facilities) ⁽³⁾		1,915.04	1,750.18
North Douglas CFD No. 2005-1 (Services) ⁽⁴⁾		346.26	346.26
Total Parcel Charges, Assessments, and Special Taxes		\$2,815.24	\$2,628.98
Total Taxes		\$7,882.56	\$7,080.18
Total Effective Tax Rate		1.92%	1.96%

(1) Represents average assessed values for RD-5 and RD-7 lots that had improvement assessed values for fiscal year 2017-18.

(2) Does not include any PACE assessments or special taxes.

(3) Equal to the applicable Maximum Facilities Special Tax in FY 2017-18.

(4) Equal to the Maximum Services Special Tax in FY 2017-18.

Sources: Sacramento County Tax Collector's Office; Goodwin Consulting Group, Inc.

ATTACHMENT 4

Special Tax Collections and Delinquency Rates

The following table provides a summary of the historical Special Tax collections and delinquencies for the District. The County's Teeter Plan has been applicable to Special Tax collections in the District since the initial year of a Special Tax levy, but no assurance can be given that it will continue in any or all of the years that the 2018 Bonds are outstanding. To the extent that the County's Teeter Plan continues in existence and is carried out as adopted, and to the extent the County does not discontinue the Teeter Plan with respect to the City or the District, the County's Teeter Plan may help protect owners of the 2018 Bonds from the risk of delinquencies in the payment of Special Taxes. See "SECURITY FOR THE 2018 BONDS – Delinquent Payments of Special Tax; Covenant for Superior Court Foreclosure – Teeter Plan" for additional details on the Teeter Plan.

**City of Rancho Cordova
Sunridge North Douglas CFD No. 2005-1
Special Tax Collections and Delinquencies**

Fiscal Year	Amount Levied	No. of Parcels Delinquent	Amount Delinquent	% Delinquent
2015-16 ⁽¹⁾	\$1,146,380	0	\$0	0.00%
2016-17 ⁽¹⁾	1,169,308	0	0	0.00
2017-18	1,190,777	1	958	0.16

(1) The Sacramento County Tax Collector's Office reports that all prior year delinquent amounts were remitted to the City through the Teeter Plan.

(2) Reported as of February 1, 2018. Only includes delinquencies from the first installment of special taxes for FY 2017-18.

Sources: Sacramento County Assessor's Office; Goodwin Consulting Group, Inc.

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BOND OWNERS' RISKS

The purchase of the 2018 Bonds involves a degree of risk that may not be appropriate for some investors. The following includes a discussion of some of the risks that should be considered before making an investment decision. This discussion does not purport to be comprehensive or definitive or a complete statement of all factors that may be considered as risks in evaluating the credit quality of the 2018 Bonds.

Limited Obligation of the City to Pay Debt Service

The City has no obligation to pay principal of and interest on the 2018 Bonds if Special Tax collections are delinquent or insufficient, other than from amounts, if any, on deposit in the Reserve Fund or funds derived from the tax sale or foreclosure and sale of parcels for Special Tax delinquencies. The City is not obligated to advance funds to pay debt service on the 2018 Bonds.

Concentration of Ownership of Undeveloped Property

A significant amount of the land within the District is owned by affiliates of Lennar and Woodside Homes, which are merchant builders. Although there will be transfers of ownership of this property as development progresses and home sales are closed, the timely payment of the 2018 Bonds depends upon the willingness and ability of all of the owners of taxable property within the District to pay the Special Taxes when due. The only assets of the owners of property within the District which constitute security for the 2018 Bonds are such owners' real property holdings located within the District, and each parcel may only be foreclosed against for delinquent Special Taxes levied against such parcel. If the current landowners choose to pay some but not all of the Special Taxes, they may, as owners of parcels in the District, choose to default on payments of the Special Tax on parcels. Also see "– Bankruptcy Delays" below.

Development of undeveloped property within the District may be subject to unexpected delays, disruptions and changes which may affect the willingness and ability of the two homebuilders or other property owners to pay the Special Taxes when due. Certain infrastructure improvements remain to be completed in order to complete construction of the remaining homes in the District. No assurance can be given that the remaining proposed residential development will be partially or fully completed, and for purposes of evaluating the investment quality of the 2018 Bonds, prospective purchasers should consider the possibility that such parcels will remain vacant and only partially improved. See the information set forth under the caption "THE DISTRICT – Development in the District."

Levy and Collection of the Special Tax

General. The principal source of payment of principal of and interest on the 2018 Bonds is the proceeds of the annual levy and collection of the Special Tax against property within the District.

Limitation on Maximum Annual Special Tax Rate. The annual levy of the Special Tax is subject to the maximum annual Special Tax rate authorized in the Special Tax Formula. The levy cannot be made at a higher rate even if the failure to do so means that the estimated proceeds of the levy and collection of the Special Tax, together with other available funds, will not be sufficient to pay debt service on the 2018 Bonds.

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In addition to the maximum annual Special Tax rate limitation in the Special Tax Formula, Section 53321(d) of the Act provides that the special tax levied against any parcel for which an occupancy permit for private residential use has been issued may not be increased as a consequence of delinquency or default by the owner of any other parcel within a community facilities district by more than 10% above the amount that would have been levied in such fiscal year had there never been any such delinquencies or defaults. In cases of significant delinquency, these factors may result in defaults in the payment of principal of and interest on the 2018 Bonds.

No Relationship Between Property Value and Special Tax Levy. Because the Special Tax Formula is not based on property value, the levy of the Special Tax will rarely, if ever, result in a uniform relationship between the value of particular parcels in the District subject to a Special Tax and the amount of the levy of the Special Tax against those parcels. Thus, there will rarely, if ever, be a uniform relationship between the value of the parcels in the District subject to a Special Tax and their proportionate share of debt service on the 2018 Bonds, and certainly not a direct relationship.

Factors that Could Lead to Special Tax Deficiencies. The following are some of the factors that might cause the levy of the Special Tax on any particular parcel of Taxable Property to vary from the Special Tax that might otherwise be expected:

Transfers to Governmental Entities. The number of parcels in the District subject to a Special Tax could be reduced through the acquisition of Taxable Property by a governmental entity and failure of the government to pay the Special Tax based upon a claim of exemption or, in the case of the federal government or an agency thereof, immunity from taxation, thereby resulting in an increased tax burden on the remaining taxed parcels.

Property Tax Delinquencies. Failure of the owners of Taxable Property to pay property taxes (and, consequently, the Special Tax), or delays in the collection of or inability to collect the Special Tax by tax sale or foreclosure and sale of the delinquent parcels, could result in a deficiency in the collection of Special Tax revenues. See “—Property Tax Delinquencies” below.

Delays Following Special Tax Delinquencies and Foreclosure Sales. The Fiscal Agent Agreement generally provides that the Special Tax is to be collected in the same manner as ordinary *ad valorem* property taxes are collected and, except as provided in the special covenant for foreclosure described in “SECURITY FOR THE 2018 BONDS – Delinquent Payments of Special Tax; Covenant for Superior Court Foreclosure” and in the Mello-Roos Act, is subject to the same penalties and the same procedure, sale and lien priority in case of delinquency as is provided for ordinary *ad valorem* property taxes. Under these procedures, if taxes are unpaid for a period of five years or more, the property is deeded to the State and then is subject to sale by the County.

If sales or foreclosures of property are necessary, there could be a delay in payments to owners of the 2018 Bonds pending such sales or the prosecution of foreclosure proceedings and receipt by the City of the proceeds of sale if the Reserve Fund is depleted. See “SECURITY FOR THE 2018 BONDS – Delinquent Payments of Special Tax; Covenant for Superior Court Foreclosure.”

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The ability of the City to collect interest and penalties specified by State law and to foreclose against properties having delinquent Special Tax installments may be limited in certain respects with regard to properties in which the Federal Deposit Insurance Corporation (the “FDIC”) has or obtains an interest. The FDIC would obtain such an interest by taking over a financial institution that has made a loan that is secured by property within the District. See “ – FDIC/Federal Government Interests in Properties” below.

Other laws generally affecting creditors’ rights or relating to judicial foreclosure may affect the ability to enforce payment of Special Taxes or the timing of enforcement of Special Taxes. For example, the Soldiers and Sailors Civil Relief Act of 1940 affords protections such as a stay in enforcement of the foreclosure covenant, a six-month period after termination of military service to redeem property sold to enforce the collection of a tax or assessment and a limitation on the interest rate on the delinquent tax or assessment to persons in military service if the court concludes the ability to pay such taxes or assessments is materially affected by reason of such service.

Property Tax Delinquencies

General. Delinquencies in the payment of property taxes and, consequently, the Special Taxes, can occur because the owners of delinquent parcels may not have received property tax bills from the County in a timely manner, including situations in which the County initially sent property tax bills to the property developer or merchant builder at a time when the parcels in question had already been sold to individual homeowners. Delinquencies can also reflect economic difficulties and duress by the property owner.

Numerous future delinquencies by the owners of Taxable Property in the District in the payment of property taxes (and, consequently, the Special Taxes, which are collected on the ordinary property tax bills) when due could result in a deficiency in Special Tax Revenues necessary to pay debt service on the 2018 Bonds, which could in turn result in the depletion of the Reserve Fund, prior to reimbursement from the resale of foreclosed property or payment of the delinquent Special Tax. In that event, there could be a delay or failure in payments of the principal of and interest on the 2018 Bonds. See “SECURITY FOR THE 2018 BONDS – Reserve Fund,” and “SECURITY FOR THE 2018 BONDS – Delinquent Payments of Special Tax; Covenant for Superior Court Foreclosure.”

The City intends to take certain actions designed to mitigate the impact of future delinquencies, including: enforcing the lien of the Special Taxes through collection procedures that will include foreclosure actions under certain circumstances (see “SECURITY FOR THE 2018 BONDS – Delinquent Payments of Special Tax; Covenant for Superior Court Foreclosure”); and increasing the levy of Special Taxes against non-delinquent property owners in the District, to the extent permitted under the Special Tax Formula and the Mello-Roos Act and to the extent the Special Taxes are not already being levied at the Maximum Annual Special Tax rate.

Any future decline in home values in the District could result in property owner unwillingness or inability to pay mortgage payments, as well as *ad valorem* property taxes and Special Taxes, when due. Under such circumstances, bankruptcies are likely to increase. Bankruptcy by homeowners with delinquent Special Taxes would delay the commencement and completion of foreclosure proceedings to collect delinquent Special Taxes.

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It is possible that laws could be enacted in the future to assist homeowners in default in the payment of mortgages and property taxes. It is further possible that federal laws could be enacted that would adversely impact the ability of the City to foreclose on parcels with delinquent Special Taxes. No assurance can be given that any such laws will be enacted, or if enacted will be effective in assisting affected homeowners.

Property Values and Risks Related to Development

The value of Taxable Property within the District is a critical factor in determining the investment quality of the 2018 Bonds. If a property owner defaults in the payment of the Special Tax, the City's only remedy is to foreclose on the delinquent property in an attempt to obtain funds with which to pay the delinquent Special Tax. Land values could be adversely affected by economic and other factors beyond the City's control, such as a general economic downturn, relocation of employers out of the area, shortages of water, electricity, natural gas or other utilities, destruction of property caused by earthquake, flood, wildfires, or other natural disasters, environmental pollution or contamination, or unfavorable economic conditions.

The following is a discussion of specific risk factors that could affect the value of property in the District.

Risks Related to Availability of Mortgage Loans. In the past, market events have adversely affected the availability of mortgage loans to homeowners, including potential buyers of homes within the District. Any such unavailability in the future could hinder the ability of the current homeowners to resell their homes, or the sale of newly completed homes in the future.

Natural Disasters. The value of the Taxable Property in the future can be adversely affected by a variety of natural occurrences, particularly those that may affect infrastructure and other public improvements and private improvements on the Taxable Property and the continued habitability and enjoyment of such private improvements.

The areas in and surrounding the District, like those in much of California, may be subject to unpredictable seismic activity, including earthquakes. See "THE DISTRICT – Location of the District."

Other natural disasters could include, without limitation, floods, wildfires, droughts or tornadoes. One or more natural disasters could occur and could result in damage to improvements of varying seriousness. The damage may entail significant repair or replacement costs and that repair or replacement may never occur either because of the cost, or because repair or replacement will not facilitate habitability or other use, or because other considerations preclude such repair or replacement. Under any of these circumstances there could be significant delinquencies in the payment of Special Taxes, and the value of the Taxable Property may well depreciate or disappear.

California Drought. On January 17, 2014, with the State facing water shortfalls in the then-driest year in recorded state history, Governor Edmund G. Brown Jr. proclaimed a State of Emergency and directed state officials to take all necessary actions to prepare for these drought conditions. In the State of Emergency declaration, Governor Brown directed state officials to assist farmers and communities that were economically impacted by dry conditions and to ensure the State could respond if Californians faced drinking water shortages. The Governor also directed state agencies to use less water and hire more firefighters and greatly expanded

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water conservation public awareness. In addition, the proclamation gave state water officials more flexibility to manage supply throughout the State under drought conditions.

