ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017
PROJECT BASELINE AGREEMENT

US 50 Gold Line Corridor Enhancement Project - Hazel Ave/US 50 Interchange

Resolution LPP-P-2324-05B
(to be completed by CTC)

1. FUNDING PROGRAM

- ☐ Active Transportation Program
- ☑ Local Partnership Program (Competitive)
- ☐ Solutions for Congested Corridors Program
- ☐ State Highway Operation and Protection Program
- ☐ Trade Corridor Enhancement Program

2. PARTIES AND DATE

2.1 This Project Baseline Agreement (Agreement) effective on December 6, 2023 (will be completed by CTC), is made by and between the California Transportation Commission (Commission), the California Department of Transportation (Caltrans), the Project Applicant, Sacramento Transportation Authority, and the Implementing Agency, Sacramento County, SacRT, sometimes collectively referred to as the "Parties".

3. RECITAL

3.1 Whereas at its 6/28/2023 meeting the Commission approved the Local Partnership Program and included in this program of projects the US 50 Gold Line Corridor Enhancement Project - Hazel Ave/, the parties are entering into this Project Baseline Agreement to document the project cost, schedule, scope and benefits, as detailed on the Project Programming Request Form attached hereto as ***Exhibit A***, the Project Report attached hereto as ***Exhibit B***, the Performance Metrics Form, if applicable, attached hereto as ***Exhibit C***, as the baseline for project monitoring by the Commission.

3.2 The undersigned Project Applicant certifies that the funding sources cited are committed and expected to be available; the estimated costs represent full project funding; and the scope and description of benefits is the best estimate possible.

4. GENERAL PROVISIONS

The Project Applicant, Implementing Agency, and Caltrans agree to abide by the following provisions:

4.1 To meet the requirements of the Road Repair and Accountability Act of 2017 (Senate Bill [SB] 1, Chapter 5, Statutes of 2017) which provides the first significant, stable, and on-going increase in state transportation funding in more than two decades.

4.2 To adhere, as applicable, to the provisions of the Commission:

- ☐ Resolution _____, "Adoption of Program of Projects for the Active Transportation Program", dated _____
- ■ Resolution G-23-47, "Adoption of Program of Projects for the Local Partnership Program", dated 6/28/2023
- ☐ Resolution _____, "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated _____
- ☐ Resolution _____, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated _____
- ☐ Resolution _____, "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated _____

4.3 All signatories agree to adhere to the Commission's Guidelines. Any conflict between the programs will be resolved at the discretion of the Commission.

4.4 All signatories agree to adhere to the Commission's SB 1 Accountability and Transparency Guidelines and policies, and program and project amendment processes.

4.5 The Implementing Agencies, as identified in Section 5.4, agrees to secure funds for any additional costs of the project.

4.6 The Implementing Agencies, as identified in Section 5.4, agrees to report to Caltrans on a quarterly basis; on the progress made toward the implementation of the project, including scope, cost, schedule, and anticipated benefits/performance metric outcomes.

4.7 Caltrans agrees to prepare program progress reports on a on a semi-annual basis and include information appropriate to assess the current state of the overall program and the current status of each project identified in the program report.

4.8 The Implementing Agencies, as identified in Section 5.4, agrees to submit a timely Completion Report and Final Delivery Report as specified in the Commission's SB 1 Accountability and Transparency Guidelines.

4.9 The Implementing Agencies, as identified in Section 5.4, agrees to submit a timely Project Performance Analysis as specified in the Commission's SB 1 Accountability and Transparency Guidelines.

4.10 All signatories agree to maintain and make available to the Commission and/or its designated representative, all work related documents, including without limitation engineering, financial and other data, and methodologies and assumptions used in the determination of project benefits and performance metric outcomes during the course of the project, and retain those records for six years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.

4.11 The Inspector General of the Independent Office of Audits and Investigations has the right to audit the project records, including technical and financial data, of the Department of Transportation, the Project Applicant, the Implementing Agency, and any consultant or sub-consultants at any time during the course of the project and for six years from the date of the final closeout of the project, therefore all project records shall be maintained and made available at the time of request. Audits will be conducted in accordance with Generally Accepted Government Auditing Standards.

5. SPECIFIC PROVISIONS AND CONDITIONS

5.1 Project Schedule and Cost
See Project Programming Request Form, attached as Exhibit A.

5.2 Project Scope
See Project Report or equivalent, attached as Exhibit B. At a minimum, the attachment shall include the cover page, evidence of approval, executive summary, and a link to or electronic copy of the full document.

5.3 Performance Metrics
See Performance Metrics Form, if applicable, attached as Exhibit C.

5.4 Additional Provisions and Conditions *(Please attach an additional page if additional space is needed.)*

Implementing Agencies:

PPNO	Project	Implementing Agency	Amount
03-6222	Hazel Avenue/US 50 Interchange	Sacramento County	$15,000,000
03-LP008	Gold Line Light Rail Platform Mod. - Ph 2	SacRT	$10,000,000

Attachments:

Exhibit A: Project Programming Request Form
Exhibit B: Project Report
Exhibit C: Performance Metrics Form *(if applicable)*

SIGNATURE PAGE
TO
PROJECT BASELINE AGREEMENT

Project Name: US 50 Gold Line Corridor Enhancement Project - Hazel Ave/US 50 Interchange

Resolution: LPP-P-2324-05B

(to be completed by CTC)

DocuSigned by:
Kevin Bewsey
F64FCC63256B428...

9/21/2023
Date

Kevin M. Bewsey, Executive Director

Sacramento Transportation Authority

Project Applicant

DocuSigned by:
Ron Vicari
F72B15EEF9DF431...

9/20/2023
Date

Ron Vicari, Director

Sacramento County, Dept. Transportation

Implementing Agency

DocuSigned by:
FBAF3C5285914DC...

9/21/2023
Date

Henry Li, GM/CEO

Sacramento Regional Transit District

Implementing Agency

Amarjeet S. Benipal

10/23/2023
Date

Amarjeet S. Benipal

District Director

California Department of Transportation

11/27/2023
Date

Tony Tavares

Director

California Department of Transportation

01/10/24
Date

Tanisha Taylor

Executive Director

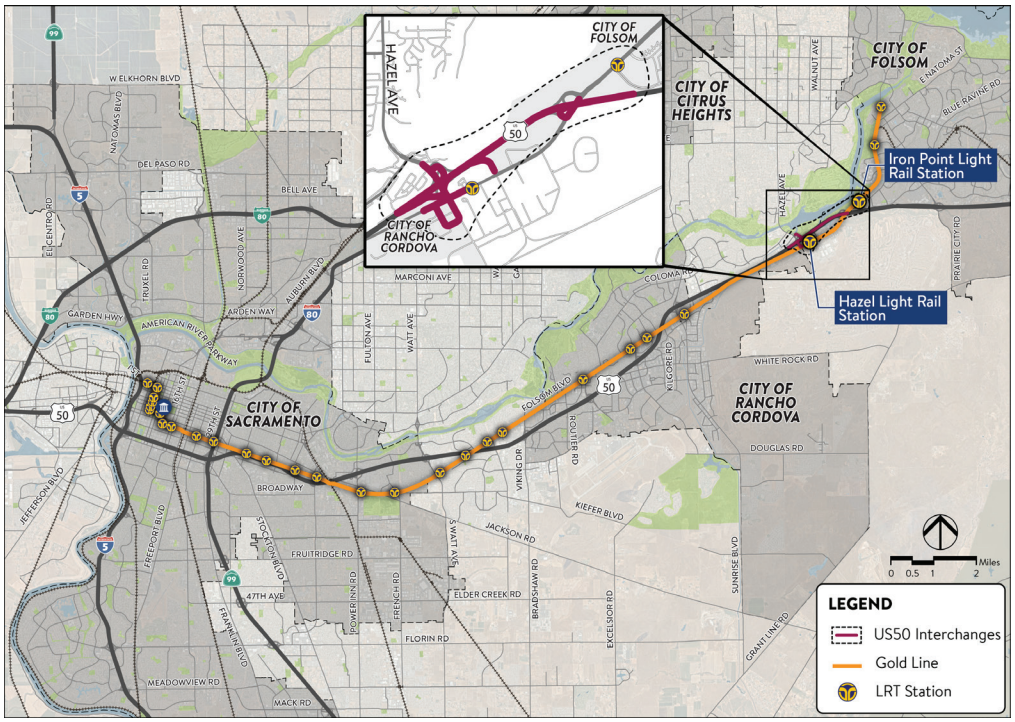
California Transportation Commission

US 50 GOLD LINE CORRIDOR ENHANCEMENT PROJECT

Applicant: Sacramento Transportation Authority
Implementing Agencies: Sacramento County / Sacramento Regional Transit District

SCOPE

The US 50 Congestion Reduction, Mobility, and Modernization Project (Project) implements a holistic approach to improve the transportation network along the highway corridor. The Project modernizes the Hazel Avenue, Aerojet Road, and Folsom Boulevard interchanges with US 50 to reduce congestion and improve operations, convert 29 Gold Line light rail station platforms to accommodate low floor vehicles, grade separate Hazel Avenue from Folsom Boulevard and the Gold Line to minimize conflicts and improve transit reliability, and add a grade separated Class I path across US 50 to connect to the American River Parkway. The improvements will promote a mode shift from single occupancy vehicles to light rail transit and reduce vehicle miles traveled on US 50. This will improve mobility, air quality, and provide transportation equity for residents in disadvantaged and low income communities along US 50 corridor.



COST

Environmental & Design	**$14,076,000**
Right of Way	**$16,959,000**
Construction	**$101,691,000**
Total	**$132,726,000**
LPP Request	**$25,000,000**

SCHEDULE

CEQA/NEPA Clearance	**1/2021**
Final Design	**2/2025**
Right of Way	**2/2025**
Construction Start	**7/2025**

OUTPUTS

- **29 Station Platforms**
- **3 Interchange Modifications**
- **0.74 Miles of Class I Path**
- **19,190 Sq Ft of Bridge Overpass**
- **35,100 Sq Ft of Bridge Off-Ramp Viaduct**

OUTCOMES

- **Supports Mode Shift**
- **Improves Operations and Safety**
- **Reduces Emissions**
- **Benefits Disadvantaged Communities**
- **Increases Mobility Options**

Exhibit A:

1. **US 50-Hazel Ave ePPR - PPNO 6222 / 03-3E380**
2. **Gold Line Light Rail Platform Modifications Phase 2 ePPR- PPNO LP008**

1. US 50-Hazel Ave ePPR - PPNO 6222 / 03-3E380

Nominating Agency: Sacramento Transportation Authority
Implementing Agencies: Sacramento County & Sacramento Regional Transit District

US 50 GOLD LINE CORRIDOR ENHANCEMENT PROJECT

Exhibit A: Electronic Project Programming Request Forms

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID
ePPR-5924-2023-0005 v0.1

Amendment (Existing Project) ☐ YES ☒ NO | Date 09/19/2023 09:33:47

Programs ☒ LPP-C ☐ LPP-F ☐ SCCP ☐ TCEP ☐ STIP ☐ Other

District	EA	Project ID	PPNO	Nominating Agency	
03	03E380		6222	Sacramento Transportation Authority	
County	**Route**	**PM Back**	**PM Ahead**	**Co-Nominating Agency**	
Sacramento County	50	15.000	17.200		
				MPO	**Element**
				SACOG	Capital Outlay

Project Manager/Contact	Phone	Email Address
Tim Stevens	916-874-7281	stevensti@saccounty.gov

Project Title

Hazel Avenue/US 50 Interchange

Location (Project Limits), Description (Scope of Work)

In Sacramento County: Hazel Avenue between Folsom Boulevard and U.S. Highway 50; Modify the existing Hazel Avenue interchange at US 50 including US 50 eastbound off ramp modifications at Aerojet Road and Folsom Boulevard (PM 15.0/17.2), extend and grade-separate Hazel Avenue over Folsom Boulevard and the Sacramento Regional Transit District Gold Line corridor, and provide Class I path/multimodal from Folsom Boulevard to the American River Parkway.

Component	Implementing Agency
PA&ED	Sacramento County
PS&E	Sacramento County
Right of Way	Sacramento County
Construction	Sacramento County

Legislative Districts

Assembly:	8	Senate:	1	Congressional:	7

Project Milestone	Existing	Proposed
Project Study Report Approved	07/15/2014	
Begin Environmental (PA&ED) Phase		07/02/2015
Circulate Draft Environmental Document Document Type EIR/FONSI		03/30/2020
Draft Project Report		07/27/2020
End Environmental Phase (PA&ED Milestone)		10/05/2020
Begin Design (PS&E) Phase		01/17/2022
End Design Phase (Ready to List for Advertisement Milestone)		02/28/2025
Begin Right of Way Phase		01/17/2022
End Right of Way Phase (Right of Way Certification Milestone)		02/28/2025
Begin Construction Phase (Contract Award Milestone)		07/31/2025
End Construction Phase (Construction Contract Acceptance Milestone)		09/30/2027
Begin Closeout Phase		10/01/2027
End Closeout Phase (Closeout Report)		09/30/2028

PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID
ePPR-5924-2023-0005 v0.1

Date 09/19/2023 09:33:47

Purpose and Need

The primary purpose of the project is to modify the existing interchange to reduce congestion, improve traffic operations, accommodate travel demand due to planned and approved developments, and improve safety of all modes of travel, including bicycles and pedestrians. The project will meet the following objectives.

• Improve operations by removing the close intersection spacing between the eastbound ramps and Folsom Boulevard, and minimizing conflict with heavy rail and light rail. This is accomplished by grade separating Hazel Avenue from Folsom Boulevard and the Sacramento Regional Transit District Gold Line corridor.

• Provide sufficient capacity in the ramps and roadways for future traffic volumes. This is accomplished through widening and lengthening on- and off-ramps.

• Maintain the Aerojet Road off-ramp connection to the approved development while improving the mainline operations. This is accomplished by removing the Aerojet Road exit from US 50 but still providing direct access to Aerojet Road through the eastbound Hazel Avenue off-ramp.

The project is needed for the following reasons.

• Existing and forecasted traffic operations and congestion are below acceptable operating standards at the Hazel Avenue/US 50 Interchange.

• Planned and approved developments identified by the adopted Sacramento County General Plan and the Sacramento Area Council of Governments' Regional Transportation Plan, including the increased traffic volumes associated with the proposed Easton Project, will increase the traffic volumes at the Hazel Avenue/US 50 interchange beyond acceptable operating standards.

• Implementation of mitigation identified in the Easton Project Final Environmental Impact Report (EIR) (County of Sacramento 2008) is required in order to accommodate the increased traffic volumes associated with that development. The Easton Project mitigation includes reconstruction of the Hazel Avenue/US 50 interchange as well as grade separation of Hazel Avenue over Folsom Boulevard and the light rail tracks. The Easton Project will contribute its fair share of funding to the improvements.

NHS Improvements ☒ YES ☐ NO	Roadway Class 2	Reversible Lane Analysis ☐ YES ☒ NO

Inc. Sustainable Communities Strategy Goals ☒ YES ☐ NO Reduce Greenhouse Gas Emissions ☒ YES ☐ NO

Project Outputs

Category	Outputs	Unit	Total
Operational Improvement	Interchange modifications	EA	3
Bridge / Tunnel	New bridges/tunnels	SQFT	19,190
Bridge / Tunnel	Modified / Improved interchanges	SQFT	35,100
Active Transportation	Pedestrian/Bicycle facilities miles constructed	Miles	0.74

PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID
ePPR-5924-2023-0005 v0.1

Date 09/19/2023 09:33:47

Additional Information

PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID
ePPR-5924-2023-0005 v0.1

Performance Indicators and Measures						
Measure	**Required For**	**Indicator/Measure**	**Unit**	**Build**	**Future No Build**	**Change**
Congestion Reduction	LPPC, SCCP, LPPF	Change in Daily Vehicle Miles Travelled	Miles	5,741,943	5,751,463	-9,520
			VMT per Capita	47.03	47.11	-0.08
	LPPC, SCCP, LPPF	Person Hours of Travel Time Saved (Only 'Change' required)	Person Hours	-47.52	0	-47.52
			Hours per Capita	0	0	0
System Reliability (Freight)	LPPC, SCCP, LPPF	Peak Period Travel Time Reliability Index (Only 'No Build' Required)	Index	0	2.92	-2.92
	LPPC, SCCP, LPPF	Level of Transit Delay (if required)	% "On-time"	97.8	95.6	2.2
Air Quality & GHG (only 'Change' required)	LPPC, SCCP, TCEP, LPPF	Particulate Matter	PM 2.5 Tons	0.0406	0	0.0406
			PM 10 Tons	0.0414	0	0.0414
	LPPC, SCCP, TCEP, LPPF	Carbon Dioxide (CO2)	Tons	-885	0	-885
	LPPC, SCCP, TCEP, LPPF	Volatile Organic Compounds (VOC)	Tons	-2.37	0	-2.37
	LPPC, SCCP, TCEP, LPPF	Sulphur Dioxides (SOx)	Tons	0.0592	0	0.0592
	LPPC, SCCP, TCEP, LPPF	Carbon Monoxide (CO)	Tons	-28.4	0	-28.4
	LPPC, SCCP, TCEP, LPPF	Nitrogen Oxides (NOx)	Tons	-3.4	0	-3.4
Safety	LPPC, SCCP, TCEP, LPPF	Number of Fatalities	Number	1	1	0
	LPPC, SCCP, TCEP, LPPF	Fatalities per 100 Million VMT	Number	0.0575	0.0575	0
	LPPC, SCCP, TCEP, LPPF	Number of Serious Injuries	Number	14.75	14.8	-0.05
	LPPC, SCCP, TCEP, LPPF	Number of Serious Injuries per 100 Million VMT	Number	0.852	0.8549	-0.0029
Economic Development	LPPC, SCCP, TCEP, LPPF	Jobs Created (Only 'Build' Required)	Number	1,662	0	1,662
Cost Effectiveness (only 'Change' required)	LPPC, SCCP, TCEP, LPPF	Cost Benefit Ratio	Ratio	1.03	0	1.03
Vehicle Volume	LPPC, LPPF, SCCP	Existing Average Annual Vehicle Volume on Project Segment	Number	21,563,969	21,586,218	-22,249
	LPPC, LPPF, SCCP	Estimated Year 20 Average Annual Vehicle Volume on Project Segment with Project	Number	23,060,450	23,106,897	-46,447

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID
ePPR-5924-2023-0005 v0.1

District	County	Route	EA	Project ID	PPNO
03	Sacramento County	50	03E380		6222

Project Title

Hazel Avenue/US 50 Interchange

Existing Total Project Cost ($1,000s)									
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Implementing Agency
E&P (PA&ED)									Sacramento County
PS&E									Sacramento County
R/W SUP (CT)									Sacramento County
CON SUP (CT)									Sacramento County
R/W									Sacramento County
CON									Sacramento County
TOTAL									
Proposed Total Project Cost ($1,000s)									Notes
E&P (PA&ED)	5,505							5,505	
PS&E	6,707							6,707	
R/W SUP (CT)									
CON SUP (CT)									
R/W	16,959							16,959	
CON			75,794					75,794	
TOTAL	29,171		75,794					104,965	

Fund #1:	Local Funds - Sacramento Co Measure A (Committed)								Program Code
Existing Funding ($1,000s)									
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)									Sacramento Transportation Authority
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)	2,283							2,283	
PS&E	6,707							6,707	
R/W SUP (CT)									
CON SUP (CT)									
R/W	10,080							10,080	
CON			11,931					11,931	
TOTAL	19,070		11,931					31,001	

PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID
ePPR-5924-2023-0005 v0.1

Fund #2:	Local Funds - Developer Fees (Committed)								Program Code
	Existing Funding ($1,000s)								
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)									Sacramento County
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
	Proposed Funding ($1,000s)								Notes
E&P (PA&ED)	3,222							3,222	
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W	6,879							6,879	
CON			11,863					11,863	
TOTAL	10,101		11,863					21,964	

Fund #3:	Other Fed - SACOG Revolving Match (Committed)								Program Code
	Existing Funding ($1,000s)								
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)									Sacramento Area Council of Governm
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
	Proposed Funding ($1,000s)								Notes
E&P (PA&ED)									SACOG Revolving Match funds. Funding program to be determined.
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			2,000					2,000	
TOTAL			2,000					2,000	

PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID
ePPR-5924-2023-0005 v0.1

Fund #4:	Local Funds - Local Transportation Funds (Committed)								Program Code
Existing Funding ($1,000s)									
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)									Sacramento County
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)									Update to show Local Funds in place of US DOT - Mega Program (the National Infrastructure Project Assistance program) as application outcome is pending.
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			35,000					35,000	
TOTAL			35,000					35,000	

Fund #5:	State SB1 LPP - Local Partnership Program - Competitive program (Uncommitted)								Program Code
Existing Funding ($1,000s)									
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)									California Transportation Commissio
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL									
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			15,000					15,000	
TOTAL			15,000					15,000	

2. Gold Line Light Rail Platform Modifications Phase 2 ePPR - PPNO LP008

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID
ePPR-6005-2023-0001 v2

Amendment (Existing Project) ☒ YES ☐ NO				Date	11/28/2023 11:36:00
Programs ☐ LPP-C ☐ LPP-F ☐ SCCP ☐ TCEP ☐ STIP ☐ Other					
District	EA	Project ID	PPNO	Nominating Agency	
03			LP008	Sacramento Transportation Authority	
County	Route	PM Back	PM Ahead	Co-Nominating Agency	
Sacramento County	OFF				
				MPO	Element
				SACOG	Mass Transit (MT)
Project Manager/Contact			Phone	Email Address	
Joe Paglieroni			916-869-6746	jpaglieroni@sacrt.com	

Project Title

Gold Line Light Rail Platform Modifications- Phase 2

Location (Project Limits), Description (Scope of Work)

City of Sacramento and Sacramento County. Light rail vehicle station conversions to accommodate low floor light rail vehicles (LRVs). Funds used for phase 2 conversions of light rail stations along the Gold Line (29 stations).

Component	Implementing Agency
PA&ED	Sacramento Regional Transit District
PS&E	Sacramento Regional Transit District
Right of Way	Sacramento Regional Transit District
Construction	Sacramento Regional Transit District

Legislative Districts					
Assembly:	8	Senate:	6	Congressional:	6

Project Milestone	Existing	Proposed
Project Study Report Approved		
Begin Environmental (PA&ED) Phase	06/01/2019	06/01/2019
Circulate Draft Environmental Document Document Type		
Draft Project Report	07/01/2019	07/01/2019
End Environmental Phase (PA&ED Milestone)	08/31/2019	08/31/2019
Begin Design (PS&E) Phase	04/30/2022	04/30/2022
End Design Phase (Ready to List for Advertisement Milestone)	11/30/2024	11/30/2024
Begin Right of Way Phase	12/01/2024	12/01/2024
End Right of Way Phase (Right of Way Certification Milestone)	12/01/2024	12/01/2024
Begin Construction Phase (Contract Award Milestone)	05/31/2025	05/31/2025
End Construction Phase (Construction Contract Acceptance Milestone)	07/31/2026	07/31/2026
Begin Closeout Phase	08/01/2026	08/01/2026
End Closeout Phase (Closeout Report)	12/31/2026	12/31/2026

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID

ePPR-6005-2023-0001 v2

Date 11/28/2023 11:36:00

Purpose and Need

In conjunction with this project, SacRT is acquiring low floor light rail vehicles (LRVs) for use on the Gold Line. Gold Line station conversions include raising the station platform up at least 8 inches above the top of the rail in order to allow for automatic passenger ramp deployment. Without the conversion of the stations, the low floor LRVs will not be able to provide service on the Gold Line.