The Governor's State of Emergency declaration followed a series of actions the administration had taken to ensure that the State was prepared for record dry conditions. In May 2013, Governor Brown had issued an Executive Order to direct state water officials to expedite the review and processing of voluntary transfers of water and water rights. In December 2014, the Governor had formed a Drought Task Force to review expected water allocations, the State's preparedness for water scarcity and whether conditions merited a drought declaration.

The State set a new "low water" mark on April 1, 2015, with its early-April snowpack measurement. The statewide electronic reading of the snowpack's water content stood at 1.4 inches, or 5 percent, of the 28-inch average. The lowest previous reading since 1950 was 25 percent of the average, so water year 2015 was the driest winter in the State's written record. Subsequently, on April 1, 2015, for the first time in State history, the Governor directed the State Water Resources Control Board (the "**SWRCB**") to implement mandatory water reductions in cities and towns across the State to reduce water usage by 25 percent. This savings amounted to approximately 1.5 million acre-feet of water over nine months.

Following a wet winter that partly replenished the mountain snowpack and a year of enormous savings in urban water use, the SWRCB announced that it would suspend the mandatory statewide reduction in urban water use, effective June 1, 2016. Although the State was still in a drought at the time, the SWRCB adopted new rules that would allow local communities to set their own conservation standards based on their own projection of water supplies, assuming that the next three years would continue to be uncommonly dry. These projections were subject to State review, and the State was empowered to impose restrictions on communities it determined were being unrealistic. The State could also return to the mandatory statewide reductions if communities reverted to water-wasting habits, or if subsequent years were dry again.

With unprecedented water conservation and plentiful rain- and snowfall in the State throughout the end of 2016 and the beginning of 2017, Governor Brown issued Executive Order B-40-17 on April 7, 2017 (the "**2017 Executive Order**"), which lifted the January 17, 2014 drought declaration in all Counties except the Counties of Fresno, Kings, Tulare, and Tuolumne, where diminished groundwater supply issues remain. The 2017 Executive Order also directed the SWRCB to rescind the water supply stress tests for urban water suppliers, as well any remaining mandatory conservation standards. These rescissions notwithstanding, the 2017 Executive Order instructed the SWRCB to maintain urban water use reporting requirements and prohibitions on wasteful water-use practices in order to preserve and promote Statewide water conservation efforts.

The City cannot predict when drought conditions and concomitant water-reduction requirements will return, what effect drought conditions could have on property values, or whether or to what extent water reduction requirements may affect the District.

Legal Requirements. Other events that may affect the value of Taxable Property include changes in the law or application of the law. Such changes may include, without limitation, local growth control initiatives, local utility connection moratoriums and local application of statewide tax and governmental spending limitation measures.

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Hazardous Substances. One of the most serious risks in terms of the potential reduction in the value of Taxable Property is a claim with regard to a hazardous substance. In general, the owners and operators of Taxable Property may be required by law to remedy conditions of the parcel relating to releases or threatened releases of hazardous substances. The federal Comprehensive Environmental Response, Compensation and Liability Act of 1980, sometimes referred to as “CERCLA” or the “Superfund Act,” is the most well-known and widely applicable of these laws, but California laws with regard to hazardous substances are also stringent and similar. Under many of these laws, the owner or operator is obligated to remedy a hazardous substance condition of property whether or not the owner or operator has anything to do with creating or handling the hazardous substance. The effect, therefore, should any of the Taxable Property be affected by a hazardous substance, is to reduce the marketability and value of the parcel by the costs of remedying the condition, because the purchaser, upon becoming owner, will become obligated to remedy the condition.

The property values set forth in this Official Statement do not take into account the possible reduction in marketability and value of any of the Taxable Property by reason of the possible liability of the owner or operator for the remedy of a hazardous substance condition of the parcel. Although the City is not aware that the owner or operator of any of the Taxable Property has such a current liability with respect to any of the Taxable Property, it is possible that such liabilities do currently exist and that the City is not aware of them.

Further, it is possible that liabilities may arise in the future with respect to any of the Taxable Property resulting from the existence, currently, on the parcel of a substance presently classified as hazardous but that has not been released or the release of which is not presently threatened, or may arise in the future resulting from the existence, currently on the parcel of a substance not presently classified as hazardous but that may in the future be so classified. Further, such liabilities may arise not simply from the existence of a hazardous substance but from the method of handling it. All of these possibilities could significantly affect the value of Taxable Property that is realizable upon a delinquency.

Future Property Development

Continuing development of the parcels in the District may be adversely affected by changes in general or local economic conditions, fluctuations in or a deterioration of the real estate market, increased construction costs, development, financing and marketing capabilities of the developer, water or electricity shortages, discovery on the undeveloped property of any plants or animals in their habitat that have been listed as endangered species, changes in law, and other similar factors. Development in the District may also be affected by development in surrounding areas, which may compete with the property in the District.

For example, H.R. 1 of the 115th U.S. Congress, known as the “Tax Cuts and Jobs Act,” was enacted into law on December 22, 2017 (the “**Tax Act**”). The Tax Act makes significant changes to many aspects of the Code that could have an impact on future property development. The Tax Act reduces the amount of mortgage interest expense and state local income tax and property tax expense that individuals may deduct from their gross income for federal income tax purposes, which could increase the cost of home ownership within the District and could adversely affect the sale of homes by the developers. However, neither the City nor the developers can predict the effect that the Tax Act may have on the cost of home ownership or the price of homes in the District, the rate at which homes in the District are sold to individual homeowners, or the ability or willingness of homeowners to pay special taxes or property taxes on taxable property within the District.

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Other Possible Claims Upon the Value of Taxable Property

While the Special Taxes are secured by the Taxable Property, the security only extends to the value of such Taxable Property that is not subject to priority and parity liens and similar claims.

The table in the section entitled "SPECIAL TAX REVENUE AND VALUE OF PROPERTY WITHIN THE DISTRICT – Overlapping Liens and Priority of Lien" shows the presently outstanding amount of governmental obligations (with stated exclusions), the tax or assessment for which is or may become an obligation of one or more of the parcels in the District subject to a Special Tax. The table also states the additional amount of general obligation bonds the tax for which, if and when issued, may become an obligation of one or more of the parcels in the District subject to a Special Tax. The table does not specifically identify which of the governmental obligations are secured by liens on one or more of the parcels in the District subject to a Special Tax.

In addition, other governmental obligations may be authorized and undertaken or issued in the future, the tax, assessment or charge for which may become an obligation of one or more of the parcels in the District subject to a Special Tax and may be secured by a lien on a parity with the lien of the Special Tax securing the 2018 Bonds.

In general, as long as the Special Tax is collected on the County tax roll, the Special Tax and all other taxes, assessments and charges also collected on the tax roll are on a parity, that is, are of equal priority. Questions of priority become significant when collection of one or more of the taxes, assessments or charges is sought by some other procedure, such as foreclosure and sale. In the event of proceedings to foreclose for delinquency of Special Taxes securing the 2018 Bonds, the Special Tax will be subordinate only to existing prior governmental liens, if any. Otherwise, in the event of such foreclosure proceedings, the Special Taxes will generally be on a parity with the other taxes, assessments and charges, and will share the proceeds of such foreclosure proceedings on a pro rata basis. Although the Special Taxes will generally have priority over non-governmental liens on a parcel of Taxable Property, regardless of whether the non-governmental liens were in existence at the time of the levy of the Special Tax or not, this result may not apply in the case of bankruptcy. See "– Bankruptcy Delays" below.

Exempt Properties

Certain properties are exempt from the Special Tax in accordance with the Special Tax Formula and the Mello-Roos Act, which provides that properties or entities of the state, federal or local government are exempt from the Special Tax; provided, however, that property within the District acquired by a public entity through a negotiated transaction or by gift or devise, which is not otherwise exempt from the Special Tax, will continue to be subject to the Special Tax. See "SECURITY FOR THE 2018 BONDS – Special Tax Formula."

In addition, although the Mello- Roos Act provides that if property subject to the Special Tax is acquired by a public entity through eminent domain proceedings, the obligation to pay the Special Tax with respect to that property is to be treated as if it were a special assessment, the constitutionality and operation of these provisions of the Mello- Roos Act have not been tested, meaning that such property could become exempt from the Special Tax. The Mello- Roos Act further provides that no other properties or entities are exempt from the Special Tax unless the

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properties or entities are expressly exempted in a resolution of consideration to levy a new special tax or to alter the rate or method of apportionment of an existing special tax.

FDIC/Federal Government Interests in Properties

General. The ability of the City to foreclose the lien of delinquent unpaid Special Tax installments may be limited with regard to properties in which the FDIC, the Drug Enforcement Agency, the Internal Revenue Service, or other federal agency has or obtains an interest.

Federal courts have held that, based on the supremacy clause of the United States Constitution, in the absence of Congressional intent to the contrary, a state or local agency cannot foreclose to collect delinquent taxes or assessments if foreclosure would impair the federal government interest.

The supremacy clause of the United States Constitution reads as follows: "This Constitution, and the Laws of the United States which shall be made in Pursuance thereof; and all Treaties made, or which shall be made, under the Authority of the United States, shall be the supreme Law of the Land; and the Judges in every State shall be bound thereby, any Thing in the Constitution or Laws of any State to the contrary notwithstanding."

This means that, unless Congress has otherwise provided, if a federal governmental entity owns a parcel that is subject to Special Taxes but does not pay taxes and assessments levied on the parcel (including Special Taxes), the applicable state and local governments cannot foreclose on the parcel to collect the delinquent taxes and assessments.

Moreover, unless Congress has otherwise provided, if the federal government has a mortgage interest in the parcel and the City wishes to foreclose on the parcel as a result of delinquent Special Taxes, the property cannot be sold at a foreclosure sale unless it can be sold for an amount sufficient to pay delinquent taxes and assessments on a parity with the Special Taxes and preserve the federal government's mortgage interest. In *Rust v. Johnson* (9th Circuit; 1979) 597 F.2d 174, the United States Court of Appeal, Ninth Circuit held that the Federal National Mortgage Association ("**FNMA**") is a federal instrumentality for purposes of this doctrine, and not a private entity, and that, as a result, an exercise of state power over a mortgage interest held by FNMA constitutes an exercise of state power over property of the United States.

The City has not undertaken to determine whether any federal governmental entity currently has, or is likely to acquire, any interest (including a mortgage interest) in any of the parcels subject to the Special Taxes, and therefore expresses no view concerning the likelihood that the risks described above will materialize while the 2018 Bonds are outstanding.

FDIC. In the event that any financial institution making any loan which is secured by real property within the District is taken over by the FDIC, and prior thereto or thereafter the loan or loans go into default, resulting in ownership of the property by the FDIC, then the ability of the District to collect interest and penalties specified by State law and to foreclose the lien of delinquent unpaid Special Taxes may be limited.

The FDIC's policy statement regarding the payment of state and local real property taxes (the "**Policy Statement**") provides that property owned by the FDIC is subject to state and local real property taxes only if those taxes are assessed according to the property's value, and that the FDIC is immune from real property taxes assessed on any basis other than property value.

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According to the Policy Statement, the FDIC will pay its property tax obligations when they become due and payable and will pay claims for delinquent property taxes as promptly as is consistent with sound business practice and the orderly administration of the institution's affairs, unless abandonment of the FDIC's interest in the property is appropriate. The FDIC will pay claims for interest on delinquent property taxes owed at the rate provided under state law, to the extent the interest payment obligation is secured by a valid lien. The FDIC will not pay any amounts in the nature of fines or penalties and will not pay nor recognize liens for such amounts. If any property taxes (including interest) on FDIC-owned property are secured by a valid lien (in effect before the property became owned by the FDIC), the FDIC will pay those claims. The Policy Statement further provides that no property of the FDIC is subject to levy, attachment, garnishment, foreclosure or sale without the FDIC's consent. In addition, the FDIC will not permit a lien or security interest held by the FDIC to be eliminated by foreclosure without the FDIC's consent.

The Policy Statement states that the FDIC generally will not pay non-*ad valorem* taxes, including special assessments, on property in which it has a fee interest unless the amount of tax is fixed at the time that the FDIC acquires its fee interest in the property, nor will it recognize the validity of any lien to the extent it purports to secure the payment of any such amounts. Special taxes imposed under the Mello-Roos Act and a special tax formula which determines the special tax due each year are specifically identified in the Policy Statement as being imposed each year and therefore covered by the FDIC's federal immunity. The Ninth Circuit issued a ruling on August 28, 2001, in which it determined that the FDIC, as a federal agency, is exempt from special taxes levied under the Act.

The City is unable to predict what effect the application of the Policy Statement would have in the event of a delinquency in the payment of Special Taxes on a parcel within the District in which the FDIC has or obtains an interest, although prohibiting the lien of the Special Taxes to be foreclosed out at a judicial foreclosure sale could reduce or eliminate the number of persons willing to purchase a parcel at a foreclosure sale. Such an outcome could cause a draw on the Reserve Fund and perhaps, ultimately, if enough property were to become owned by the FDIC, a default in payment on the 2018 Bonds.