NHS Improvements ☐ YES ☒ NO	Roadway Class NA	Reversible Lane Analysis ☐ YES ☒ NO

Inc. Sustainable Communities Strategy Goals ☒ YES ☐ NO Reduce Greenhouse Gas Emissions ☒ YES ☐ NO

Project Outputs

Category	Outputs	Unit	Total
Rail/ Multi-Modal	Station improvements	EA	29

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID

ePPR-6005-2023-0001 v2

Date 11/28/2023 11:36:00

Additional Information

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID

ePPR-6005-2023-0001 v2

Performance Indicators and Measures						
Measure	**Required For**	**Indicator/Measure**	**Unit**	**Build**	**Future No Build**	**Change**
Congestion Reduction	LPPC, SCCP, LPPF	Change in Daily Vehicle Miles Travelled	Miles	5,741,943	5,751,463	-9,520
			VMT per Capita	47.03	47.11	-0.08
	LPPC, SCCP, LPPF	Person Hours of Travel Time Saved (Only 'Change' required)	Person Hours	-47.52	0	-47.52
			Hours per Capita	0	0	0
System Reliability (Freight)	LPPC, SCCP, LPPF	Peak Period Travel Time Reliability Index (Only 'No Build' Required)	Index	0	2.92	-2.92
	LPPC, SCCP, LPPF	Level of Transit Delay (if required)	% "On-time"	97.8	95.6	2.2
Air Quality & GHG (only 'Change' required)	LPPC, SCCP, TCEP, LPPF	Particulate Matter	PM 2.5 Tons	0.0406	0	0.0406
			PM 10 Tons	0.0414	0	0.0414
	LPPC, SCCP, TCEP, LPPF	Carbon Dioxide (CO2)	Tons	-885	0	-885
	LPPC, SCCP, TCEP, LPPF	Volatile Organic Compounds (VOC)	Tons	-2.37	0	-2.37
	LPPC, SCCP, TCEP, LPPF	Sulphur Dioxides (SOx)	Tons	0.0592	0	0.0592
	LPPC, SCCP, TCEP, LPPF	Carbon Monoxide (CO)	Tons	-28.4	0	-28.4
	LPPC, SCCP, TCEP, LPPF	Nitrogen Oxides (NOx)	Tons	-3.4	0	-3.4
Safety	LPPC, SCCP, TCEP, LPPF	Number of Fatalities	Number	1	1	0
	LPPC, SCCP, TCEP, LPPF	Fatalities per 100 Million VMT	Number	0.0575	0.0575	0
	LPPC, SCCP, TCEP, LPPF	Number of Serious Injuries	Number	14.75	14.8	-0.05
	LPPC, SCCP, TCEP, LPPF	Number of Serious Injuries per 100 Million VMT	Number	0.852	0.8549	-0.0029
Economic Development	LPPC, SCCP, TCEP, LPPF	Jobs Created (Only 'Build' Required)	Number	1,662	0	1,662
Cost Effectiveness (only 'Change' required)	LPPC, SCCP, TCEP, LPPF	Cost Benefit Ratio	Ratio	1.03	0	1.03
Vehicle Volume	LPPC, LPPF, SCCP	Existing Average Annual Vehicle Volume on Project Segment	Number	21,563,969	21,586,218	-22,249
	LPPC, LPPF, SCCP	Estimated Year 20 Average Annual Vehicle Volume on Project Segment with Project	Number	23,060,450	23,106,897	-46,447

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID
ePPR-6005-2023-0001 v2

District	County	Route	EA	Project ID	PPNO
03	Sacramento County	OFF			LP008

Project Title

Gold Line Light Rail Platform Modifications- Phase 2

Existing Total Project Cost ($1,000s)									
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Implementing Agency
E&P (PA&ED)	214							214	Sacramento Regional Transit District
PS&E	1,650							1,650	Sacramento Regional Transit District
R/W SUP (CT)									Sacramento Regional Transit District
CON SUP (CT)									Sacramento Regional Transit District
R/W									Sacramento Regional Transit District
CON	4,142	19,863	25,647	5,000				54,652	Sacramento Regional Transit District
TOTAL	6,006	19,863	25,647	5,000				56,516	
Proposed Total Project Cost ($1,000s)									Notes
E&P (PA&ED)	214							214	
PS&E	1,250							1,250	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			54,652					54,652	
TOTAL	1,464		54,652					56,116	

Fund #1:	Local Funds - Developer Fees (Committed)								Program Code
Existing Funding ($1,000s)									20.10.400.100
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)	100							100	Sacramento County
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL	100							100	
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)	100							100	
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON									
TOTAL	100							100	

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PPR ID

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Fund #2:	Other State - STA Transit Assist (Committed)								Program Code
Existing Funding ($1,000s)									20.30.207.811
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)	114							114	Sacramento Area Council of Governm
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON	1,089							1,089	
TOTAL	1,203							1,203	
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)	114							114	
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			1,089					1,089	
TOTAL	114		1,089					1,203	

Fund #3:	RSTP - STP Local (Committed)								Program Code
Existing Funding ($1,000s)									20.30.010.810
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)									Sacramento Area Council of Governm
PS&E	1,650							1,650	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON				5,000				5,000	
TOTAL	1,650			5,000				6,650	
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)									
PS&E	1,250							1,250	
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			5,000					5,000	
TOTAL	1,250		5,000					6,250	

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PROJECT PROGRAMMING REQUEST (PPR)

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PPR ID

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Fund #4:	Other Fed - SACOG Revolving Match (Committed)								Program Code
Existing Funding ($1,000s)									20.30.010.300
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)									Sacramento Area Council of Governm
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			2,000					2,000	
TOTAL			2,000					2,000	
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			2,000					2,000	
TOTAL			2,000					2,000	

Fund #5:	Other Fed - THUD appropriation (Committed)								Program Code
Existing Funding ($1,000s)									20.30.010.300
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			3,647					3,647	
TOTAL			3,647					3,647	
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			3,647					3,647	
TOTAL			3,647					3,647	

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PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID

ePPR-6005-2023-0001 v2

Fund #6:	State SB1 LPP - Local Partnership Program - Competitive program (Committed)								Program Code
Existing Funding ($1,000s)									20.20.210.200
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)									California Transportation Commissio
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			10,000					10,000	
TOTAL			10,000					10,000	
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			10,000					10,000	
TOTAL			10,000					10,000	

Fund #7:	FTA Funds - State of Good Repair Formula Grants (Committed)								Program Code
Existing Funding ($1,000s)									FTA-TRANSIT
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)									Sacramento Regional Transit District
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON		19,863	10,000					29,863	
TOTAL		19,863	10,000					29,863	
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			29,863					29,863	
TOTAL			29,863					29,863	

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PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID

ePPR-6005-2023-0001 v2

Fund #8:	Other State - State Cash (Committed)								Program Code
Existing Funding ($1,000s)									20.30.207.811
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)									Sacramento Regional Transit District
PS&E									State-Housing and Community Development- Transit Oriented Development Program
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON	2,053							2,053	
TOTAL	2,053							2,053	
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			2,053					2,053	
TOTAL			2,053					2,053	

Fund #9:	Local Funds - City Funds (Committed)								Program Code
Existing Funding ($1,000s)									20.10.400.100
Component	Prior	23-24	24-25	25-26	26-27	27-28	28-29+	Total	Funding Agency
E&P (PA&ED)									City of Folsom
PS&E									Folsom Annexation
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON	1,000							1,000	
TOTAL	1,000							1,000	
Proposed Funding ($1,000s)									Notes
E&P (PA&ED)									
PS&E									
R/W SUP (CT)									
CON SUP (CT)									
R/W									
CON			1,000					1,000	
TOTAL			1,000					1,000	

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

PROJECT PROGRAMMING REQUEST (PPR)

PRG-0010 (REV 08/2020)

PPR ID
ePPR-6005-2023-0001 v2

Complete this page for amendments only Date 11/28/2023 11:36:00

District	County	Route	EA	Project ID	PPNO
03	Sacramento County	OFF			LP008

SECTION 1 - All Projects

Project Background

No change to project.

Programming Change Requested

Move all CON funds not programmed in FY24/25 to FY24/25. Reduce STP in PE from $1,650 to $1,250/

Reason for Proposed Change

Since LPP-C funds are programmed in FY24/25, all other CON funds must be programmed in FY24/25.
Only $1,250 STP funds needed for PE. Remainder ($400) removed.

If proposed change will delay one or more components, clearly explain 1) reason for the delay, 2) cost increase related to the delay, and 3) how cost increase will be funded

N/A

Other Significant Information

SECTION 2 - For SB1 Project Only

Project Amendment Request (Please follow the individual SB1 program guidelines for specific criteria)

N/A

Approvals

I hereby certify that the above information is complete and accurate and all approvals have been obtained for the processing of this amendment request.

Name (Print or Type)	Signature	Title	Date

SECTION 3 - All Projects

Attachments
1) Concurrence from Implementing Agency and/or Regional Transportation Planning Agency
2) Project Location Map

Exhibit B:

1. **Hazel Ave/US 50 Interchange Project Report -PPNO 6222 / 03-3E380**
    a. Link to Project Report
    b. Supplemental Memo

2. **Gold Line Light Rail Platform Modifications Phase 2 Project Report - PPNO LP008**

1. **Hazel Ave/US 50 Interchange Project Report - PPNO 6222 / 03-3E380**
    a. Link to Project Report
    b. Supplemental Memo

Exhibit B: Project Report

Baseline Agreement links to documents

Sacramento County, Department of Transportation Project WebPage:

https://sacdot.saccounty.net/Pages/Project-Hazel-StateRoute50.aspx

Project Report

Hazel Avenue/US 50 Interchange Project - PPNO 6222

Environmental Impact Report

Hazel Avenue/U.S. 50 Interchange Project – EIR

Department of Transportation
Ron Vicari
Director

County of Sacramento

Divisions
Planning & Programs
Maintenance & Operations
Engineering & Design
Administrative Services

Date: October 17, 2023

To: Sudha Kodali
Office Chief
Office of Capital Improvement Programming
Division of Financial Programming

File: EA 03-3E380
ID 0300020439
PPNO 6222

From: Ron Vicari
Director, Department of Transportation

DS

Subject: Update Schedule and Funding to the Project Report 03-3E380 Hazel Avenue/US 50 Interchange Project for the SB-1 Baseline of Project

---

The purpose of this memorandum is to document the change in the funding and schedule since the project report was approved on January 14, 2021. There has been an increase in project cost estimates.

The project description remains unchanged. The project description is as follows:

> In Sacramento County: Hazel Avenue between Folsom Boulevard and U.S. Highway 50; Modify the existing Hazel Avenue interchange at US 50 including US 50 eastbound off ramp modifications at Aerojet Road and Folsom Boulevard (PM 15.0/17.2), extend and grade-separate Hazel Avenue over Folsom Boulevard and the Sacramento Regional Transit District Gold Line corridor, and provide Class I path/multimodal from Folsom Boulevard to the American River Parkway.

Cost Estimate:
As shown below in the funding/programming section, the project cost estimates for construction capital, construction support and right of way capital have increased from the amounts in the project report.

Schedule Update:
Delivery schedule was delayed due to lack of a complete funding plan and unexpected right of way negotiations. Funds were sufficient to complete earlier developmental phases with local funding, but construction funds were lacking until SB-1 funds were awarded in 2023. The "Proposed" milestones below are the same as proposed in the 2022 Local Partnership Competitive Program (LPP-C) grant application.

Project Milestones	Existing	Proposed
Project Study Report Approved	7/15/2014	
Begin Environmental (PA&ED) Phase	Sep 2017	7/2/2015
Circulate Draft Environmental Document	Feb 2020	3/30/2020
Final Project Report		1/14/2021
End Environmental Phase (PA&ED Milestone)	Jan 2021	10/5/2020
Begin Design (PS&E) Phase	2021	1/17/2022
End Design Phase (Ready to List for Advertisement Milestone)	2023	2/28/2025
Begin Right of Way Phase	2021	1/17/2022
End Right of Way Phase (Right of Way Certification Milestone)	2022	2/28/2025
Begin Construction Phase (Contract Award Milestone)	2023	7/31/2025
End Construction Phase (Construction Contract Acceptance Milestone)	2025	9/30/2027
Begin Closeout Phase	2025	10/1/2027
End Closeout Phase (Closeout Report)	2026	9/30/2028

Funding :
The project components remain the same as in the 2021 Project Report, but unit prices have increased for these components. The original cost estimate was during the preliminary engineering stage. Since then, the cost of right of way and construction estimates had been updated for the 2022 Local Partnership Competitive Program (LPP-C) grant application and are reflected in the following funding plan:

	Fiscal Year Estimate				
	Prior	2023/24	2024/25	2025/26	Total
Component	*In thousands of dollars ($1,000)*				
PA&ED	5,505				5,505
PS&E	6,707				6,707
Right of Way	16,959				16,959
Construction			75,794		75,794
Total					104,965

Approval Recommended:

DocuSigned by:
Steve White
0A184156F465474...