Depletion of Reserve Fund

The Reserve Fund is to be maintained at an amount equal to the Reserve Requirement as defined in the Fiscal Agent Agreement. See "SECURITY FOR THE 2018 BONDS – Reserve Fund." The Reserve Fund will be used to pay principal of and interest on the 2018 Bonds (and any Additional Bonds, the principal of and interest on which is supported by amounts in the Reserve Fund) if insufficient funds are available from the proceeds of the levy and collection of the Special Tax against property within the District. If the Reserve Fund is depleted, it can be replenished from the proceeds of the levy and collection of the Special Taxes that exceed the amounts to be paid to the owners of the 2018 Bonds (and any Additional Bonds, the principal of and interest on which is supported by amounts in the Reserve Fund) under the Fiscal Agent Agreement. However, because the Special Tax levy is limited to the annual Maximum Annual Special Tax rates, it is possible that no replenishment would be achieved if the Special Tax proceeds, together with other available funds, remain insufficient to pay all such amounts. Thus, it is possible that the Reserve Fund will be depleted and not be replenished by the levy and collection of the Special Taxes.

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Bankruptcy Delays

The payment of the Special Tax and the ability of the City to foreclose the lien of a delinquent unpaid Special Tax, as discussed in "SECURITY FOR THE 2018 BONDS," may be limited by bankruptcy, insolvency or other laws generally affecting creditors' rights or by the laws of the State of California relating to judicial foreclosure. The various legal opinions to be delivered concurrently with the delivery of the 2018 Bonds (including Bond Counsel's approving legal opinion) will be qualified as to the enforceability of the various legal instruments by bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights, by the application of equitable principles and by the exercise of judicial discretion in appropriate cases.

Although bankruptcy proceedings would not cause the Special Taxes to become extinguished, bankruptcy of a property owner or any other person claiming an interest in the property could result in a delay in superior court foreclosure proceedings and could result in the possibility of Special Tax installments not being paid in part or in full. Such a delay would increase the likelihood of a delay or default in payment of the principal of and interest on the 2018 Bonds.

In addition, the amount of any lien on property securing the payment of delinquent Special Taxes could be reduced if the value of the property were determined by the bankruptcy court to have become less than the amount of the lien, and the amount of the delinquent Special Taxes in excess of the reduced lien could then be treated as an unsecured claim by the court. Any such stay of the enforcement of the lien for the Special Tax, or any such delay or non-payment, would increase the likelihood of a delay or default in payment of the principal of and interest on the 2018 Bonds and the possibility of delinquent Special Taxes not being paid in full.

To the extent that property in the District continues to be owned by a limited number of property owners, the chances are increased that the Reserve Fund could be fully depleted during any such delay in obtaining payment of delinquent Special Taxes. As a result, sufficient moneys would not be available in the Reserve Fund to make up shortfalls resulting from delinquent payments of the Special Tax and thereby to pay principal of and interest on the 2018 Bonds on a timely basis.

Disclosure to Future Purchasers

The City has recorded a notice of the Special Tax lien in the Office of the County Recorder. While title companies normally refer to such notices in title reports, there can be no guarantee that such reference will be made or, if made, that a prospective purchaser or lender will consider such special tax obligation in the purchase of a parcel of land or a home in the District or the lending of money secured by property in the District. The Mello-Roos Act and the City's Mello-Roos Act Goals and Policies require the subdivider of a subdivision (or its agent or representative) to notify a prospective purchaser or long-term lessor of any lot, parcel, or unit subject to a Mello-Roos special tax of the existence and maximum amount of such special tax using a statutorily prescribed form. California Civil Code Section 1102.6b requires that in the case of transfers other than those covered by the above requirement, the seller must at least make a good faith effort to notify the prospective purchaser of the special tax lien in a format prescribed by statute. Failure by an owner of the property to comply with these requirements, or failure by a purchaser or lessor to consider or understand the nature and existence of the Special Tax, could adversely affect the willingness and ability of the purchaser or lessor to pay the Special Tax when due.

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No Acceleration Provisions

The 2018 Bonds do not contain a provision allowing for their acceleration in the event of a payment default or other default under the terms of the 2018 Bonds or the Fiscal Agent Agreement. Under the Fiscal Agent Agreement, a Bondowner is given the right for the equal benefit and protection of all Bondowners similarly situated to pursue certain remedies. So long as the 2018 Bonds are in book-entry form, DTC will be the sole Bondowner and will be entitled to exercise all rights and remedies of Bondholders, in accordance with its procedures and rules.

Loss of Tax Exemption

As discussed under the caption “Legal Matters – Tax Exemption,” interest on the 2018 Bonds might become includable in gross income for purposes of federal income taxation retroactive to the date the 2018 Bonds were issued as a result of future acts or omissions of the City in violation of its covenants in the Fiscal Agent Agreement. The Fiscal Agent Agreement does not contain a special redemption feature triggered by the occurrence of an event of taxability. As a result, if interest on the 2018 Bonds were to become includable in gross income for purposes of federal income taxation, the 2018 Bonds would continue to remain outstanding until maturity unless earlier redeemed pursuant to optional redemption, mandatory sinking fund redemption or special mandatory redemption upon prepayment of the Special Taxes. See “THE 2018 BONDS – Redemption.”

IRS Audit of Tax-Exempt Bond Issues

The Internal Revenue Service (the “IRS”) has initiated an expanded program for the auditing of tax-exempt bond issues, including both random and targeted audits. It is possible that the 2018 Bonds will be selected for audit by the IRS. It is also possible that the market value of such 2018 Bonds might be affected as a result of such an audit (or by an audit of similar bonds or securities).

Impact of Legislative Proposals, Clarifications of the Code and Court Decisions on Tax Exemption

Future legislative proposals, if enacted into law, clarification of the Code or court decisions may cause interest on the 2018 Bonds to be subject, directly or indirectly, to federal income taxation or to be subject to or exempted from state income taxation, or otherwise prevent Bondowners from realizing the full current benefit of the tax status of such interest.

Voter Initiatives

Under the California Constitution, the power of initiative is reserved to the voters for the purpose of enacting statutes and constitutional amendments. Since 1978, the voters have exercised this power through the adoption of Proposition 13 and similar measures, including Proposition 218, which was approved in the general election held on November 5, 1996, and Proposition 26, which was approved on November 2, 2010.

Any such initiative may affect the collection of fees, taxes and other types of revenue by local agencies such as the District. Subject to overriding federal constitutional principles, such collection may be materially and adversely affected by voter-approved initiatives, possibly to the

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extent of creating cash-flow problems in the payment of outstanding obligations such as the 2018 Bonds.

Proposition 218 – Voter Approval for Local Government Taxes—Limitation on Fees, Assessments, and Charges—Initiative Constitutional Amendment, added Articles XIII C and XIII D to the California Constitution, imposing certain vote requirements and other limitations on the imposition of new or increased taxes, assessments and property-related fees and charges.

On November 2, 2010, California voters approved Proposition 26, entitled the “Supermajority Vote to Pass New Taxes and Fees Act.” Section 1 of Proposition 26 declares that Proposition 26 is intended to limit the ability of the State Legislature and local government to circumvent existing restrictions on increasing taxes by defining the new or expanded taxes as “fees.” Proposition 26 amended Articles XIII A and XIII C of the State Constitution. The amendments to Article XIII A limit the ability of the State Legislature to impose higher taxes (as defined in Proposition 26) without a two-thirds vote of the Legislature. Article XIII C requires that all new local taxes be submitted to the electorate before they become effective. Taxes for general governmental purposes require a majority vote and taxes for specific purposes (“special taxes”) require a two-thirds vote.

The Special Taxes and the 2018 Bonds were each authorized by not less than a two-thirds vote of the landowners within the District who constituted the qualified electors at the time of such voted authorization. The City believes, therefore, that issuance of the 2018 Bonds does not require the conduct of further proceedings under the Act, Proposition 218 or Proposition 26.

Secondary Market for Bonds

There can be no guarantee that there will be a secondary market for the 2018 Bonds or, if a secondary market exists, that any 2018 Bonds can be sold for any particular price. Prices of bond issues for which a market is being made will depend upon then-prevailing circumstances. Such prices could be substantially different from the original purchase price.

No assurance can be given that the market price for the 2018 Bonds will not be affected by the introduction or enactment of any future legislation (including without limitation amendments to the Internal Revenue Code), or changes in interpretation of the Internal Revenue Code, or any action of the IRS, including but not limited to the publication of proposed or final regulations, the issuance of rulings, the selection of the 2018 Bonds for audit examination, or the course or result of any IRS audit or examination of the 2018 Bonds or obligations that present similar tax issues as the 2018 Bonds.

LEGAL MATTERS

Legal Opinion

The legal opinion of Jones Hall, A Professional Law Corporation, San Francisco, California, Bond Counsel, approving the validity of the 2018 Bonds will be made available to purchasers at the time of original delivery and is attached in substantially final form as APPENDIX E.

Jones Hall, A Professional Law Corporation, San Francisco, California, has served as Disclosure Counsel to the City. Meyers Nave, A Professional Law Corporation, Sacramento,

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California, will pass upon certain legal matters for the City as its City Attorney. Nossaman LLP, is serving as counsel to the Underwriter.

Tax Exemption

Opinion of Bond Counsel. In the opinion of Jones Hall, A Professional Law Corporation, San Francisco, California, Bond Counsel, subject, however to the qualifications set forth below, under existing law, the interest on the 2018 Bonds is excluded from gross income for federal income tax purposes and such interest is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations, provided, however, that, for the purpose of computing the alternative minimum tax imposed on corporations (as defined for federal income tax purposes), such interest is taken into account in determining certain income and earnings.

The opinions set forth in the preceding paragraph are subject to the condition that the City comply with all requirements of the Internal Revenue Code of 1986, as amended (the “**Tax Code**”) that must be satisfied subsequent to the issuance of the 2018 Bonds. The City has covenanted to comply with each such requirement. Failure to comply with certain of such requirements may cause the inclusion of such interest in gross income for federal income tax purposes to be retroactive to the date of issuance of the 2018 Bonds.

If the initial offering price to the public (excluding bond houses and brokers) at which a 2018 Bond is sold is less than the amount payable at maturity thereof, then such difference constitutes “original issue discount” for purposes of federal income taxes and State of California personal income taxes. If the initial offering price to the public (excluding bond houses and brokers) at which a 2018 Bond is sold is greater than the amount payable at maturity thereof, then such difference constitutes “original issue premium” for purposes of federal income taxes and State of California personal income taxes. *De minimis* original issue discount and original issue premium is disregarded.

Under the Tax Code, original issue discount is treated as interest excluded from federal gross income and exempt from State of California personal income taxes to the extent properly allocable to each owner thereof subject to the limitations described in the first paragraph of this section. The original issue discount accrues over the term to maturity of the 2018 Bond on the basis of a constant interest rate compounded on each interest or principal payment date (with straight-line interpolations between compounding dates). The amount of original issue discount accruing during each period is added to the adjusted basis of such 2018 Bonds to determine taxable gain upon disposition (including sale, redemption or payment on maturity) of such 2018 Bond. The Tax Code contains certain provisions relating to the accrual of original issue discount in the case of purchasers of the 2018 Bonds who purchase the 2018 Bonds after the initial offering of a substantial amount of such maturity. Owners of such 2018 Bonds should consult their own tax advisors with respect to the tax consequences of ownership of 2018 Bonds with original issue discount, including the treatment of purchasers who do not purchase in the original offering, the allowance of a deduction for any loss on a sale or other disposition, and the treatment of accrued original issue discount on such 2018 Bonds under federal individual and corporate alternative minimum taxes.

Under the Tax Code, original issue premium is amortized on an annual basis over the term of the 2018 Bond (said term being the shorter of the 2018 Bond's maturity date or its call date). The amount of original issue premium amortized each year reduces the adjusted basis of the owner of the 2018 Bond for purposes of determining taxable gain or loss upon disposition.

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The amount of original issue premium on a 2018 Bond is amortized each year over the term to maturity of the 2018 Bond on the basis of a constant interest rate compounded on each interest or principal payment date (with straight-line interpolations between compounding dates). Amortized 2018 Bond premium is not deductible for federal income tax purposes. Owners of premium 2018 Bonds, including purchasers who do not purchase in the original offering, should consult their own tax advisors with respect to State of California personal income tax and federal income tax consequences of owning such 2018 Bonds.

In the further opinion of Bond Counsel, interest on the 2018 Bonds is exempt from California personal income taxes.

Owners of the 2018 Bonds should also be aware that the ownership or disposition of, or the accrual or receipt of interest on, the 2018 Bonds may have federal or state tax consequences other than as described above. Bond Counsel expresses no opinion regarding any federal or state tax consequences arising with respect to the 2018 Bonds other than as expressly described above.

No Litigation

At the time of delivery of the 2018 Bonds, the City will certify that there is no action, suit, proceeding, inquiry or investigation, at law or in equity, before or by any court, public board or body, pending with respect to which the District has been served with process or threatened, which (i) in any way questions the powers of the City Council or the City, (ii) in any way questions the validity of any proceeding taken by the City Council in connection with the issuance of the 2018 Bonds, (iii) wherein an unfavorable decision, ruling or finding could have a material adverse effect on the transactions contemplated by the purchase contract with respect to the 2018 Bonds, (iv) which, in any way, could adversely affect the validity or enforceability of the resolutions of the City Council adopted in connection with the formation of the District or the issuance of the 2018 Bonds, the Fiscal Agent Agreement, the Continuing Disclosure Agreement or the purchase contract with respect to the 2018 Bonds, (v) to the knowledge of the City, which in any way questions the exclusion from gross income of the recipients thereof of the interest on the 2018 Bonds for federal income tax purposes, or (vi) in any other way questions the status of the 2018 Bonds under State tax laws or regulations.

CONTINUING DISCLOSURE

The City has covenanted for the benefit of owners of the 2018 Bonds to provide certain financial information and operating data relating to the District by not later than nine months after the end of the City's fiscal year (presently June 30) in each year (the "**City Annual Report**") commencing with its report for the 2016-17 fiscal year (due by April 1, 2018) and to provide notices of the occurrence of certain enumerated events. Additionally, the Master Developer has covenanted for the benefit of owners of the 2018 Bonds to provide certain information with respect to its property within the District (the "**Developer Annual Report**") to the City at the same times as the City Annual Report (so long as it is responsible for a certain percentage of the Special Taxes), as described in the Developer Annual Report, and to provide notices of the occurrence of certain enumerated events.

The City Annual Report and the Developer Annual Report and notices of material events will be filed with the Municipal Securities Rulemaking Board. The covenants of the City have been made in order to assist the Underwriters in complying with Securities Exchange

ATTACHMENT 4

Commission Rule 15c2-12(b)(5) (the “**Rule**”). The specific nature of the information to be contained in the Annual Report or the notices of material events by the City and the Developer is summarized in “APPENDIX F - Form of Continuing Disclosure Undertakings.”

A review of the City’s compliance with prior continuing disclosure undertakings in the last five years indicates that:

(1) The City’s audited financial statements for fiscal years 2012, 2013 and 2014 were not filed until September 3, 2015, which was up to 886 days after the dates required for such filings.

(2) The City’s annual reports required for fiscal years 2012 through 2014 were not filed with all required information until September 8, 2015, and the annual report for fiscal year 2015 was not filed with all required information until July 6, 2016, which was up to 1,256 days after the dates required for such information.

The City has retained Goodwin Consulting Group, Inc. to serve as dissemination agent with respect to the filings to be made with respect to the 2018 Bonds and its other undertakings under the Rule.

Lennar represents that in the last five years, it has not failed to comply in any material respects with its previous undertakings, specifically regarding its requirement to provide prior developer periodic reports or to provide notice of occurrence of enumerated events.

NO RATING

The City has not obtained a formal credit rating on the 2018 Bonds, and does not anticipate obtaining one on the 2018 Bonds in the future. Nothing should be assumed from any credit rating that the City may obtain for other purposes. Prospective purchasers of the 2018 Bonds are required to make independent determinations as to the credit quality of the 2018 Bonds and their appropriateness as an investment.

UNDERWRITING

The 2018 Bonds are being purchased by Piper Jaffray & Co. (the “**Underwriter**”), at a purchase price of \$_____ (which represents the aggregate principal amount of the 2018 Bonds (\$_____), [plus/minus] original issue [premium/discount] of \$_____, and less an Underwriter’s discount of \$_____).

The purchase agreement relating to the 2018 Bonds provides that the Underwriter will purchase all of the 2018 Bonds, if any are purchased, the obligation to make such purchase being subject to certain terms and conditions set forth in such purchase agreement.

The Underwriter may offer and sell the 2018 Bonds to certain dealers and others at prices lower than the offering prices stated on the inside cover page hereof. The offering prices may be changed from time to time by the Underwriter.

ATTACHMENT 4**PROFESSIONAL FEES**

In connection with the issuance of the 2018 Bonds, fees or compensation payable to certain professionals are contingent upon the issuance and delivery of the 2018 Bonds. Those professionals include:

- Piper Jaffray & Co., as the Underwriter;
- Jones Hall, A Professional Law Corporation, as Bond Counsel and Disclosure Counsel;
- Nossaman LLP, as Underwriter's Counsel;
- Goodwin Consulting Group, Inc., as Special Tax Consultant;
- NHA Advisors, LLC, as Municipal Advisor; and
- U.S. Bank National Association, as Fiscal Agent for the 2018 Bonds and as Escrow Agent.

EXECUTION

The execution and delivery of the Official Statement by the City has been duly authorized by the City Council, acting as the legislative body of the District.

CITY OF RANCHO CORDOVA

By: _____
Chief Financial Officer

ATTACHMENT 4

APPENDIX A

RATE AND METHOD OF APPORTIONMENT OF SPECIAL TAX

ATTACHMENT 4

**APPENDIX B
THE APPRAISAL**

ATTACHMENT 4

APPENDIX C

SUMMARY OF CERTAIN PROVISIONS OF THE FISCAL AGENT AGREEMENT

ATTACHMENT 4

APPENDIX D

SACRAMENTO COUNTY AND CITY OF RANCHO CORDOVA
DEMOGRAPHIC INFORMATION

The following information concerning the City of Rancho Cordova (the “City”) and the County of Sacramento (the “County”) is included only for the purpose of supplying general information regarding the area of the City and County. The 2018 Bonds are not a debt of the City, the County, the State of California (the “State”) or any of its political subdivisions, and neither the City, the County, the State nor any of its political subdivisions is liable therefor.

General

The City. The City was incorporated on July 1, 2003, is located in the northeastern portion of the County, 10 miles east of downtown Sacramento and 90 miles northeast of San Francisco. Organized as a General Law City under State law, the City operates under the Council-Manager form of government with five members elected to the Council, one of which serves as mayor for a year.

The County. The County was incorporated in 1850 as one of the original 27 counties of the State. The County’s largest city, the City of Sacramento serves as the seat of government for both the County and the State. Sacramento became the State Capital in 1854. The County is the major component of the Sacramento Metropolitan Statistical Area (“**SMSA**”), which includes Sacramento, El Dorado, and Placer Counties.

The County encompasses approximately 994 square miles in the northern portion of the Central Valley, which is California’s prime agricultural region. The County is bordered by Contra Costa and San Joaquin Counties on the south, Amador and El Dorado Counties on the east, Placer and Sutter Counties on the north, and Yolo and Solano Counties on the west. The County extends from the low delta lands between the Sacramento and San Joaquin rivers north to about ten miles beyond the State Capitol and east to the foothills of the Sierra Nevada Mountains. The southernmost portion of the County has direct access to the San Francisco Bay.

ATTACHMENT 4**Population**

The following table lists population estimates for the City, the County and the State for the last five calendar years, as of January 1, 2017.

**CITY OF RANCHO CORDOVA, COUNTY OF SACRAMENTO
AND STATE OF CALIFORNIA
Population Estimates
Calendar Years 2013 through 2017, as of January 1**

Calendar Year	City of Rancho Cordova	County of Sacramento	State of California
2013	68,199	1,452,666	38,239,207
2014	69,449	1,465,654	38,357,459
2015	70,968	1,481,803	38,907,642
2016	72,203	1,495,297	39,255,883
2017	73,872	1,514,770	39,523,613

Source: State Department of Finance.

Employment and Industry

The City is included in the Sacramento-Arden-Arcade-Roseville Metropolitan Statistical Area. The unemployment rate in the Sacramento--Roseville--Arden-Arcade MSA was 5.0 percent in March 2017, down from a revised 5.1 percent in February 2017, and below the year-ago estimate of 5.6 percent. This compares with an unadjusted unemployment rate of 5.1 percent for California and 4.6 percent for the nation during the same period. The unemployment rate was 4.8 percent in El Dorado County, 4.2 percent in Placer County, 5.1 percent in the County, and 6.0 percent in Yolo County.

The table below provides information about employment rates and employment by industry type for the Sacramento MSA (which includes Sacramento, Placer, Yolo and El Dorado Counties) for the calendar years 2012 through 2016.

ATTACHMENT 4

SACRAMENTO-ARDEN ARCADE-ROSEVILLE MSA
(El Dorado, Placer, Sacramento, Yolo Counties)
Employment by Industry
(March 2016 Benchmark)

	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>	<u>2016</u>
Civilian Labor Force ⁽¹⁾	1,049,500	1,046,800	1,049,200	1,060,200	1,073,300
Employment	941,100	956,100	974,100	998,100	1,017,300
Unemployment	108,300	90,800	75,100	62,100	56,000
Unemployment Rate	10.3%	8.7%	7.2%	5.9%	5.2%
Wage and Salary Employment ⁽²⁾					
Agriculture	8,600	8,900	9,200	9,300	9,200
Mining and Logging	400	500	500	600	500
Construction	38,400	43,300	45,400	49,900	54,500
Manufacturing	33,900	34,100	35,400	36,300	36,200
Wholesale Trade	25,200	25,000	24,500	24,600	25,500
Retail Trade	91,800	93,800	95,300	97,500	100,600
Transportation, Warehousing and Utilities	22,000	22,900	23,600	24,600	25,900
Information	15,600	14,800	13,900	14,200	13,800
Finance and Insurance	35,700	36,300	35,500	37,100	37,500
Real Estate and Rental and Leasing	12,500	13,100	13,400	13,900	14,400
Professional and Business Services	111,100	114,600	118,200	119,700	128,600
Educational and Health Services	125,600	130,700	134,300	140,300	145,900
Leisure and Hospitality	84,500	88,700	91,800	94,900	99,800
Other Services	28,600	29,000	30,200	30,800	31,200
Federal Government	13,700	13,500	13,600	13,700	14,100
State Government	108,200	109,900	113,400	115,400	116,600
Local Government	99,600	99,200	100,800	102,900	104,600
Total, All Industries ⁽³⁾	855,300	878,200	898,800	925,400	958,700

(1) Labor force data is by place of residence; includes self-employed individuals, unpaid family workers, household domestic workers, and workers on strike.

(2) Industry employment is by place of work; excludes self-employed individuals, unpaid family workers, household domestic workers, and workers on strike.

(3) Totals may not add due to rounding.

Source: State of California Employment Development Department.

ATTACHMENT 4**Principal Employers**

The following table shows the principal employers in the City, as shown in the City's Comprehensive Annual Financial Report for fiscal year ending June 30, 2016.

**CITY OF RANCHO CORDOVA
Principal Employers
As of June 2016**

Employer	Number of Employees	Percent of Total Employment
State of California	3,000	5.45%
Veterans Affairs Medical Center	2,500	4.55
Aerojet Rocketdyne Inc.	1,700	3.09
Ampac Fine Chemicals LLC	1,600	2.91
Delta Dental	1,600	2.91
Sutter Health	1,400	2.55
Vision Service Plan	1,000	1.82
Verizon Wireless	1,000	1.82
Progressive Insurance	800	1.45
Health Net Federal Svc LLC	800	1.45

Source: City of Rancho Cordova, Comprehensive Annual Financial Report for the Fiscal Year Ended June 30, 2016.

ATTACHMENT 4**Major Employers**

The following table list the major employers within the County as of April 2017, in alphabetical order.

**COUNTY OF SACRAMENTO
Major Employers
As of April 2017**

Employer Name	Location	Industry
Aerojet International Inc	Rancho Cordova	Aerospace Industries (mfrs)
Aerojet Rocketdyne Inc	Rancho Cordova	Aerospace Industries (mfrs)
Air Resources Board Tstg Off	Sacramento	Engineers-Environmental
AMPAC Fine Chemicals LLC	Rancho Cordova	Electronic Equipment & Supplies-Mfrs
Ca Department of Insurance	Sacramento	Government Offices-State
California Prison Ind Auth	Folsom	Government Offices-State
Corrections Dept	Sacramento	State Govt-Correctional Institutions
Delta Dental of California	Rancho Cordova	Insurance
Dept of Transportation In Ca	Sacramento	Government Offices-State
Disabled American Veterans	Sacramento	Veterans' & Military Organizations
Employment Development Dept	Sacramento	Government-Job Training/Voc Rehab Svcs
Environmental Protection Agcy	Sacramento	State Government-Environmental Programs
Exposition & Fair	Sacramento	Government Offices-State
Intel Corp	Folsom	Semiconductor Devices (mfrs)
Mercy General Hospital	Sacramento	Hospitals
Mercy San Juan Medical Ctr	Carmichael	Hospitals
Sacramento Bee	Sacramento	Newspapers (publishers/Mfrs)
Sacramento Municipal Utility	Sacramento	Electric Contractors
Sacramento Regional Transit	Sacramento	Bus Lines
Sacramento State	Sacramento	Schools-Universities & Colleges Academic
Smud Customer Svc Ctr	Sacramento	Electric Companies
South Sacramento MEDICAL Ctr	Sacramento	Hospitals
Sutter Medical Ctr Sacramento	Sacramento	Hospitals
University of CA Davis Med Ctr	Sacramento	Hospitals
Water Resource Dept	Sacramento	Government Offices-State

Source: State of California Employment Development Department, extracted from The America's Labor Market Information System (ALMIS) Employer Database, 2017 2nd Edition.