10/19/2023

Stephen White
Chief, Department of Transportation
Sacramento County

Date

Approved:

DocuSigned by:
Thileepan, Sathanathan@DOT
7E849DD9F2BD498...

10/20/2023

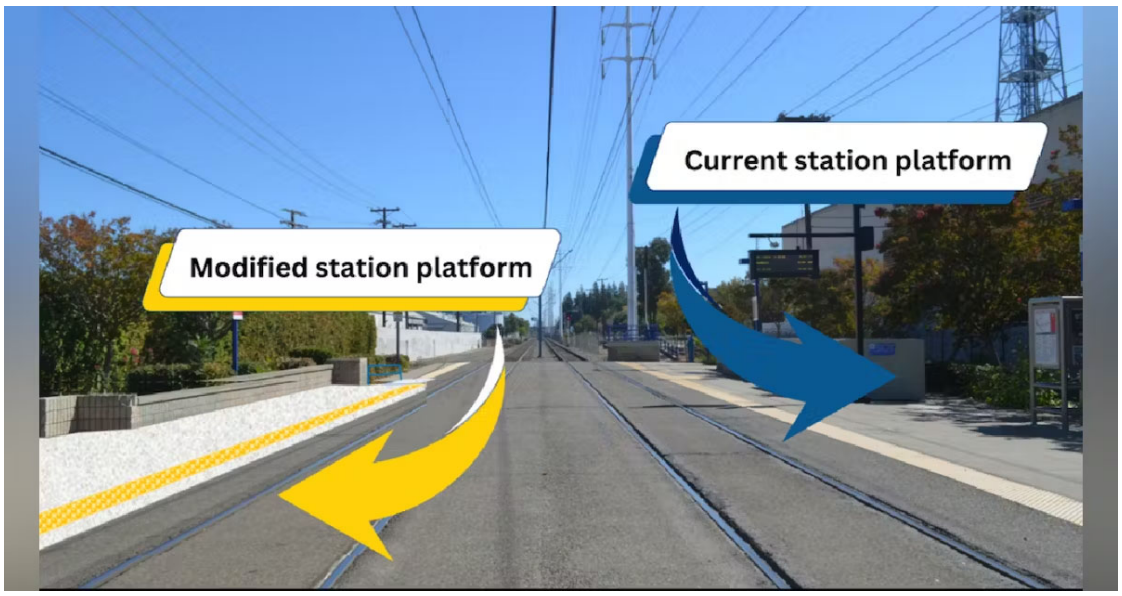
Sathanathan Thileepan, P.E.
Project Manager
Office of Project Management, Caltrans
District 3

Date

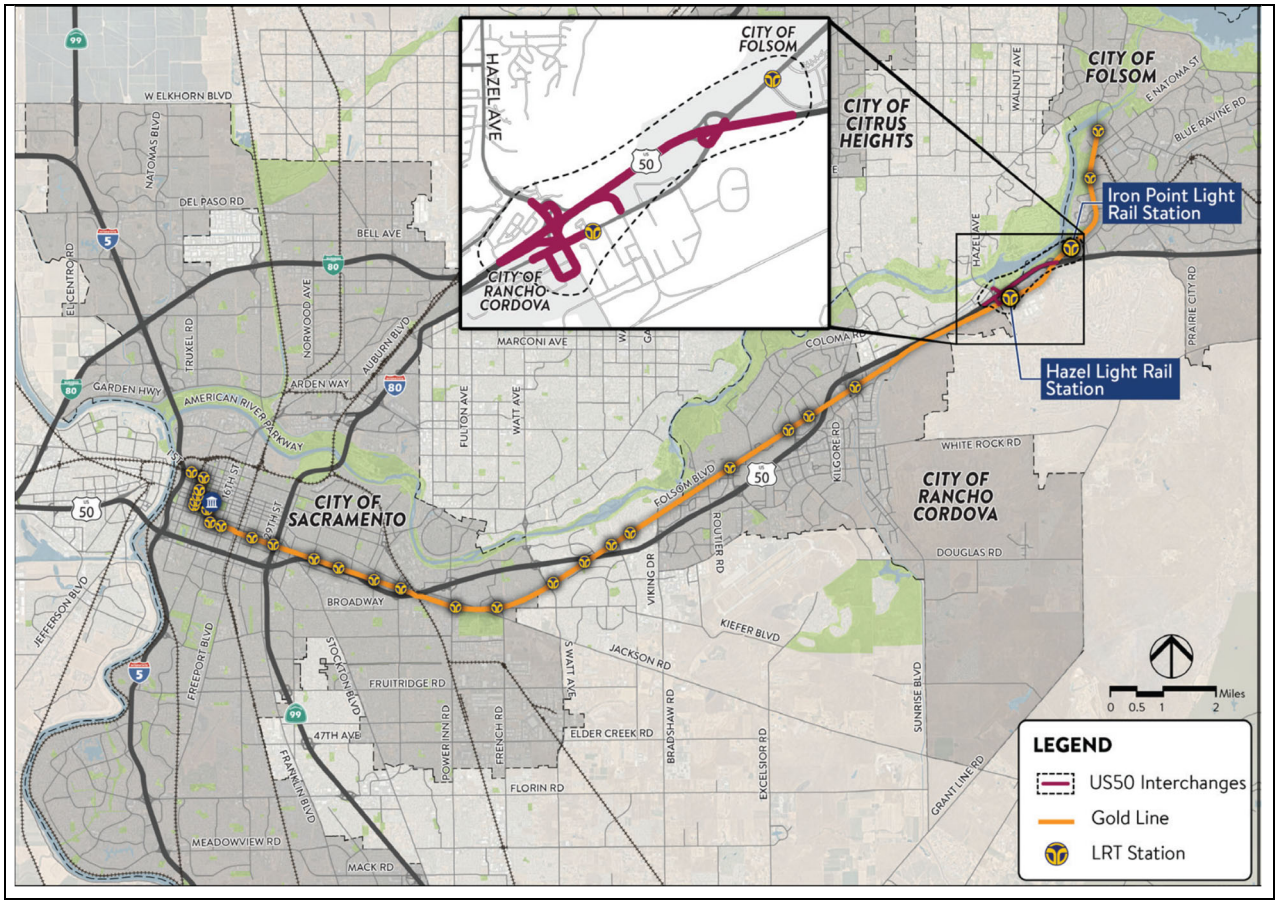
2. Gold Line Light Rail Platform Modifications Phase 2 Project Report - PPNO LP008

Project Study Report

Gold Line Modernization Phase 2
between Sac Valley Station and Historic Folsom Station



Vicinity Map



I, _*Anthony Adams, Director of Planning*_ have been given full authority by *Sacramento Regional Transit District* to prepare this report. I certify that the information and data contained in this report are true to the best of my knowledge and belief and I understand that disciplinary action may be taken in the event that the following information are found to be falsified.

Anthony Adams

Anthony Adams 10/2/2023
Director of Planning
Sacramento Regional Transit District

I have reviewed the information contained in this report and find the data and information to be complete, current, and accurate

10/2/2023

CRAIG NORMAN

Craig Norman
Director of Engineering
Sacramento Regional Transit District

Table of Contents

As needed, include a table of contents with the topics from the body of the report.

1. INTRODUCTION

Project Description:

The Project consists of two complementary components, the Gold Line Modernization and the US 50 Interchange improvements. The Gold Line Modernization project modifies 29 Gold Line Station platforms to accommodate four low-floor light rail vehicles. This will provide better accessibility for all passengers and will increase ridership along the Gold Line connecting Folsom, Downtown Sacramento, and points in between.

Project Limits	Along the Gold Line from Sac Valley Station to Folsom	
	Current Cost Estimate	**Escalated Cost Estimate**
Current Capital Outlay for PA&ED	214,000	Same/Complete
Current Capital Outlay PS&E Cost	1,250,000	Escalated to 2024
Current Capital Outlay Construction Cost	54,652,000	Escalated to 2026
Current Capital Outlay Right-of-Way Cost	N/A	
Funding Source	Local Developer Fees - $100k State Transit Assistance - $1.2M Surface Transportation Program - $6.25M SACOG Revolving Match - $2M THUD Congressional Appropriation -$3.65M LPP Competitive - $10M FTA State of Good Repair Formula - $29.86M State Housing and Community TOD - $2.05M Folsom Annexation Funds - $1M	
Type of Facility	Rail	
Number of Structures	29 station modifications	
Anticipated Environmental Determination or Document	Categorical Exemption - 7/1/2019 FTA Categorical Exclusion – 8/1/2019	
Legal Description	The Gold Line Modernization project modifies 29 Gold Line Station platforms to accommodate three to four low-floor light rail vehicles.	

2. BACKGROUND

US 50 is a backbone of the regional transportation network and a critical segment of the Surface Transportation Assistance Act (STAA) National Network (Link). The Gold Line light rail system runs parallel to US 50. The 25-mile US 50 Gold Line Corridor carries 246,000 vehicles and 17,484 transit riders daily. Significant urban and suburban land use planning has occurred along the US 50 corridor in the cities of Sacramento, Rancho Cordova, and Folsom and within unincorporated Sacramento County. To the east, existing residents in El Dorado and Amador Counties use regional highways and freeways to access jobs, goods, and services within Sacramento County. The demographics and business sectors along the corridor are remarkably diverse. Middle-wage jobs, including distribution and warehousing, located along the corridor offer economic opportunities for the underserved communities along US 50 if the existing mobility challenges are improved.

The Sacramento region has recognized the unique importance of the US 50 corridor over the last 20 years. As the area and eastern Sacramento County continues to develop, this vital corridor needs investment beyond what can be secured locally. Given the importance of this region to the State and the Nation, state and federal investment is necessary to sustain the transportation efficiency of the corridor.

3. PURPOSE AND NEED

Purpose:

The purpose of the Project is to convert the existing station platforms along the Gold Line to accommodate a new fleet of low-floor light rail vehicles.

Need:

SacRT is one of only 2 light rail operators still utilizing high-floor vehicles. SacRT is in the process of updating our fleet and procuring 50+ new low-floor light rail vehicles. All station platforms in our system must be raised to 8-inches above top of rail to accommodate new low-floor vehicles.

4. DEFICIENCIES

Current Gold Line stations are not compatible with a new low-floor light rail fleet. SacRT's new fleet can only be utilized once all station flatforms are raised to be compatible with low-floor fleet.

5. CORRIDOR AND SYSTEM COORDINATION

The US 50 Gold Line Corridor Enhancement Project (Project) will implement two complementary project components – Gold Line Modernization and US 50 Interchanges – to enhance accessibility and preservation of the regional transportation system. The

Gold Line Modernization project modifies 29 Gold Line Station platforms to accommodate three to four low floor light rail vehicles. SacRT plans to begin service of our new low-floor fleet of vehicles by summer 2024. Station platforms along our light rail system must be raised to accommodate the operations of this new fleet. The conversion of our stations, to coincide with the arrival of our new fleet ensures operational coordination of our system along this corridor

The partner project to the Gold Line Modernization is the US 50 Interchanges project, which improves three interchanges along US 50 (Hazel Avenue, Aerojet Road, and Folsom Boulevard). The Project components work in concert to reduce vehicle hours of delay on US 50, improve transit accessibility for all transit riders, particularly for those using mobility devices, provide a first/last mile connection along Hazel Avenue, enhance goods movement access to US 50, and reduce greenhouse gas emissions (GHG) in the Sacramento region.

6. ALTERNATIVES

6A. Viable Alternatives

Gold Line station conversions are required to allow for low-floor light rail vehicle operations. There are no other viable alternatives.