ATTACHMENT 4**Effective Buying Income**

“Effective Buying Income” is defined as personal income less personal tax and nontax payments, a number often referred to as “disposable” or “after-tax” income. Personal income is the aggregate of wages and salaries, other labor-related income (such as employer contributions to private pension funds), proprietor’s income, rental income (which includes imputed rental income of owner-occupants of non-farm dwellings), dividends paid by corporations, interest income from all sources, and transfer payments (such as pensions and welfare assistance). Deducted from this total are personal taxes (federal, state and local), nontax payments (fines, fees, penalties, etc.) and personal contributions to social insurance. According to U.S. government definitions, the resultant figure is commonly known as “disposable personal income.”

The following table summarizes the total effective buying income for the City, the County, the State and the United States for the period 2012 through 2016. Effecting buying income data is not yet available for calendar year 2017.

**CITY OF RANCHO CORDOVA, COUNTY OF SACRAMENTO, THE STATE OF CALIFORNIA
AND THE UNITED STATES
Effective Buying Income
As of January 1, 2012 through 2016**

Year	Area	Total Effective Buying Income (000s' Omitted)	Median Household Effective Buying Income
2012	City of Rancho Cordova	\$1,242,695	\$41,709
	County of Sacramento	28,956,570	43,682
	California	864,088,828	47,307
	United States	6,737,867,730	41,358
2013	City of Rancho Cordova	\$1,286,365	\$43,422
	County of Sacramento	29,591,998	44,536
	California	858,676,636	48,340
	United States	6,982,757,379	43,715
2014	City of Rancho Cordova	\$1,305,605	\$44,975
	County of Sacramento	30,629,048	45,938
	California	901,189,699	50,072
	United States	7,357,153,421	45,448
2015	City of Rancho Cordova	\$1,439,538	\$47,314
	County of Sacramento	33,033,628	47,932
	California	981,231,666	53,589
	United States	7,757,960,399	46,738
2016	City of Rancho Cordova	\$1,572,336	\$50,181
	County of Sacramento	35,596,193	50,219
	California	1,036,142,723	55,681
	United States	8,132,748,136	48,043

Source: The Neilson Company Inc.

ATTACHMENT 4**Commercial Activity**

A summary of historic taxable sales within the City and the County during the past five years in which data is available is shown in the following tables. Total taxable sales during calendar year 2015 in the City were reported to be \$1,486,660,000 a 9.28% increase over the total taxable sales of \$1,360,439,000 reported during calendar year 2014. Annual figures are not yet available for calendar year 2016.

CITY OF RANCHO CORDOVA
Taxable Transactions
(Dollars in Thousands)

	<u>Retail and Food Services Stores</u>		<u>Total All Outlets</u>	
	Number of Permits	Taxable Transactions	Number of Permits	Taxable Transactions
2011	1,108	766,808	1,834	1,158,566
2012	1,100	811,506	1,807	1,240,397
2013	1,127	861,610	1,831	1,310,018
2014	1,130	873,802	1,846	1,360,439
2015	1,168	894,063	2,028	1,486,660

(1) Permit figures as of fourth quarter for calendar year 2015. Data for calendar year 2015 preliminary and subject to review and adjustment.

Source: California State Board of Equalization

Total taxable sales during calendar year 2015 in the County were reported to be \$22,043,196,000 a 4.66% increase over the total taxable sales of \$21,061,901,000 reported during calendar year 2014.

COUNTY OF SACRAMENTO
Taxable Transactions
(Dollars in Thousands)

	<u>Retail and Food Services Stores</u>		<u>Total All Outlets</u>	
	Number of Permits	Taxable Transactions	Number of Permits	Taxable Transactions
2011	22,198	12,502,808	31,682	18,003,765
2012	22,211	13,366,459	31,507	19,089,848
2013	22,629	14,171,006	31,709	20,097,095
2014	23,147	14,649,693	32,143	21,061,901
2015	23,543	15,221,223	35,584	22,043,196

(1) Permit figures as of fourth quarter for calendar year 2015. Data for calendar year 2015 preliminary and subject to review and adjustment.

Source: California State Board of Equalization

ATTACHMENT 4**Construction Activity**

The following tables show a five-year summary of the valuation of building permits issued in the City and the County. Annual figures are not yet available for calendar year 2016.

CITY OF RANCHO CORDOVA
Total Building Permit Valuations
(Dollars in Thousands)

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
<u>Permit Valuation</u>					
New Single-family	\$40,044.4	\$54,662.9	\$95,765.0	\$50,447.2	\$111,287.7
New Multi-family	0.0	0.0	8,998.5	5,359.9	0.0
Res. Alterations/Additions	<u>4,050.9</u>	<u>2,384.8</u>	<u>3,923.1</u>	<u>2,123.4</u>	<u>3,893.2</u>
Total Residential	44,095.3	57,047.7	108,686.6	57,930.5	115,180.9
New Commercial	17,964.1	5,836.7	27,984.9	3,671.8	1,806.0
New Industrial	0.0	0.0	0.0	0.0	0.0
New Other	0.0	699.7	763.0	2,064.4	5,952.0
Com. Alterations/Additions	<u>27,984.7</u>	<u>16,859.2</u>	<u>25,077.6</u>	<u>23,599.4</u>	<u>25,351.5</u>
Total Nonresidential	\$45,948.8	\$23,395.6	\$53,825.5	\$293,335.6	\$33,109.5
<u>New Dwelling Units</u>					
Single Family	148	215	330	166	402
Multiple Family	<u>0</u>	<u>0</u>	<u>106</u>	<u>56</u>	<u>0</u>
TOTAL	148	215	436	222	406

Source: Construction Industry Research Board, Building Permit Summary.

COUNTY OF SACRAMENTO
Total Building Permit Valuations
(Dollars in Thousands)

	<u>2011</u>	<u>2012</u>	<u>2013</u>	<u>2014</u>	<u>2015</u>
<u>Permit Valuation</u>					
New Single-family	\$189,634.5	\$248,826.3	\$388,935.7	\$361,339.4	\$547,340.7
New Multi-family	64,390.8	48,632.8	13,637.4	30,113.7	108,510.7
Res. Alterations/Additions	<u>202,757.1</u>	<u>143,291.7</u>	<u>201,418.7</u>	<u>179,207.0</u>	<u>241,507.7</u>
Total Residential	\$456,782.4	\$440,750.8	\$603,991.8	\$570,660.1	\$897,359.1
New Commercial	\$77,164.9	\$155,651.6	\$146,191.2	\$186,318.0	\$165,016.0
New Industrial	3,232.4	648.1	1,360.7	2,178.5	0.00
New Other	3,290.1	3,788.0	22,007.6	73,961.0	92,108.8
Com. Alterations/Additions	<u>287,939.6</u>	<u>248,426.0</u>	<u>279,324.0</u>	<u>261,776.1</u>	<u>394,305.5</u>
Total Nonresidential	\$371,627.0	\$408,513.7	\$448,883.5	\$524,233.6	\$651,430.3
<u>New Dwelling Units</u>					
Single Family	727	1,290	1,764	1,547	2,358
Multiple Family	<u>606</u>	<u>343</u>	<u>145</u>	<u>226</u>	<u>815</u>
TOTAL	1,333	1,633	1,909	1,773	3,173

Source: Construction Industry Research Board, Building Permit Summary.

ATTACHMENT 4

APPENDIX E

FORM OF OPINION OF BOND COUNSEL

_____, 2018

City Council
 City of Rancho Cordova
 2729 Prospect Park Drive
 Rancho Cordova, California 95670

OPINION: \$_____ City of Rancho Cordova Sunridge North Douglas
Community Facilities District No. 2005-1 Special Tax Bonds, Series 2018

Members of the City Council:

We have acted as bond counsel to the City of Rancho Cordova (the "City") in connection with the delivery by the City of the above-referenced bonds (the "Bonds"), issued pursuant to the provisions of the Mello-Roos Community Facilities Act of 1982, as amended, being California Government Code Section 53311, *et seq.* (the "Act"), and pursuant to a Supplemental Agreement No. 1 to Fiscal Agent Agreement, dated _____, 2018 and a Fiscal Agent Agreement dated as of October 1, 2015 (together, the "Fiscal Agent Agreement"), by and between the City and U.S. Bank National Association, as fiscal agent. We have examined the Act, an executed copy of the Fiscal Agent Agreement and such certified proceedings and other papers as we deem necessary to render this opinion.

As to questions of fact material to our opinion, we have relied upon representations of the City contained in the Fiscal Agent Agreement and in the certified proceedings and other certifications of public officials furnished to us, without undertaking to verify the same by independent investigation.

Based upon our examination we are of the opinion, under existing law, that:

1. The City is duly organized and existing under the laws of the State of California, with power to enter into Supplemental Agreement No. 1 to Fiscal Agent Agreement, dated _____, 2018, to perform the agreements on its part contained therein and in the Fiscal Agent Agreement, and to issue the Bonds.

2. The Bonds have been duly authorized, executed and delivered by the City and are legal, valid and binding obligations of the City, payable solely from the sources provided therefor in the Fiscal Agent Agreement.

ATTACHMENT 4

3. The Fiscal Agent Agreement has been duly approved by the City and constitutes a legal, valid and binding obligation of the City enforceable against the City in accordance with its terms.

4. Pursuant to the Act, the Fiscal Agent Agreement establishes a valid lien on and pledge of the Special Tax Revenues (as such term is defined in the Fiscal Agent Agreement) for the security of the Bonds.

5. Interest on the Bonds is excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals. The opinions set forth in the preceding sentence are subject to the condition that the City complies with all requirements of the Internal Revenue Code of 1986 that must be satisfied subsequent to the issuance of the Bonds in order that interest thereon be, or continue to be, excluded from gross income for federal income tax purposes. The City has covenanted to comply with each such requirement. Failure to comply with certain of such requirements may cause the inclusion of interest on the Bonds in gross income for federal income tax purposes to be retroactive to the date of issuance of the Bonds. We express no opinion regarding other federal tax consequences arising with respect to the ownership, sale or disposition of the Bonds, or the amount, accrual or receipt of interest on the Bonds.

6. Interest on the Bonds is exempt from personal income taxation imposed by the State of California. We express no opinion regarding any other tax consequences arising with respect to the ownership or disposition of, or the amount, accrual or receipt of interest on, the Bonds.

The rights of the owners of the Bonds and the enforceability of the Bonds and the Fiscal Agent Agreement may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights heretofore or hereafter enacted and may also be subject to the exercise of judicial discretion in accordance with principles of equity or otherwise in appropriate cases.

This opinion is given as of the date hereof, and we assume no obligation to revise or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention, or any changes in law that may hereafter occur. Our engagement with respect to this matter has terminated as of the date hereof.

Respectfully submitted,

A Professional Law Corporation

ATTACHMENT 4**APPENDIX F****FORM OF CONTINUING DISCLOSURE UNDERTAKINGS****CONTINUING DISCLOSURE CERTIFICATE
(City)**

\$ _____
CITY OF RANCHO CORDOVA
SUNRIDGE NORTH DOUGLAS COMMUNITY FACILITIES DISTRICT NO. 2005-1
SPECIAL TAX BONDS
SERIES 2018

THIS CONTINUING DISCLOSURE CERTIFICATE (the "Disclosure Certificate") is executed and delivered by the City of Rancho Cordova, a public body, corporate and politic, organized and existing under and by virtue of the laws of the State of California (the "Issuer" or the "City"), in connection with the issuance of the bonds captioned above (the "Bonds"). The Bonds are being issued pursuant to a Supplemental Agreement No. 1 to Fiscal Agent Agreement, dated as of _____, 2018, which supplements a Fiscal Agent Agreement dated as of October 1, 2015 (collectively, the "Fiscal Agent Agreement"), by and between the City and U.S. Bank National Association, as fiscal agent (the "Fiscal Agent"). The City hereby covenants and agrees as follows:

Section 1. Purpose of the Disclosure Certificate. This Disclosure Certificate is being executed and delivered by the City for the benefit of the holders and beneficial owners of the Bonds and in order to assist the Participating Underwriters in complying with S.E.C. Rule 15c2-12(b)(5).

Section 2. Definitions. In addition to the definitions set forth above and in the Fiscal Agent Agreement, which apply to any capitalized term used in this Disclosure Certificate unless otherwise defined in this Section, the following capitalized terms shall have the following meanings:

"*Annual Report*" means any Annual Report provided by the City pursuant to, and as described in, Sections 3 and 4 of this Disclosure Certificate.