7. COMMUNITY INVOLVEMENT

SacRT has also engaged in wide ranging community engagement activities, including those targeted to reach underserved communities. Pre-pandemic, SacRT typically participated in approximately 90 events annually in the greater Sacramento community, including the Martin Luther King Jr. March and Expo, Black History Month, California Clean Air Day, Earth Day, health fairs, Capitol Bike Fest, Cinco de Mayo, festivals, Pride Festival, Safetyville, transportation fairs and Try Transit events to provide trip planning and transit information. These events reached numerous facets of the community and a wide variety of demographics, including marginalized and disadvantaged community members. During the pandemic, outreach was held during virtual events and social media (both paid and owned) posts.

Multiple community engagement efforts were held for the SacRT Short Range Transit Plan: FY2022-2027 (Link). This included a customer survey, phone call/email opportunities for feedback, and two virtual open houses in November 2021, one virtual open house in February 2022, and two virtual open houses in March 2022. The Gold Line Modernization was presented to the public as a significant capital improvement project being undertaken by the transit agency. Support was expressed for the Gold Line Modernization and there was no opposition.

8. ENVIRONMENTAL COMPLIANCE

The Gold Line Modernization's CEQA Statutory Exemption (SE) was completed in July 2019 and NEPA Categorical Exclusion (CE) was approved by FTA in August 2019. Final design for the platforms is currently underway and is anticipated to be completed by November 2024. The final design phase will also include community engagement efforts to seek input and hear design and construction impact concerns. The platform modifications do not require any right of way acquisitions or utility relocations. The construction contract award is anticipated to be made by May 2025, and construction activities will begin in July 2025. Construction will occur over a 12-month schedule with anticipated completion by July 2026.

9. FUNDING, PROGRAMMING AND ESTIMATE

Funding

It has been determined that this project is eligible for Federal-aid funding.

The Gold Line Modernization Project funding will come from:

- Local Developer Fees - $100,000
- State Transit Assistance - $1,203,000
- Surface Transportation Program - $6,250,000
- SACOG Revolving Match - $2,000,000
- THUD Congressional Appropriation -$3,647,000
- LPP Competitive - $10,000,000
- FTA State of Good Repair Formula - $29,863,000
- State Housing and Community TOD - $2,053,000
- Folsom Annexation Funds - $1,000,000
- Total: $56,116,000

Programming

Fund Source	Fiscal Year Estimate								
Developer Fees	**Prior**	**23-24**	**24-25**	**25-26**	**26-27**	**27-28**	**28-29+**	**Future**	**Total**
Component	In thousands of dollars ($1,000)								
PA&ED Support	100								
PS&E Support									
Right-of-Way Support									
Construction Support									
Right-of-Way									
Construction									
Total	100								
State Transit Assistance (STA)	**Prior**	**23-24**	**24-25**	**25-26**	**26-27**	**27-28**	**28-29+**	**Future**	**Total**
PA&ED Support	114								
PS&E Support									

Right-of-Way Support									
Construction Support									
Right-of-Way									
Construction			1,089						
Total	114		1,089						1,203
Surface Transportation Program	**Prior**	**23-24**	**24-25**	**25-26**	**26-27**	**27-28**	**28-29+**	**Future**	**Total**
PA&ED Support									
PS&E Support	1,250								
Right-of-Way Support									
Construction Support									
Right-of-Way									
Construction			5,000						
Total	1,250		5,000						6,250
SACOG Revolving Match	**Prior**	**23-24**	**24-25**	**25-26**	**26-27**	**27-28**	**28-29+**	**Future**	**Total**
PA&ED Support									
PS&E Support									
Right-of-Way Support									
Construction Support									
Right-of-Way									
Construction			2,000						
Total			2,000						2,000
THUD Appropriate (Committed)	**Prior**	**23-24**	**24-25**	**25-26**	**26-27**	**27-28**	**28-29+**	**Future**	**Total**
PA&ED Support									
PS&E Support									
Right-of-Way Support									
Construction Support									
Right-of-Way									
Construction			3,647						
Total			3,647						3,647
LPP Competitive	**Prior**	**23-24**	**24-25**	**25-26**	**26-27**	**27-28**	**28-29+**	**Future**	**Total**
PA&ED Support									
PS&E Support									
Right-of-Way Support									
Construction Support									
Right-of-Way									
Construction			10,000						
Total			10,000						10,000
FTA State of Good Repair Formula	**Prior**	**23-24**	**24-25**	**25-26**	**26-27**	**27-28**	**28-29+**	**Future**	**Total**
PA&ED Support									

PS&E Support									
Right-of-Way Support									
Construction Support									
Right-of-Way									
Construction			29,863						
Total			29,863						29,863
Other State Cash	**Prior**	**23-24**	**24-25**	**25-26**	**26-27**	**27-28**	**28-29+**	**Future**	**Total**
PA&ED Support									
PS&E Support									
Right-of-Way Support									
Construction Support									
Right-of-Way									
Construction			2,053						
Total			2,053						2,053
Local Funds – City Funds	**Prior**	**23-24**	**24-25**	**25-26**	**26-27**	**27-28**	**28-29+**	**Future**	**Total**
PA&ED Support									
PS&E Support									
Right-of-Way Support									
Construction Support									
Right-of-Way									
Construction			1,000						1,000
Total			1,000						1,000

SacRT will utilize TIRCP funds for project support costs. Project support cost ratio is 10%.

Estimate

SacDOT and SacRT have prepared cost estimates, as shown above, based upon 30% design with sufficient contingencies. The cost has been escalated to the year of construction – 2025. This is affirmed by the directors of both agencies signing the cover letter.

10. DELIVERY SCHEDULE

Project Milestones		Milestone Date (Month/Day/Year)	Milestone Designation (Target/Actual)
PROGRAM PROJECT	M015	10/1/2023	Actual
BEGIN ENVIRONMENTAL	M020	6/1/2019	Actual
PA & ED	M200	8/31/2019	Actual
PROJECT PS&E	M380	4/30/2022	Actual
RIGHT OF WAY CERTIFICATION	M410	12/01/2024	Target
READY TO LIST	M460	11/30/2024	Target
AWARD	M495	5/31/2025	Target
APPROVE CONTRACT	M500	5/31/2025	Target
CONTRACT ACCEPTANCE	M600	7/31/2026	Target
END PROJECT EXPENDITURES	M800	8/1/2026	Target
FINAL PROJECT CLOSEOUT	M900	12/31/2026	Target

11. RISKS

Risk	Mitigation
Local jurisdictions require additional improvements or delay approvals.	The Gold Line Modernization is constructing improvements within the cities of Sacramento, Rancho Cordova, and Folsom as well as the County requiring their approvals. SacRT maintains strong relationships with each agency, and approvals are not anticipated to be delayed.
SPTC-JPA and CPUC delay approvals.	The US 50 Interchanges impact railroad right of way owned by the SPTC-JPA. This right of way carries one SacRT light rail track and one heavy rail track. A formal grade separation application will be required, and approval is needed from the SPTC-JPA and the CPUC. Coordination has already begun with both stakeholders. The Project delivery schedule has included sufficient time to secure these approvals.
Insufficient funding for construction.	The current cost estimate includes appropriate contingencies.

12. EXTERNAL AGENCY COORDINATION

Federal Transit Administration (FTA) or Federal Railroad Administration (FRA)

Project is not located within Caltrans ROW, and has already received FTA approval regarding NEPA. No FRA coordination will be needed.

The project requires the following coordination:

Local Agency
Cooperative Agreements with City of Sacramento for downtown stations.

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13. PROJECT PERSONNEL

Local Sponsor (Sacramento Regional Transit District)

Craig Norman, Director of Engineering (916) 869-8742 cnorman@sacrt.com

Sue Bianchi, Principal Civil Engineer (916) 556-0407 sbianchi@sacrt.com

14. ATTACHMENTS (Number of Pages)

List attachments with the number of pages, such as:

A. Project Programming Request PPR (9 pages)
B. Approved Environmental Document (33 pages)

SUPPORTING INFORMATION FOR PROBABLE CATEGORICAL EXCLUSION

(Per 23 C.F.R. Part 771.118)

The purpose of this worksheet is to assist grantees in gathering and organizing materials for environmental analysis required under the National Environmental Policy Act (NEPA), particularly for projects that may qualify as a Categorical Exclusion (CE) or Documented Categorical Exclusion (DCE).

The following information may be included in the request letter or attached to the letter from the grantee to FTA Region 9 to support the recommendation for a Categorical Exclusion (CE) determination.

__X__A. **DETAILED PROJECT DESCRIPTION:**

Project Sponsor: Sacramento Regional Transit District (SacRT)

Project Features: SacRT is working on the projects to replace its existing obsolete high-floor light rail vehicles with new low-floor light rail vehicles (LRVs). This change in vehicle type requires modification to the existing station platforms to accommodate the floor height of the new vehicles. The stations to be modified in order to be compatible with low-floor LRVs are identified in **Table 1**.

Anticipated changes at each station include:

- Adjusting all platforms to an 8-inch elevation above top of rail
- Replacing detectable warning surface (DWS) and directional guidance tiles
- Adjusting, if needed, all facilities and furniture currently on the platform to the new height including (shelters, fare vending machines, smart card/connect card readers, display kiosks, signage, benches, railings)
- Removing and replacing if required all in-ground artwork in direct conflict
- Modifying tree grates and planters
- Modifying impacted drainage facilities
- Modifying adjacent improvements to meet ADA requirements
- Assess existing mini-highs for removal and replacement with temporary structure
- Adding crosswalk areas, fencing, signage in ballasted track stations
- Where existing track is embedded track the existing concrete will remain in place

Table 1. Light Rail Stations to be Modified

No	Light Rail Station	Number of Platforms at Station
1	Watt/I-80	1
2	Watt/I-80 West	1
3	Roseville Road	1
4	Marconi/Arcade	2
5	Swanston	2
6	Royal Oaks	2
7	Arden/Del Paso	2
8	Globe	1
9	Alkalai Flat	1
10	12th and I	1
11	Cathedral Square	2
12	St. Rose of Lima/9th and K	1
13	7th and Capitol	1
14	8th and Capitol	1
15	8th and O	2
16	8th and K	1
17	Archives Plaza	2
18	13th Street	2
19	16th Street	2
20	Broadway	2
21	4th Avenue/Wayne Hulgren	2
22	City College	2
23	Fruitridge	2
24	47th Avenue	2
25	Florin	2
26	Meadowview	2
27	Sacramento Valley	2
28	7th and I /County Center	1
29	23rd Street	2
30	29th Street	2
31	39th Street	2
32	48th Street	2
33	59th Street	2
34	University/65th Street	2
35	Power Inn	2
36	College Greens	2
37	Watt/Manlove	2
38	Starfire	2
39	Tiber	2
40	Butterfield	2
41	Mather Field/Mills	2
42	Zinfandel	2
43	Cordova Town Center	2
44	Sunrise	2
45	Hazel	1
46	Iron Point	1
47	Glenn	1
48	Sutter Street/Historic Folsom	1

Funding Sources:
To date, SacRT has programmed $1.65 million of STP for the Preliminary Engineering (PE) through Final Design (FD) phases of this project. SacRT has also secured and programmed a large amount of state and local funds for this project, both for match for the $1.65 million in federal funds in the PE and FD phases, as well as for the construction phase. Additional federal funds may ultimately be used for station construction if needed, including the following potential fund sources: FTA formula funds; FTA discretionary funds, if awarded to the project in a nationwide competition by FTA/DOT; and/or FHWA/FTA flexible funds, if awarded to the project in a regional competition by the Metropolitan Planning Organization (MPO)/Regional Transportation Planning Agency (RTPA).