"*Annual Report Date*" means the date that is nine months after the end of the City's fiscal year (currently April 1 based on the City's fiscal year end of June 30).

"*Dissemination Agent*" means Goodwin Consulting Group, or any successor Dissemination Agent designated in writing by the City and which has filed with the City a written acceptance of such designation.

"*EMMA System*" means the Electronic Municipal Market Access system of the MSRB or such other electronic system designated by the MSRB or the Securities and Exchange Commission for compliance with S.E.C Rule 15c2-12(b).

ATTACHMENT 4

"*Listed Events*" means any of the events listed in Section 5(a) of this Disclosure Certificate.

"*MSRB*" means the Municipal Securities Rulemaking Board, or any other repository of disclosure information that may be designated by the Securities and Exchange Commission as such for purposes of the Rule in the future.

"*Official Statement*" means the final official statement dated _____, 2018, executed by the City in connection with the issuance of the Bonds.

"*Participating Underwriter*" means Piper Jaffray & Co.

"*Rule*" means Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as it may be amended from time to time.

Section 3. Provision of Annual Reports.

(a) The City shall, or shall cause the Dissemination Agent to, not later than the Annual Report Date, commencing April 1, 2018, with the report for the 2016-17 fiscal year, provide to the MSRB through the EMMA System an Annual Report that is consistent with the requirements of Section 4 of this Disclosure Certificate. Not later than 15 Business Days prior to the Annual Report Date, the City shall provide the Annual Report to the Dissemination Agent (if other than the City). If by 15 Business Days prior to the Annual Report Date the Dissemination Agent (if other than the City) has not received a copy of the Annual Report, the Dissemination Agent shall contact the City to determine if the City is in compliance with the previous sentence. The Annual Report may be submitted as a single document or as separate documents comprising a package, and may include by reference other information as provided in Section 4 of this Disclosure Certificate; provided that the audited financial statements of the City may be submitted separately from the balance of the Annual Report, and later than the Annual Report Date, if not available by that date. If the City's fiscal year changes, it shall give notice of such change in the same manner as for a Listed Event under Section 5(c). The City shall provide a written certification with each Annual Report furnished to the Dissemination Agent to the effect that such Annual Report constitutes the Annual Report required to be furnished by the City hereunder.

(b) If the City does not provide, or cause the Dissemination Agent to provide, an Annual Report by the Annual Report Date as required in subsection (a) above, the Dissemination Agent shall provide in a timely manner to the MSRB through the EMMA System, in an electronic format as prescribed by the MSRB, a notice in substantially the form attached as Exhibit A.

(c) The Dissemination Agent shall:

(1) determine each year prior to the Annual Report Date the then-applicable rules and electronic format prescribed by the MSRB for the filing of annual continuing disclosure reports; and

(2) if the Dissemination Agent is other than the City, file a report with the City and the Participating Underwriters certifying that the Annual Report has been provided pursuant to this Disclosure Certificate, and stating the date it was provided.

ATTACHMENT 4

Section 4. Content of Annual Reports. The City's Annual Report shall contain or incorporate by reference the following documents and information:

(a) Audited Financial Statements prepared in accordance with generally accepted accounting principles as promulgated to apply to governmental entities from time to time by the Governmental Accounting Standards Board. If the Issuer's audited financial statements are not available by the time the Annual Report is required to be filed pursuant to Section 3(a), the Annual Report shall contain unaudited financial statements in a format similar to the financial statements contained in the final Official Statement, and the audited financial statements shall be filed in the same manner as the Annual Report when they become available. This submission should be made with the following caveat:

THE CITY'S ANNUAL FINANCIAL STATEMENT IS PROVIDED SOLELY TO COMPLY WITH THE SECURITIES EXCHANGE COMMISSION STAFF'S INTERPRETATION OF RULE 15C2-12. NO FUNDS OR ASSETS OF THE CITY (OTHER THAN THE PROCEEDS OF THE SPECIAL TAXES LEVIED FOR THE DISTRICT AND SECURING THE BONDS) ARE REQUIRED TO BE USED TO PAY DEBT SERVICE ON THE BONDS AND THE CITY IS NOT OBLIGATED TO ADVANCE AVAILABLE FUNDS FROM THE CITY TREASURY TO COVER ANY DELINQUENCIES. INVESTORS SHOULD NOT RELY ON THE FINANCIAL CONDITION OF THE CITY IN EVALUATING WHETHER TO BUY, HOLD OR SELL THE BONDS.

(b) The following additional items, indicating information as of the previous September 30th, with respect to the Bonds:

(1) Principal amount of Bonds outstanding under the Fiscal Agent Agreement.

(2) Balance in Reserve Fund.

(3) Table indicating Special Tax levy, amount collected, delinquent amount and percent delinquent for the most recent year.

(4) Status of foreclosure proceedings and summary of results of foreclosure sales, if available.

(5) Identity of any delinquent taxpayer representing more than 5% of levy and value-to-lien ratios of applicable properties (using assessed values unless more accurate information is available).

(6) Aggregate assessed value for all parcels in the District.

(7) Until the fiscal year in which the Special Tax levied on the developed property in the District is greater than or equal to the annual debt service on the Bonds, the number of building permits issued by the City for single family residential homes in such fiscal year.

(c) For so long as there is any owner of property in the District whose properties in the District collectively represent 10% or more of the Special Taxes, the following information regarding the status of development in the District:

(1) Significant amendments to land use entitlements.

ATTACHMENT 4

(2) Status of any legislative, administrative and judicial challenges to the construction of the development known to the Issuer.

(3) Assessed valuation of property shown on County Assessor's tax rolls with no "improvements" value in the District for the current (as of the date of the report) fiscal year.

(4) List of landowners (as shown County Assessor's tax roll) and assessor's parcel number(s) of parcels held by owners whose properties collectively represent 10% or more of the Special Taxes for the current (as of the date of the report) fiscal year.

(5) Number of building permits issued by the City for property in the District for the reported fiscal year.

(d) In addition to any of the information expressly required to be provided under paragraphs (a), (b) and (c) of this Section, the Issuer shall provide such further information, if any, as may be necessary to make the specifically required statements, in the light of the circumstances under which they are made, not misleading.

Any or all of the items listed above may be included by specific reference to other documents, including official statements of debt issues of the City or related public entities, which are available to the public on the MSRB's Internet web site or filed with the Securities and Exchange Commission. The City shall clearly identify each such other document so included by reference.

Section 5. Reporting of Listed Events.

(a) The City shall give, or cause to be given, notice of the occurrence of any of the following Listed Events with respect to the Bonds:

- (1) Principal and interest payment delinquencies.
- (2) Non-payment related defaults, if material.
- (3) Unscheduled draws on debt service reserves reflecting financial difficulties.
- (4) Unscheduled draws on credit enhancements reflecting financial difficulties.
- (5) Substitution of credit or liquidity providers, or their failure to perform.
- (6) Rating Changes.
- (7) Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds, or other material events affecting the tax status of the Bonds.
- (8) Modifications to rights of security holders, if material.
- (9) Bond calls, if material, and tender offers.
- (10) Defeasances.
- (11) Release, substitution, or sale of property securing repayment of the securities, if material.
- (12) Bankruptcy, insolvency, receivership or similar event of the City.
- (13) The consummation of a merger, consolidation, or acquisition involving the City, or the sale of all or substantially all of the assets of the City (other

ATTACHMENT 4

than in the ordinary course of business), the entry into a definitive agreement to undertake such an action, or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material.

- (14) Appointment of a successor or additional Fiscal Agent or the change of name of the Fiscal Agent, if material.

(b) Whenever the City obtains knowledge of the occurrence of a Listed Event, the City shall, or shall cause the Dissemination Agent (if not the City) to, file a notice of such occurrence with the MSRB through the EMMA System, in an electronic format as prescribed by the MSRB, in a timely manner not in excess of 10 business days after the occurrence of the Listed Event. Notwithstanding the foregoing, notice of Listed Events described in subsections (a)(8) and (9) above need not be given under this subsection any earlier than the notice (if any) of the underlying event is given to holders of affected Bonds under the Indenture.

(c) The City acknowledges that the events described in subparagraphs (a)(2), (a)(7), (a)(8) (if the event is a bond call), (a)(10), (a)(13), and (a)(14) of this Section 5 contain the qualifier "if material" and that subparagraph (a)(6) also contains the qualifier "material" with respect to certain notices, determinations or other events affecting the tax status of the Bonds. The City shall cause a notice to be filed as set forth in paragraph (b) above with respect to any such event only to the extent that it determines the event's occurrence is material for purposes of U.S. federal securities law. Whenever the City obtains knowledge of the occurrence of any of these Listed Events, the City will as soon as possible determine if such event would be material under applicable federal securities law. If such event is determined to be material, the City will cause a notice to be filed as set forth in paragraph (b) above.

(d) For purposes of this Disclosure Certificate, any event described in paragraph (a)(12) above is considered to occur when any of the following occur: the appointment of a receiver, fiscal agent, or similar officer for the City in a proceeding under the United States Bankruptcy Code or in any other proceeding under state or federal law in which a court or governmental authority has assumed jurisdiction over substantially all of the assets or business of the City, or if such jurisdiction has been assumed by leaving the existing governing body and officials or officers in possession but subject to the supervision and orders of a court or governmental authority, or the entry of an order confirming a plan of reorganization, arrangement, or liquidation by a court or governmental authority having supervision or jurisdiction over substantially all of the assets or business of the City.

Section 6. Identifying Information for Filings with the MSRB. All documents provided to the MSRB under the Disclosure Certificate shall be accompanied by identifying information as prescribed by the MSRB.

Section 7. Termination of Reporting Obligation. The City's obligations under this Disclosure Certificate shall terminate upon the legal defeasance, prior redemption or payment in full of all of the Bonds. If such termination occurs prior to the final maturity of the Bonds, the City shall give notice of such termination in the same manner as for a Listed Event under Section 5(c).

Section 8. Dissemination Agent. The City may, from time to time, appoint or engage a Dissemination Agent to assist it in carrying out its obligations under this Disclosure Certificate, and may discharge any such Agent, with or without appointing a successor Dissemination Agent. The initial Dissemination Agent will be Goodwin Consulting Group, Inc.

ATTACHMENT 4

Section 9. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Certificate, the City may amend this Disclosure Certificate, and any provision of this Disclosure Certificate may be waived, provided that the following conditions are satisfied:

(a) if the amendment or waiver relates to the provisions of Sections 3(a), 4 or 5(a), it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature, or status of an obligated person with respect to the Bonds, or type of business conducted;

(b) the undertakings herein, as proposed to be amended or waived, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the primary offering of the Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) the proposed amendment or waiver either (1) is approved by holders of the Bonds in the manner provided in the Fiscal Agent Agreement for amendments to the Fiscal Agent Agreement with the consent of holders, or (2) does not, in the opinion of the Fiscal Agent or nationally recognized bond counsel, materially impair the interests of the holders or beneficial owners of the Bonds.

If the annual financial information or operating data to be provided in the Annual Report is amended pursuant to the provisions hereof, the first annual financial information filed pursuant hereto containing the amended operating data or financial information shall explain, in narrative form, the reasons for the amendment and the impact of the change in the type of operating data or financial information being provided.

If an amendment is made to the undertaking specifying the accounting principles to be followed in preparing financial statements, the annual financial information for the year in which the change is made shall present a comparison between the financial statements or information prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles. The comparison shall include a qualitative discussion of the differences in the accounting principles and the impact of the change in the accounting principles on the presentation of the financial information, in order to provide information to investors to enable them to evaluate the ability of the City to meet its obligations. To the extent reasonably feasible, the comparison shall be quantitative. A notice of the change in the accounting principles shall be filed in the same manner as for a Listed Event under Section 5(c).

Section 10. Additional Information. Nothing in this Disclosure Certificate shall be deemed to prevent the City from disseminating any other information, using the means of dissemination set forth in this Disclosure Certificate or any other means of communication, or including any other information in any Annual Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Certificate. If the City chooses to include any information in any Annual Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Certificate, the City shall have no obligation under this Disclosure Certificate to update such information or include it in any future Annual Report or notice of occurrence of a Listed Event.

Section 11. Identifying Information for Filings with EMMA. All documents provided to EMMA under this Disclosure Certificate will be accompanied by identifying information as prescribed by the MSRB.

ATTACHMENT 4

Section 12. Default. In the event of a failure of the City to comply with any provision of this Disclosure Certificate, the Participating Underwriters or any holder or beneficial owner of the Bonds may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the City to comply with its obligations under this Disclosure Certificate. A default under this Disclosure Certificate shall not be deemed an Event of Default under the Fiscal Agent Agreement, and the sole remedy under this Disclosure Certificate in the event of any failure of the City to comply with this Disclosure Certificate shall be an action to compel performance.