__X__B. **LOCATION (INCLUDING ADDRESS): Attach a site map or diagram, which identifies the land uses and resources on the site and the adjacent or nearby land uses and resources. This is used to determine the probability of impact on sensitive receptors (such as schools, hospitals, residences) and on protected resources.**

The following Site Maps are attached:

- Attachment 1A – Site Map in relation to Section 4(f) Resources
- Attachment 1B – Site Map in relation to Critical Habitat
- Attachment 1C – Site Map in relation to Wetlands

__X__C. **METROPOLITAN PLANNING AND AIR QUALITY CONFORMITY: Is the proposed project "included" in the current adopted MPO plan, either explicitly or in a grouping of projects or activities? What is the conformity status of that plan? Is the proposed project, or are appropriate phases of the project included in the TIP? What is the conformity status of the TIP?**

The proposed project is included in the current adopted MPO plan and in the Transportation Improvement Program (TIP), both of which received federal approval for their Air Quality Conformity Analysis on December 7, 2018 (see https://www.sacog.org/current-2019-22-mtip for documentation)

Adopted MPO Plan & MTIP Year:

- Regional Transportation Plan: SACOG's 2016 Metropolitan Transportation Plan (MTP)/Sustainable Communities Strategy (SCS) Amendment #2
- Metropolitan Transportation Improvement Program (MTIP): 2019 MTIP

Adopted MPO Plan & MTIP Project Number: REG18048 - Light Rail Low Floor Station Conversion (Sub-Project of Group30 – Grouped Projects for Reconstruction or Renovation of Transit Buildings and Structures)

Date that 2016 MTP/SCS Amendment #2 and 2019 MTIP was found to be conforming: December 7, 2018

Consistency between project description and MPO plan: The project is described in the 2016 MTP/SCS Amendment #2 as follows: "In Sacramento Region, for the 48 light rail stations, design and construct improvements to convert stations to accommodate future low-floor vehicles."

Is the proposed project, or are appropriate phases of the project included in the TIP?
Yes, the current TIP listing (Revision 19-02, Federally Approved on 2/15/19) lists the following funding amounts in the following fiscal years and phases:

Fed FY	Revenue Source	Engineering	Right of Way	Construction	Total Revenue
2019	Local - Developer - Transportation Improvement Fee	$100,000			$100,000
2019	Regional Surface Transportation Program	$1,650,000			$1,650,000
2019	Transportation Development Act	$113,774			$113,774
2020	Cap and Trade Program			$10,000,000	$10,000,000
2029	Future Need - Unfunded Need			$38,000,000	$38,000,000
		$1,863,774	**$0**	**$48,000,000**	**$49,863,774**

__X__ D. **LAND USE AND ZONING: Description of zoning, if applicable, and consistency with proposed use. Attach maps.**

There will be no land use or zoning impacts as part of this project. All work is to be completed within the SacRT/SPTC-JPA property boundary or existing right-of-way and no new right of way or easements are required.

__X__ E. **PRIME AND UNIQUE FARMLANDS: Does the proposal involve the use of any prime or unique farmlands? If so, describe potential impacts and any coordination with the Soil Conservation Service of the U.S. Department of Agriculture (attach maps).**

No, the proposed project does not involve the use of any prime or unique farmlands. All work is to be completed within the SacRT/SPTC-JPA property boundary or existing right-of-way.

__X__ F. **TRAFFIC AND PARKING IMPACTS: Describe potential traffic impacts; including whether the existing roadways have adequate capacity to handle increased bus and other vehicular traffic. Describe potential impacts to on and off street parking.**

The proposed project will not impact on-street or off-street parking, or vehicular access and egress to the stations and parking lots. The project will not require traffic signal work or modification of lanes (e.g. add turn lanes, removal of medians, removal of lanes, restriping, shifting location of lanes) because existing stations are not within roadway network.

The existing roadways are currently maintained by specific jurisdictions and the proposed project will not increase bus or any other vehicular traffic. While the intent of the station conversions is to enhance transit service (through low-floor boarding) and attract new riders, since this is an enhancements project and not an expansion project, the ridership and associated vehicular traffic will not exceed the maximum levels that were accounted for with each station's original environmental analysis at the time of construction.

The station conversions themselves will not result in increased light rail or bus service; they will simply accommodate existing service when it is provided with new replacement vehicles.

__X__ G. **AESTHETICS AND VISUAL QUALITY: Will the project have an adverse effect on a scenic vista? Will the project substantially degrade the existing visual character or quality of the site and its surroundings? Will the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?**

The project will modify existing light rail stations to accommodate low-floor LRT vehicles as efficiently as possible with minimal changes to existing stations. The project will not impact any scenic vistas, and will not substantially degrade the existing visual character or quality of the existing stations or their surroundings. The project does not include site lighting work, so there will be now new sources of substantial light or glare.

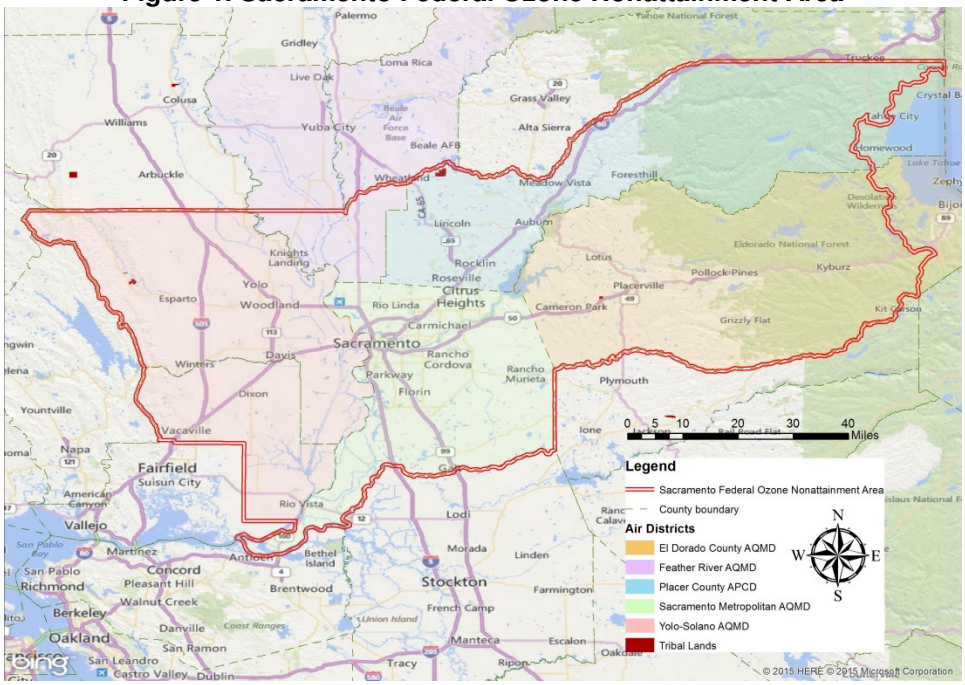
It is not anticipated that artwork will be included in the new platform flatwork. If removal, relocation or modification of existing artwork is needed, SacRT will do so in accordance with all FTA requirements, including consulting with the artist on any needed repairs or restorations and allowing the artist to sever their association with the Artwork as a result of repairs or restoration if desired. SacRT will review the existing patterns and decorative effects (brick pavers, colored bands, etc) in the current station platform flatwork and it is anticipated that these effects will largely be replicated to maintain the existing appearance.

__X__H. **AIR QUALITY: Does the project have the potential to impact air quality? Is the project located in an non-attainment or maintenance area If there are serious traffic impacts at any affected intersection, and if the area is nonattainment for CO, demonstrate that CO hot spots will not result.**

The Sacramento region is in an EPA-designated nonattainment area for two out of the six criteria pollutants: ozone and particulate matter 2.5 microns (PM2.5). See Figures 1 & 2 for maps of the nonattainment areas. The Sacramento region currently meets the National Ambient Air Quality Standard (NAAQS) for the remaining criteria pollutants: carbon monoxide, lead, nitrogen dioxide, sulfur dioxide and particulate matter – 10 microns (PM10). Maintenance plans for carbon monoxide and PM10 are still required.

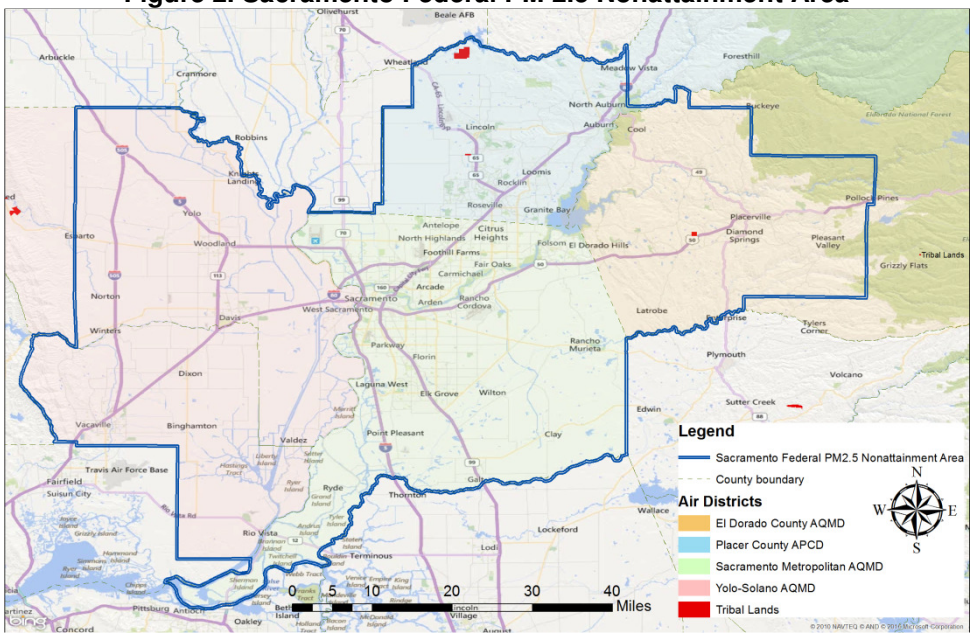
Since this is a transit enhancements project, which will modify stations to accommodate existing transit service and will not result in an increase in service, any increased ridership and associated vehicular traffic to and from the stations will not exceed the levels that were already accounted for in each station's design and environmental analysis at the time of the original construction. The project will not result serious traffic impacts at any intersection; therefore, there will not be any resulting CO hot spots or exacerbate conditions of an existing hotspot or non-attainment area.

Figure 1. Sacramento Federal Ozone Nonattainment Area



Source: Sacramento Metropolitan Air Quality Management District

Figure 2. Sacramento Federal PM 2.5 Nonattainment Area



Source: Sacramento Metropolitan Air Quality Management District

The overall project does not have the potential to have significant negative impacts on air quality. SacRT used the California Air Resources Board's (CARB's) greenhouse gas (GHG) Calculator Tool to conduct a GHG reduction analysis for this project, and SacRT found that by converting all 49 of the existing high floor stations systemwide to low-floor, and replacing 36 aging high floor LRVs with new, modern, low-floor LRVs, over the 31-year life of the project (LRVs have a useful life of approximately 25-31 years), it would reduce passenger vehicle miles traveled (VMT) by approximately 35 million miles, and reduce emissions of criteria pollutants significantly, as detailed in Table 2.

Table 2. Anticipated Air Quality Benefits of Project to Convert 49 Stations to Low Floor and Replace 36 LRVs with high floor LRVs

Key Variables	Passenger VMT Reductions (miles)	34,826,472
	Fossil Fuel Use Reductions	N/A
	Fossil Fuel Energy Use Reductions (kWh)	N/A
Co-Benefits	ROG Emission Reductions (lbs)	10,338
	NOx Emission Reductions (lbs)	57,750
	PM2.5 Emission Reductions (lbs)	1,554
	Diesel PM Emission Reductions (lbs)	2,756

See Attachment 2 for the detailed GHG quantification methodology that was prepared using CARB's GHG Calculator tool, and the assumptions that were used in the analysis.

__X__ I. **HISTORIC AND CULTURAL RESOURCES: Describe any cultural, historic, or archaeological resource that is located in the immediate vicinity of the proposed project and the impact of the project on the resource. Discuss State Historic Preservation Officer (SHPO) consultation and findings. Discuss consultation with the Native American Heritage Commission (NAHC) and other Native American tribes. Attach any relevant correspondence.**

Cultural and historic sites that are on the National Register of Historic Places and are in the vicinity of the project are identified on Attachment 1A. There are no archaeological resources located in the immediate vicinity of this project. All work is to be completed within the SacRT/SPTC-JPA property boundary or existing right-of-way and no new right of way or easements are required. The project will not impact the cultural and historic sites in the vicinity.

__X__ J. **NOISE: Compare the distance between the center of the proposed project and the nearest noise receptor to the screening distance for this type of project in FTA's guidelines. If the screening distance is not achieved, attach a "General Noise Assessment" with conclusions.**

All stations will remain in the same location; therefore, the project will not change the distance between the existing stations and the nearest noise receptor(s). Furthermore, the project will not result in an increase in light rail service, so the operational noise generated at each station will be the same after the project as it was before the project.