Section 13. Duties, Immunities and Liabilities of Dissemination Agent. The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Certificate, and the City agrees to indemnify and save the Dissemination Agent, its officers, directors, employees and agents, harmless against any loss, expense and liabilities which it may incur arising out of or in the exercise or performance of its powers and duties hereunder, including the costs and expenses (including attorneys fees) of defending against any claim of liability, but excluding liabilities due to the Dissemination Agent's negligence or willful misconduct. The Dissemination Agent shall have no duty or obligation to review any information provided to it hereunder and shall not be deemed to be acting in any fiduciary capacity for the City, the Fiscal Agent, the Bond owners or any other party. The obligations of the City under this Section shall survive resignation or removal of the Dissemination Agent and payment of the Bonds.

Section 14. Beneficiaries. This Disclosure Certificate shall inure solely to the benefit of the City, the Fiscal Agent, the Dissemination Agent, the Participating Underwriters and holders and beneficial owners from time to time of the Bonds, and shall create no rights in any other person or entity.

ATTACHMENT 4

Section 15. Counterparts. This Disclosure Certificate may be executed in several counterparts, each of which shall be regarded as an original, and all of which shall constitute one and the same instrument.

Date: _____, 2018

CITY OF RANCHO CORDOVA for and on
behalf of the SUNRIDGE NORTH
DOUGLAS COMMUNITY FACILITIES
DISTRICT NO. 2005-1

By: _____
Authorized Officer

AGREED AND ACCEPTED:
GOODWIN CONSULTING,
as Dissemination Agent

By: _____
Name: _____
Title: _____

ATTACHMENT 4**EXHIBIT A****NOTICE OF FAILURE TO FILE ANNUAL REPORT**

Name of Issuer: City of Rancho Cordova

Name of Bond Issue: \$_____ City of Rancho Cordova
Sunridge North Douglas Community Facilities District No. 2005-1
Special Tax Bonds, Series 2018

Date of Issuance: _____, 2018

NOTICE IS HEREBY GIVEN that the City has not provided an Annual Report with respect to the above-named Bonds as required by the Continuing Disclosure Certificate dated _____, 2018 executed by the City and countersigned by Goodwin Consulting Group, as dissemination agent. The City anticipates that the Annual Report will be filed by _____.

Dated: _____

DISSEMINATION AGENT:

ATTACHMENT 4**CONTINUING DISCLOSURE CERTIFICATE
(Developer)**

THIS CONTINUING DISCLOSURE CERTIFICATE (DEVELOPER) (the "Disclosure Certificate") dated as of _____, 2018, is executed and delivered by Lennar Homes of California, Inc. (the "Developer") in connection with the issuance by the City of Rancho Cordova (the "Issuer" or the "City"), of its \$_____ Sunridge North Douglas Community Facilities District No. 2005-1 Special Tax Bonds, Series 2018 (the "Bonds"). The Bonds are being executed and delivered pursuant to a Supplemental Agreement No. 1 to Fiscal Agent Agreement, dated as of _____, 2018, which supplements a Fiscal Agent Agreement dated as of October 1, 2015 (the "Fiscal Agent Agreement"), by and between the City and U.S. Bank National Association (the "Fiscal Agent"). The Developer covenants and agrees as follows:

Section 1. Purpose of the Disclosure Certificate. This Disclosure Certificate is being executed and delivered by the Developer for the benefit of the holders and beneficial owners of the Bonds.

Section 2. Definitions. In addition to the definitions set forth above and in the Fiscal Agent Agreement, which apply to any capitalized term used in this Disclosure Certificate unless otherwise defined in this Disclosure Certificate, the following capitalized terms shall have the following meanings:

"Affiliate" of another Person means (a) a Person directly or indirectly owning, controlling, or holding with power to vote, 5% or more of the outstanding voting securities of such other Person, (b) any Person, 5% or more of whose outstanding voting securities are directly or indirectly owned, controlled, or held with power to vote, by such other Person, and (c) any Person directly or indirectly controlling, controlled by, or under common control with, such other Person. For purposes hereof, control means the power to exercise a controlling influence over the management or policies of a Person, unless such power is solely the result of an official position with such Person.

"Assumption Agreement" means an undertaking of a Major Owner, or an Affiliate thereof, for the benefit of the holders and beneficial owners of the Bonds containing terms substantially similar to this Disclosure Certificate (as modified for such Major Owner's development and financing plans with respect to the District), whereby such Major Owner or Affiliate agrees to provide periodic reports and notices of significant events, setting forth the information described in sections 4 and 5 hereof, respectively, with respect to the portion of the property in the District owned by such Major Owner and its Affiliates and, at the option of the Developer or such Major Owner, agrees to indemnify the Dissemination Agent (if any) pursuant to a provision substantially in the form of Section 11 hereof.

"Dissemination Agent" means the entity acting in its capacity as Dissemination Agent hereunder, or any successor Dissemination Agent designated in writing by the Developer and which has filed with the Developer, the City, and the Fiscal Agent a written acceptance of such designation, and which is experienced in providing dissemination agent services such as those required under this Disclosure Certificate.

"Listed Events" means any of the events listed in Section 5(a) of this Disclosure Certificate.

ATTACHMENT 4

"Major Owner" means, as of any Report Date, an owner of land in the District that is responsible in the aggregate for 20% or more of the Special Taxes in the District anticipated to be levied at any time during the then-current fiscal year.

"MSRB" means the Municipal Securities Rulemaking Board, , which has been designated by the Securities and Exchange Commission as the sole repository of disclosure information for purposes of the Rule, or any other repository of disclosure information that may be designated by the Securities and Exchange Commission as such for purposes of the Rule in the future.

"Official Statement" means the final official statement executed by the City in connection with the issuance of the Bonds.

"Participating Underwriter" means Piper Jaffray & Co., Inc., the original underwriter of the Bonds required to comply with the Rule in connection with offering of the Bonds

"Periodic Report" means any Periodic Report provided by the Developer pursuant to, and as described in, Sections 3 and 4 of this Disclosure Certificate.

"Person" means an individual, a corporation, a partnership, a limited liability company, an association, a joint stock company, a trust, any unincorporated organization or a government or political subdivision thereof.

"Property" means the property owned by the Developer in the District.

"Report Date" means April 1 of any fiscal year. If, in any year, the Report Date falls on a Saturday, Sunday, or a holiday, such Report Date shall be extended to the next following day that is not a Saturday, Sunday, or holiday.

"Rule" means Rule 15c2-12(b)(5) adopted by the Securities and Exchange Commission under the Securities Exchange Act of 1934, as the same may be amended from time to time.

"Special Taxes" means the special taxes of the District levied on taxable property within the District.

Section 3. Provision of Periodic Reports.

(a) The Developer shall, or, upon written direction of the Developer the Dissemination Agent shall, not later than the Report Date, commencing April 1, 2018, file or cause to be filed with the MSRB a Periodic Report which is consistent with the requirements of Section 4 of this Disclosure Certificate with a copy to the Fiscal Agent (if different from the Dissemination Agent), the Participating Underwriter and the City. Not later than 15 calendar days prior to the Report Date, the Developer shall provide the Periodic Report to the Dissemination Agent (if different from the Developer). The Developer shall provide a written certification with (or included as a part of) each Periodic Report furnished to the Dissemination Agent (if different from the Developer), the Fiscal Agent (if different from the Dissemination Agent), the Participating Underwriter and the City to the effect that such Periodic Report constitutes the Periodic Report required to be furnished by it under this Disclosure Certificate. The Dissemination Agent, the Fiscal Agent, the Participating Underwriter and the City may conclusively rely upon such certification of the Developer and shall have no duty or obligation to

ATTACHMENT 4

review the Periodic Report. The Periodic Report may be submitted as a single document or as separate documents comprising a package, and may incorporate by reference other information as provided in Section 4 of this Disclosure Certificate.

(b) If the Dissemination Agent does not receive a Periodic Report by 15 calendar days prior to the Report Date, the Dissemination Agent shall send a reminder notice to the Developer that the Periodic Report has not been provided as required under Section 3(a) above. The reminder notice shall instruct the Developer to determine whether its obligations under this Disclosure Certificate have terminated (pursuant to Section 6 below) and, if so, to provide the Dissemination Agent with a notice of such termination in the same manner as for a Listed Event (pursuant to Section 5 below). If the Developer does not provide, or cause the Dissemination Agent to provide, a Periodic Report to the MSRB by the Report Date as required in subsection (a) above, the Dissemination Agent shall send a notice to the MSRB in substantially the form attached hereto as Exhibit A, with a copy to the Fiscal Agent (if other than the Dissemination Agent), the City and the Participating Underwriter.

(c) With respect to the Periodic Report, the Dissemination Agent shall, to the extent the Periodic Report has been furnished to it, file the Periodic Report with the MSRB and file a report with the Developer (if the Dissemination Agent is other than the Developer), the City and the Participating Underwriter certifying that the Periodic Report has been provided pursuant to this Disclosure Certificate, stating the date it was provided to and filed with the MSRB.

Section 4. Content of Periodic Reports. The Developer's Periodic Report shall contain or incorporate by reference the information set forth in Exhibit B relating to the Developer, any or all of which may be included by specific reference to other documents, including official statements of debt issues of the Developer or related public entities, which have been submitted to the MSRB or the Securities and Exchange Commission. If the document included by reference is a final official statement, it must be available from the MSRB. The Developer shall clearly identify each such other document so included by reference.

In addition to any of the information expressly required to be provided in Exhibit B, the Developer's Periodic Report shall include such further information, if any, as may be necessary to make the specifically required statements, in the light of the circumstances under which they are made, not misleading.

Section 5. Reporting of Significant Events.

(a) The Developer shall give, or cause to be given, notice of the occurrence of any of the following Listed Events with respect to itself or the Property, if material:

(i) bankruptcy or insolvency proceedings commenced by or against the Developer and, if known, any bankruptcy or insolvency proceedings commenced by or against any Affiliate of the Developer that is reasonably likely to have a significant impact on the Developer's ability to pay Special Taxes or to sell or develop the Property;

(ii) failure to pay any taxes, special taxes (including the Special Taxes) or assessments due with respect to the Property on or prior to the delinquency date;

(iii) filing of a lawsuit of which the Developer is aware against the Developer or an Affiliate seeking damages, which is reasonably likely to have a significant impact on the Developer's ability to pay Special Taxes or to sell or develop the Property;

ATTACHMENT 4

(iv) material damage to or destruction of any of the improvements on the Property;
and

(v) any payment default or other material default by the Developer on any loan with respect to the construction of improvements on the Property.

(b) Whenever the Developer obtains knowledge of the occurrence of a Listed Event, the Developer shall as soon as possible determine if such event would be material under applicable Federal securities law.

(c) If the Developer determines that knowledge of the occurrence of a Listed Event would be material under applicable Federal securities law, the Developer shall, or shall cause the Dissemination Agent to, promptly file a notice of such occurrence with the MSRB, with a copy to the Fiscal Agent, the City and the Participating Underwriter.

Section 6. Duration of Reporting Obligation.

(a) All the Developer's obligations hereunder shall commence on the date hereof and terminate (except as provided in Section 11) on the earliest to occur of the following:

(i) upon the legal defeasance, prior redemption or payment in full of all the Bonds, or

(ii) at such time as property owned by the Developer is no longer responsible for payment of 20% or more of the Special Taxes, or

(iii) the date on which the Developer prepays in full all of the Special Taxes attributable to the Property.

The Developer shall give notice of the termination of its obligations under this Disclosure Certificate in the same manner as for a Listed Event under Section 5.

(b) If a portion of the Property owned by the Developer, or any Affiliate of the Developer, is conveyed to a Person that, upon such conveyance, will be a Major Owner, the obligations of the Developer hereunder with respect to the property in the District owned by such Major Owner and its Affiliates may be assumed by such Major Owner or by an Affiliate thereof, and if so assumed the Developer's obligations hereunder with respect to such portion of the Property will be terminated. In order to effect such an assumption, such Major Owner or Affiliate shall enter into an Assumption Agreement in form and substance reasonably satisfactory to the City and the Participating Underwriter. If not so assumed, the Developer shall report the information, as applicable to the transferee, required herein so long as the transferee is a Major Owner.

Section 7. Dissemination Agent. The Developer may, from time to time, appoint or engage a Dissemination Agent to assist the Developer in carrying out its obligations under this Disclosure Certificate, and may discharge any such Dissemination Agent, with or without appointing a successor Dissemination Agent. The initial Dissemination Agent shall be the Developer. The Dissemination Agent may resign by providing thirty days' written notice to the City, the Developer and the Fiscal Agent.

ATTACHMENT 4

Section 8. Amendment; Waiver. Notwithstanding any other provision of this Disclosure Certificate, the Developer may amend this Disclosure Certificate, and any provision of this Disclosure Certificate may be waived, provided that the following conditions are satisfied (provided, however, that the Dissemination Agent shall not be obligated under any such amendment that modifies or increases its duties or obligations hereunder without its written consent thereto):

(a) if the amendment or waiver relates to the provisions of sections 3(a), 4 or 5(a), it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature, or status of an obligated person with respect to the Bonds, or type of business conducted;

(b) the undertakings herein, as proposed to be amended or waived, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the primary offering of the Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) the proposed amendment or waiver either (i) is approved by holders of the Bonds in the manner provided in the Trust Agreement with the consent of holders, or (ii) does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the holders or beneficial owners of the Bonds.

Section 9. Additional Information. Nothing in this Disclosure Certificate shall be deemed to prevent the Developer from disseminating any other information, using the means of dissemination set forth in this Disclosure Certificate or any other means of communication, or including any other information in any Periodic Report or notice of occurrence of a Listed Event, in addition to that which is required by this Disclosure Certificate. If the Developer chooses to include any information in any Periodic Report or notice of occurrence of a Listed Event in addition to that which is specifically required by this Disclosure Certificate, the Developer shall have no obligation under this Disclosure Certificate to update such information or include it in any future Periodic Report or notice of occurrence of a Listed Event.

Section 10. Default. In the event of a failure of the Developer to comply with any provision of this Disclosure Certificate, the Fiscal Agent shall (upon written direction and only to the extent indemnified to its satisfaction from any liability, cost or expense, including fees and expenses of its attorneys), and the Participating Underwriter and any holder or beneficial owner of the Bonds may, take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the Developer to comply with its obligations under this Disclosure Certificate. A default under this Disclosure Certificate shall not be deemed an Event of Default under the Trust Agreement, and the sole and exclusive remedy under this Disclosure Certificate in the event of any failure of the Developer to comply with this Disclosure Certificate shall be an action to compel performance.

Section 11. Duties, Immunities and Liabilities of Dissemination Agent. The Dissemination Agent shall have only such duties as are specifically set forth in this Disclosure Certificate, and the Developer agrees to indemnify and save the Dissemination Agent, its officers, directors, employees and agents (each, an "Indemnified Party"), harmless against any loss, expense and liabilities which it may incur arising out of or in the exercise or performance of its powers and duties hereunder, including the reasonable costs and expenses (including attorneys' fees) of defending against any claim of liability, but excluding loss, liabilities, costs and expenses due to an Indemnified Party's negligence or willful misconduct or failure to

ATTACHMENT 4

perform its duties hereunder. The Dissemination Agent shall be paid compensation for its services provided hereunder in accordance with its schedule of fees as amended from time to time, which schedule, as amended, shall be reasonably acceptable, and all reasonable expenses, reasonable legal fees and advances made or incurred by the Dissemination Agent in the performance of its duties hereunder. The Dissemination Agent shall have no duty or obligation to review any information provided to it hereunder and shall not be deemed to be acting in any fiduciary capacity for the City, the Developer, the Fiscal Agent, the Bond owners, or any other party. The obligations of the Developer under this Section shall survive resignation or removal of the Dissemination Agent and payment of the Bonds.

Section 12. Notices. Any notice or communications to be among any of the parties to this Disclosure Certificate may be given as follows:

To the Developer	Lennar Homes of California, Inc. 1420 Rocky Ridge Drive, Suite #320 Roseville, CA 95661
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To the Issuer/City:	City of Rancho Cordova Attn: CFD Administrator 2729 Prospect Park Drive Rancho Cordova, CA 95670
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Any person may, by written notice to the other persons listed above, designate a different address or telephone number(s) to which subsequent notices or communications should be sent.

Section 13. Beneficiaries. This Disclosure Certificate shall inure solely to the benefit of the City, the Developer (its successors and assigns), the Fiscal Agent, the Dissemination Agent, the Participating Underwriter and holders and beneficial owners from time to time of the Bonds, and shall create no rights in any other person or entity. All obligations of the Developer hereunder shall be assumed by any legal successor to the obligations of the Developer as a result of a sale, merger, consolidation or other reorganization.

Section 14. Counterparts. This Disclosure Certificate may be executed in several counterparts, each of which shall be an original and all of which shall constitute but one and the same instrument.

ATTACHMENT 4

IN WITNESS WHEREOF, the parties hereto have executed this Disclosure Certificate as of the date first above written.

LENNAR HOMES OF CALIFORNIA, INC.,
A California corporation

By: _____

Name: _____

Title: _____

ATTACHMENT 4**EXHIBIT A****NOTICE TO REPOSITORIES OF FAILURE TO FILE PERIODIC REPORT**

Name of Issuer: City of Rancho Cordova

Name of Bond Issue: \$_____ City of Rancho Cordova, Sunridge North Douglas
Community Facilities District No. 2005-1 Special Tax Bonds, Series
2018

Date of Issuance: _____, 2018

NOTICE IS HEREBY GIVEN that _____ (the "Major Owner") has not provided a
Periodic Report with respect to the above-named Bonds as required by the Continuing
Disclosure Certificate (Developer) dated as of the date of issuance of such Bonds. The
Developer anticipates that the Periodic Report will be filed by _____.

Dated: _____

Dissemination Agent

By: _____

Its: _____

cc: Developer

ATTACHMENT 4**EXHIBIT B****PERIODIC REPORT**

This Periodic Report is hereby submitted under Section 4 of the Continuing Disclosure Certificate (Developer) (the "Disclosure Certificate") dated _____, 2018 executed by the undersigned (the "Developer") in connection with the issuance of the above-captioned bonds by the City of Rancho Cordova (the "City") with respect to its City of Rancho Cordova Sunridge North Douglas Community Facilities District No. 2005-1 (the "District").

Capitalized terms used in this Periodic Report but not otherwise defined have the meanings given to them in the Disclosure Certificate.

I. Property Ownership and Development

The information in this section is provided as of _____ (this date must be not more than 60 days before the date of this Periodic Report).

A. Property currently owned by the Developer in the District (the "Property"):

Development name: _____

Number of lots (acreage): _____

B. Status of land development or construction activities:

C. Status of building permits, and any significant amendments to land use or development entitlements:

D. Aggregate property sold, optioned or leased by the Developer to end users or merchant builders:

Since the Date of Issuance <u>of the Bonds</u>		Since the Last Periodic <u>Report</u>	
Acres*	_____	Acres*	_____
Lots	_____	Lots	_____

* For bulk land sales only (excluding sales of finished lots or completed buildings).

E. Any updates to information regarding the Property in Table 2 or Table 3 contained in the Official Statement, and any other changes in ownership, whether acquisition of land in the District by the Developer or sales of land in the District to other property owners,

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distinguishing between (i) end users (e.g., condominiums), (ii) developers and (iii) merchant builders.

II. Legal and Financial Status of Developer

Unless such information has previously been included or incorporated by reference in a Periodic Report, describe any change in the legal structure of the Developer or the financial condition and financing plan of the Developer that would materially and adversely interfere with its ability to complete its development plan described in the Official Statement.

III. Change in Development or Financing Plans

Unless such information has previously been included or incorporated by reference in a Periodic Report, describe any development plans or financing plans relating to the Property *that are materially different from* the proposed development and financing plan described in the Official Statement.

IV. Official Statement Updates

Unless such information has previously been included or incorporated by reference in a Periodic Report, describe any other significant changes in the information relating to the Developer or the Property contained in the Official Statement under the heading “THE DISTRICT – Development in the District” that would materially and adversely interfere with the Developer’s ability to develop and sell the Property as described in the Official Statement.

V. Other Material Information

In addition to any of the information expressly required above, provide such further information, if any, as may be necessary to make the specifically required statements, in the light of the circumstances under which they are made, not misleading.

ATTACHMENT 4**Certification**

The undersigned Developer hereby certifies that this Periodic Report constitutes the Periodic Report required to be furnished by the Developer under the Disclosure Certificate.

ANY STATEMENTS REGARDING THE DEVELOPER, THE DEVELOPMENT OF THE PROPERTY, THE DEVELOPER'S FINANCING PLAN OR FINANCIAL CONDITION, OR THE BONDS, OTHER THAN STATEMENTS MADE BY THE DEVELOPER IN AN OFFICIAL RELEASE, OR FILED WITH THE MUNICIPAL SECURITIES RULEMAKING BOARD, ARE NOT AUTHORIZED BY THE DEVELOPER. THE DEVELOPER IS NOT RESPONSIBLE FOR THE ACCURACY, COMPLETENESS OR FAIRNESS OF ANY SUCH UNAUTHORIZED STATEMENTS.

THE DEVELOPER HAS NO OBLIGATION TO UPDATE THIS PERIODIC REPORT OTHER THAN AS EXPRESSLY PROVIDED IN THE DISCLOSURE CERTIFICATE.

Dated: _____

LENNAR HOMES OF CALIFORNIA, INC.,
A California corporation

By: _____

Name: _____

Title: _____

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APPENDIX G

DTC AND THE BOOK-ENTRY ONLY SYSTEM

The following description of the Depository Trust Company ("DTC"), the procedures and record keeping with respect to beneficial ownership interests in the Bonds, payment of principal, interest and other payments on the Bonds to DTC Participants or Beneficial Owners, confirmation and transfer of beneficial ownership interest in the Bonds and other related transactions by and between DTC, the DTC Participants and the Beneficial Owners is based solely on information provided by DTC. Accordingly, no representations can be made concerning these matters and neither the DTC Participants nor the Beneficial Owners should rely on the foregoing information with respect to such matters, but should instead confirm the same with DTC or the DTC Participants, as the case may be.

Neither the issuer of the Bonds (the "Issuer") nor the trustee, fiscal agent or paying agent appointed with respect to the Bonds (the "Agent") take any responsibility for the information contained in this Appendix.

No assurances can be given that DTC, DTC Participants or Indirect Participants will distribute to the Beneficial Owners (a) payments of interest, principal or premium, if any, with respect to the Bonds, (b) certificates representing ownership interest in or other confirmation or ownership interest in the Bonds, or (c) redemption or other notices sent to DTC or Cede & Co., its nominee, as the registered owner of the Bonds, or that they will so do on a timely basis, or that DTC, DTC Participants or DTC Indirect Participants will act in the manner described in this Appendix. The current "Rules" applicable to DTC are on file with the Securities and Exchange Commission and the current "Procedures" of DTC to be followed in dealing with DTC Participants are on file with DTC.

1. The Depository Trust Company ("DTC"), New York, NY, will act as securities depository for the securities (the "Securities"). The Securities will be issued as fully-registered securities registered in the name of Cede & Co. (DTC's partnership nominee) or such other name as may be requested by an authorized representative of DTC. One fully-registered Security certificate will be issued for each issue of the Securities, each in the aggregate principal amount of such issue, and will be deposited with DTC. If, however, the aggregate principal amount of any issue exceeds \$500 million, one certificate will be issued with respect to each \$500 million of principal amount, and an additional certificate will be issued with respect to any remaining principal amount of such issue.

2. DTC, the world's largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC's participants ("Direct Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants' accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is

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a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a Standard & Poor's rating of AA+. The DTC Rules applicable to its Participants are on file with the Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

3. Purchases of Securities under the DTC system must be made by or through Direct Participants, which will receive a credit for the Securities on DTC's records. The ownership interest of each actual purchaser of each Security ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Securities are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Securities, except in the event that use of the book-entry system for the Securities is discontinued.

4. To facilitate subsequent transfers, all Securities deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co., or such other name as may be requested by an authorized representative of DTC. The deposit of Securities with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Securities; DTC's records reflect only the identity of the Direct Participants to whose accounts such Securities are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

5. Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Securities may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Securities, such as redemptions, tenders, defaults, and proposed amendments to the Security documents. For example, Beneficial Owners of Securities may wish to ascertain that the nominee holding the Securities for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the registrar and request that copies of notices be provided directly to them.

6. Redemption notices will be sent to DTC. If less than all of the Securities within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

7. Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to Securities unless authorized by a Direct Participant in accordance with DTC's MMI

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Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to Issuer as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts Securities are credited on the record date (identified in a listing attached to the Omnibus Proxy).

8. Redemption proceeds, distributions, and dividend payments on the Securities will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from Issuer or Agent, on payable date in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of such Participant and not of DTC, Agent, or Issuer, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, distributions, and dividend payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of Issuer or Agent, disbursement of such payments to Direct Participants will be the responsibility of DTC, and disbursement of such payments to the Beneficial Owners will be the responsibility of Direct and Indirect Participants.

9. A Beneficial Owner will give notice to elect to have its Securities purchased or tendered, through its Participant, to the Agent, and will effect delivery of such Securities by causing the Direct Participant to transfer the Participant's interest in the Securities, on DTC's records, to the Agent. The requirement for physical delivery of Securities in connection with an optional tender or a mandatory purchase will be deemed satisfied when the ownership rights in the Securities are transferred by Direct Participants on DTC's records and followed by a book-entry credit of tendered Securities to the Agent's DTC account.

10. DTC may discontinue providing its services as depository with respect to the Securities at any time by giving reasonable notice to Issuer or Agent. Under such circumstances, in the event that a successor depository is not obtained, Security certificates are required to be printed and delivered.

11. Issuer may decide to discontinue use of the system of book-entry-only transfers through DTC (or a successor securities depository). In that event, Security certificates will be printed and delivered to DTC.

12. The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that Issuer believes to be reliable, but Issuer takes no responsibility for the accuracy thereof.