__X__ K. **VIBRATION: If the proposed project involves new or relocated steel tracks, compare the distance between the center of the proposed project and the nearest vibration receptor to the screening distance for this type of project in FTA's guidelines. If the screening distance is not achieved, attach a "General Vibration Assessment" with conclusions.**

The project does not involve track work, so there will be no impact on vibration receptors as a result of the project.

__X__ L. **ACQUISITIONS & RELOCATIONS REQUIRED: Describe land acquisitions and displacements of residences and businesses. Include discussion of any permanent or temporary easements required.**

There are no lands acquisitions or displacements as part of this project. All work is to be completed within the SacRT/SPTC-JPA property boundary or existing right-of-way and no new right of way or easements are required.

__X__ M. **HAZARDOUS MATERIALS: Is there any known or potential contamination at the project site? This may include, but is not limited to, lead/asbestos in existing facilities or building materials; above or below ground storage tanks; or a history of industrial uses of the site. If real property is to be acquired, has a Phase I site assessment for contaminated soil and groundwater been performed? If a Phase II site assessment is recommended, has it been performed? What steps will be taken to ensure that the community in which the project is located is protected from contamination during construction and operation of the project? State the results of consultation with the cognizant State agency regarding the proposed remediation?**

There is no known or potential contamination at the project site, nor is there any current ongoing remediation at the project site. All work is to be completed within the SacRT/SPTC-JPA property boundary or existing right-of-way and no real property is going to be acquired, so a site assessment will not be required. Because there is no potential contamination at the project site, it is not necessary to take steps to ensure that the community will be protected from contamination, nor is there a need to consult with a cognizant State agency regarding proposed remediation.

__X__ N. **COMMUNITY DISRUPTION AND ENVIRONMENTAL JUSTICE: Provide a socio-economic profile of the affected community. Describe the impacts of the proposed project on the community. Identify any community resources that would be affected and the nature of the effect.**

The result of the project will be a continuation of existing light rail services that are already operating in the community. Except during the temporary construction phase, there will be no disruption to the community. The project will be completed within the SacRT/SPTC-JPA property boundary and will not have a physical impact on the community. Existing light rail stations will be modified to accommodate low-floor LRT vehicles as efficiently as possible with minimal changes so that there is no impact on community character.

__X__ O. **SECTION 4(f) USE: Indicate parks and recreational areas, historic resources and any other Section 4(f) resources on the site map. If the activities and purposes of these resources will be affected by the proposed project, state how. State if the project will result in a use (direct and/or constructive use) or temporary occupancy of a Section 4(f) resource. If the project results in a Section 4(f) use, would the impacts be considered *de minimis*?**

The project will not require right-of-way of any parks, recreation areas, historic resources or other Section 4(f) resources, nor will it change access or require temporary closures or detours of any Section 4(f) resources.. Section 4(f) resources in the vicinity of the project are identified on the site map in Attachment 1A. The activities and purposes of these resources will not be affected by the proposed project. The project will not result in a use or temporary occupancy of any Section 4(f) resources.

__X__ P. **SECTION 6(f): If the project located in or adjacent to a park or recreation area, indicate if the park involved Land and Water Conservation Act funds (Section 6(f)).**

The project is not located in or adjacent to a park or recreation area that involved Land and Water Conservation Act funds (Section 6(f).

__X__Q. **SIESMIC AND SOILS. Are there any unusual seismic or soil conditions in the project vicinity? If so, indicate on project map and describe the seismic standards to which the project will be designed.**

There is no any unusual seismic or soil condition in the proposed project vicinity.

__X__R. **IMPACTS ON WETLANDS: Show potential wetlands on the site map. Describe the project's impact on on-site and adjacent wetlands.**

Wetlands within the project vicinity are identified in Attrachment 1C. The project will not directly drain into a waterway supporting wetlands or require alteration of surface water features, wetlands, navigable waterways or waters of the U.S. The project will not require any water permits such as the Clean Water Act Section 404 permit.

__X__S. **FLOODPLAIN IMPACTS: Is the proposed project located within the 100-year floodplain? If so, address possible flooding of the proposed project site and flooding induced by proposed project due to its taking of floodplain capacity.**

According to the flood hazard information provided by the FEMA Flood Map Service Center (MSC) (http://msc.fema.gov/portal), all of the light rail stations that are proposed to be modified with this project are either within an "area with reduced flood risk due to levee" or an "area of minimal flood hazard." The project will not introduce a large structure that will change floodplain elevations or floodways.

__X__T. **IMPACTS ON WATER QUALITY, NAVIGABLE WATERWAYS, & COASTAL ZONES: Describe surface and ground water resources in the project vicinity and their approximate distance to the project. State if any Clean Water Act 303d Listed Impaired Water Bodies are in the project vicinity. Explain if the project would alter or create a new direct connection to a surface water body. If any of these are implicated, provide detailed analysis.**

This project does not include any surface water features. This project will not change the distance between any stations and the closest surface water bodies, nor will it alter or create a new direct connection to a surface water body. The proposed improvements are replacing existing improvements and no in-situ soil is anticipated to be exposed to potentially affect water quality; therefore, a Stormwater Pollution Prevention Plan is not considered necessary for the project.

__X__U. **IMPACTS ON ECOLOGICALLY-SENSITIVE AREAS AND ENDANGERED SPECIES: Describe any natural areas (woodlands, prairies, wetlands, rivers, lakes, streams, designated wildlife or waterfowl refuges, and geological formations) on or near the proposed project area. If present, state the results of consultation with a federal or state resources agency on the impacts to these natural areas and on threatened and endangered fauna and flora that may be affected.**

As shown in Attachment 1B, there are no Critical Habitat areas within the project area.[1] All work is to be completed within the SacRT/SPTC-JPA property boundary or existing right-of-way and no new right of way or easements are required. The project does not require mature tree removal, and there are no known threatened or endangered species

[1] Critical Habitat areas are defined by the U.S. Fish and Wildlife Service (USFWS) and are geographic areas believed to be essential to an endangered or threatened species' conservation.

occurrences in the vicinity of the project. The project will not require permits or consultation from U.S. Army Corps of Engineers, U.S. Fish and Wildlife Service, or the National Marine Fisheries Service. The project will not have any impact on any designated biological or environmentally sensitive areas, designated critical habitat, wildlife corridors, or essential fish habitat.

__X__V. **IMPACTS ON SAFETY AND SECURITY: Describe the measures that would need to be taken to provide for the safe and secure operation of the project after its construction.**

The following are the measures that will be taken to provide for the safe and secure operation of the project after its construction:

- Crosswalk areas, fencing, and signage will be added in ballasted track stations
- Detectable warning surface (DWS) and directional guidance tiles will be replaced
- Adjacent improvements will be modified to meet American Disability Act (ADA) requirements
- ADA requirements and design will be confirmed including input from SacRT's Mobility Advisory Council (MAC)

The project will not include any track work, lighting, security, systems work, so there will not be any safety impacts related to those elements of the stations.

During design and construction, all contractors and consultants will be working under SacRT staff supervision and follow all the rules and guidelines established by SacRTon and around the active light rail tracks.

__X__W. **IMPACTS CAUSED BY CONSTRUCTION: Describe the construction plan and identify impacts due to construction noise, utility disruption, debris and spoil disposal, air and water quality, safety and security, and disruptions of traffic and access to property.**

During modification of each platform, each station under construction will be closed to the public. Any passengers impacted by the closure will be transported to the nearest revenue station via shuttle service. Adjacent traffic lanes may be closed temporarily during construction if required by the contractor. Temporary closures (Traffic management plans) will be submitted to and approved by the local jurisdiction. Temporary construction easements will not be required during construction because all the station modification work is within SacRT/SPTC-JPA property.

__X__X. **SUPPORTING TECHNICAL STUDIES OR MEMORANDA: List any technical studies or memoranda prepared for the project.**

California Environmental Quality Act (CEQA) Notice of Exemption (NOE) included as Attachment 3.

__X__Y. **PUBLIC OUTREACH AND AGENCY COORDINATION: Describe any federal/ state agency coordination, public outreach efforts, public meetings, or public hearing held or public notices posted for the project. Discuss if project information is posted on a project website.**

The project will have information on SacRT website and outreach media. Public outreach/notices will be scheduled during conceptual design, prior to construction and during construction. In addition, SacRT staff will meet with various stake holders including SacRT's Mobility Advisory Committee and Federal/State agencies if required.

The action described above meets the criteria for a NEPA categorical exclusion (CE) in accordance with 23 CFR Part 771.118 (INSERT CE CATEGORY).

Applicant's Environmental Reviewer	**Date**

Class II (CEs). Actions that do not individually or cumulatively have a significant environmental effect are excluded from the requirement to prepare an EA or EIS. A specific list of CEs normally not requiring NEPA documentation is set forth in §771.117(c) for FHWA actions or pursuant to §771.118(c) for FTA actions. When appropriately documented, additional projects may also qualify as CEs pursuant to §771.117(d) for FHWA actions or pursuant to §771.118(d) for FTA actions.

It is FTA's responsibility to determine whether the action described by the grant applicant ("applicant") falls within the CE category (i.e., the action meets all conditions listed in the CE), whether the action is inappropriately segmented from a larger project, and whether there are unusual circumstances that would make a CE determination inappropriate).

Grant applicants should include sufficient information for FTA to make a CE determination. A description of the project in the grant application, as well as any maps or figures typically included with the application or as requested by the FTA Regional Office, should be submitted to FTA to determine whether the CE applies. Section 771.118(d), which is an open-ended categorical exclusion authority, lists example actions and requires documentation to verify the application of a CE is appropriate (i.e., the action meets the criteria established in § 771.118(a) and (b)).

Documentation demonstrating compliance with environmental requirements other than NEPA, such as Section 106 of the National Historic Preservation Act ("Section 106"), or Section 7 of the Endangered Species Act, may be necessary for the processing of the grant. Other applicable environmental requirements must be met regardless of the applicability of the CE under NEPA, but compliance with other environmental requirements does not elevate an action that otherwise is categorically excluded under section 771.118(c) to section 771.118(d).

Pursuant to 40 C.F.R. § 1506.5, applicants or applicants' contractors may prepare NEPA documents for submittal to federal agencies. However, the applicant is responsible for submitting accurate and complete documentation to FTA. The applicant should prepare a separate transmittal letter or statement to accompany the CE verifying that they have reviewed the information contained in the document when they transmit it to FTA. The transmittal should include the following statement:

> *"in submitting the _(project name)_ categorical exclusion (CE) to the FTA, the applicant _(insert name/agency info)_ affirms that it has reviewed and supports the information presented documenting the proposed action as meeting the criteria for a CE in accordance with 23 CFR Part 771.118 (d)(# - insert appropriate number here). Following independent review and verification by FTA, applicant (insert DOT name/info) requests that it be notified of the acceptability of its submission"*

FTA Planning and Environment Resources: http://www.fta.dot.gov/12347_15129.html

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23 C.F.R Part 771.118 FTA Categorical Exclusions
[as amended, January 29, 2016]

(a) Categorical exclusions (CEs) are actions which meet the definition contained in 40 CFR 1508.4, and, based on past experience with similar actions, do not involve significant environmental impacts. They are actions which: do not induce significant impacts to planned growth or land use for the area; do not require the relocation of significant numbers of people; do not have a significant impact on any natural, cultural, recreational, historic or other resource; do not involve significant air, noise, or water quality impacts; do not have significant impacts on travel patterns; or do not otherwise, either individually or cumulatively, have any significant environmental impacts.

(b) Any action which normally would be classified as a CE but could involve unusual circumstances will require FTA, in cooperation with the applicant, to conduct appropriate environmental studies to determine if the CE classification is proper. Such **unusual circumstances** include:

(1) Significant environmental impacts;

(2) Substantial controversy on environmental grounds;

(3) Significant impact on properties protected by Section 4(f) of the DOT Act or Section 106 of the National Historic Preservation Act; or

(4) Inconsistencies with any Federal, State, or local law, requirement or administrative determination relating to the environmental aspects of the action.

(c) Actions that FTA determines fall within the following categories of FTA CEs and that meet the criteria for CEs in the CEQ regulation (40 CFR 1508.4) and paragraph (a) of this section normally do not require any further NEPA approvals by FTA.

(1) Acquisition, installation, operation, evaluation, replacement, and improvement of discrete utilities and similar appurtenances (existing and new) within or adjacent to existing transportation right-of-way, such as: utility poles, underground wiring, cables, and information systems; and power substations and utility transfer stations.

(2) Acquisition, construction, maintenance, rehabilitation, and improvement or limited expansion of stand-alone recreation, pedestrian, or bicycle facilities, such as: a multiuse pathway, lane, trail, or pedestrian bridge; and transit plaza amenities.

(3) Activities designed to mitigate environmental harm that cause no harm themselves or to maintain and enhance environmental quality and site aesthetics, and employ construction best management practices, such as: noise mitigation activities; rehabilitation of public transportation buildings, structures, or facilities; retrofitting for energy or other resource conservation; and landscaping or re-vegetation.

(4) Planning and administrative activities which do not involve or lead directly to construction, such as: training, technical assistance and research; promulgation of rules, regulations, directives, or program guidance; approval of project concepts; engineering; and operating assistance to transit authorities to continue existing service or increase service to meet routine demand.

(5) Activities, including repairs, replacements, and rehabilitations, designed to promote transportation safety, security, accessibility and effective communication within or adjacent to existing right-of-way, such as: the deployment of Intelligent Transportation Systems and components; installation and improvement of safety and communications equipment, including hazard elimination and mitigation; installation of passenger amenities and traffic signals; and retrofitting existing transportation vehicles, facilities or structures, or upgrading to current standards.

(6) Acquisition or transfer of an interest in real property that is not within or adjacent to recognized environmentally sensitive areas (e.g., wetlands, non-urban parks, wildlife management areas) and does not result in a substantial change in the functional use of the property or in substantial displacements, such as: acquisition for scenic easements or historic sites for the purpose of preserving the site. This CE extends only to acquisitions and transfers that will not limit the evaluation of alternatives for future FTA-assisted projects that make use of the acquired or transferred property.

(7) Acquisition, installation, rehabilitation, replacement, and maintenance of vehicles or equipment, within or accommodated by existing facilities, that does not result in a change in functional use of the facilities, such as: equipment to be located within existing facilities and with no substantial off-site impacts; and vehicles, including buses, rail cars, trolley cars, ferry boats and people movers that can be accommodated by existing facilities or by new facilities that qualify for a categorical exclusion.

(8) Maintenance, rehabilitation, and reconstruction of facilities that occupy substantially the same geographic footprint and do not result in a change in functional use, such as: improvements to bridges, tunnels, storage yards, buildings, stations, and terminals; construction of platform extensions, passing track, and retaining walls; and improvements to tracks and railbeds.

(9) Assembly or construction of facilities that is consistent with existing land use and zoning requirements (including floodplain regulations) and uses primarily land disturbed for transportation use, such as: buildings and associated structures; bus transfer stations or intermodal centers; busways and streetcar lines or other transit investments within areas of the right-of-way occupied

by the physical footprint of the existing facility or otherwise maintained or used for transportation operations; and parking facilities.

(10) Development of facilities for transit and non-transit purposes, located on, above, or adjacent to existing transit facilities, that are not part of a larger transportation project and do not substantially enlarge such facilities, such as: police facilities, daycare facilities, public service facilities, amenities, and commercial, retail, and residential development.

(11) The following actions for transportation facilities damaged by an incident resulting in an emergency declared by the Governor of the State and concurred in by the Secretary, or a disaster or emergency declared by the President pursuant to the Robert T. Stafford Act (42 U.S.C. 5121):

(i) Emergency repairs under 49 U.S.C. 5324; and

(ii) The repair, reconstruction, restoration, retrofitting, or replacement of any road, highway, bridge, tunnel, or transit facility (such as a ferry dock or bus transfer station), including ancillary transportation facilities (such as pedestrian/bicycle paths and bike lanes), that is in operation or under construction when damaged and the action:

(A) Occurs within the existing right-of-way and in a manner that substantially conforms to the preexisting design, function, and location as the original (which may include upgrades to meet existing codes and standards as well as upgrades warranted to address conditions that have changed since the original construction); and

(B) Is commenced within a 2-year period beginning on the date of the declaration.

(12) Projects, as defined in 23 U.S.C.101 that would take place entirely within the existing operational right-of-way. Existing operational right-of-way refers to right-of-way that has been disturbed for an existing transportation facility or is maintained for a transportation purpose. This area includes the features associated with the physical footprint of the transportation facility (including the roadway, bridges, interchanges, culverts, drainage, fixed guideways, mitigation areas, etc.) and other areas maintained for transportation purposes such as clear zone, traffic control signage, landscaping, any rest areas with direct access to a controlled access highway, areas maintained for safety and security of a transportation facility, parking facilities with direct access to an existing transportation facility, transit power substations, transit venting structures, and transit maintenance facilities. Portions of the right-of-way that have not been disturbed or that are not maintained for transportation purposes are not in the existing operational right-of-way.

(13) Federally funded projects:

(i) that receive less than $5,179,656.40 of Federal funds; or

(ii) with a total estimated cost of not more than $31,077,938.40 and Federal funds comprising less than 15 percent of the total estimated project cost

Based on the attached formula and as required by Section 1314 of the FAST Act, the following adjustments are made for Categorical Exclusions for Projects of Limited Federal Assistance:

1. The $5,000,000 monetary limit is adjusted to $5, 179,656.40.

2. The $30,000,000 monetary limit is adjusted to $31,077,938.40.

Effective January 29, 2016, these adjusted figures must be used when applying the limited Federal assistance categorical exclusion to projects. This change also affects Title 23 of the Code of Federal Regulations (CFR), subsections 771.117(c)(23) and 771.118(c)(13), which will be amended as soon as practicable. (14) Bridge removal and bridge removal related activities, such as in channel work, disposal of materials and debris in accordance with applicable regulations, and transportation facility realignment.

(15) Preventative maintenance, including safety treatments, to culverts and channels within and adjacent to transportation right-of-way to prevent damage to the transportation facility and adjoining property, plus any necessary channel work, such as restoring, replacing, reconstructing, and rehabilitating culverts and drainage pipes; and, expanding existing culverts and drainage pipes.

(16) Localized geotechnical and other investigations to provide information for preliminary design and for environmental analyses and permitting purposes, such as drilling test bores for soil sampling; archeological investigations for archeology resources assessment or similar survey; and wetland surveys.

(d) Additional actions which meet the criteria for a CE in the CEQ regulations (40 CFR 1508.4) and paragraph (a) of this section may be designated as CEs only after FTA approval. The applicant shall submit documentation which demonstrates that the specific conditions or criteria for these CEs are satisfied and that significant environmental effects will not result. Examples of such actions include but are not limited to:

(1) Modernization of a highway by resurfacing, restoring, rehabilitating, or reconstructing shoulders or auxiliary lanes (e.g., lanes for parking, weaving, turning, climbing).

(2) Bridge replacement or the construction of grade separation to replace existing at-grade railroad crossings.

(3) Acquisition of land for hardship or protective purposes. Hardship and protective buying will be permitted only for a particular parcel or a limited number of parcels. These types of land acquisition qualify for a CE only where the acquisition will not limit the evaluation of alternatives, including shifts in alignment for planned construction projects, which may be required in the NEPA process. No project development on such land may proceed until the NEPA process has been completed.

(i) Hardship acquisition is early acquisition of property by the applicant at the property owner's request to alleviate particular hardship to the owner, in contrast to others, because of an inability to sell his property. This is justified when the property owner can document on the basis of health, safety or financial reasons that remaining in the property poses an undue hardship compared to others.

(ii) Protective acquisition is done to prevent imminent development of a parcel which may be needed for a proposed transportation corridor or site. Documentation must clearly demonstrate that development of the land would preclude future transportation use and that such development is imminent. Advance acquisition is not permitted for the sole purpose of reducing the cost of property for a proposed project.

(4) Acquisition of right-of-way. No project development on the acquired right-of-way may proceed until the NEPA process for such project development, including the consideration of alternatives, has been completed.

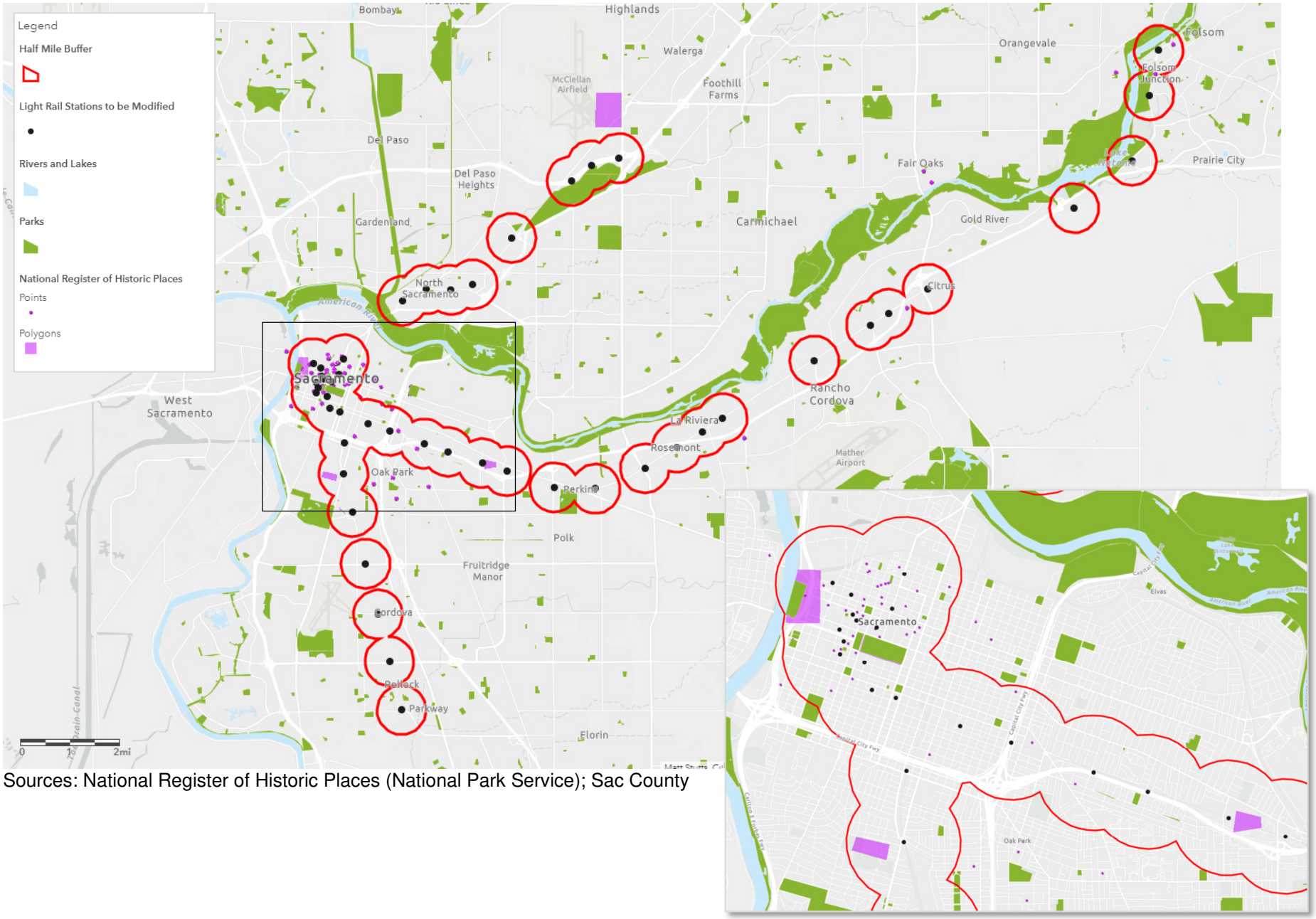
(5) [Space Holder]

(6) Facility modernization through construction or replacement of existing components.

(7) Minor transportation facility realignment for rail safety reasons, such as improving vertical and horizontal alignment of railroad crossings, and improving sight distance at railroad crossings.

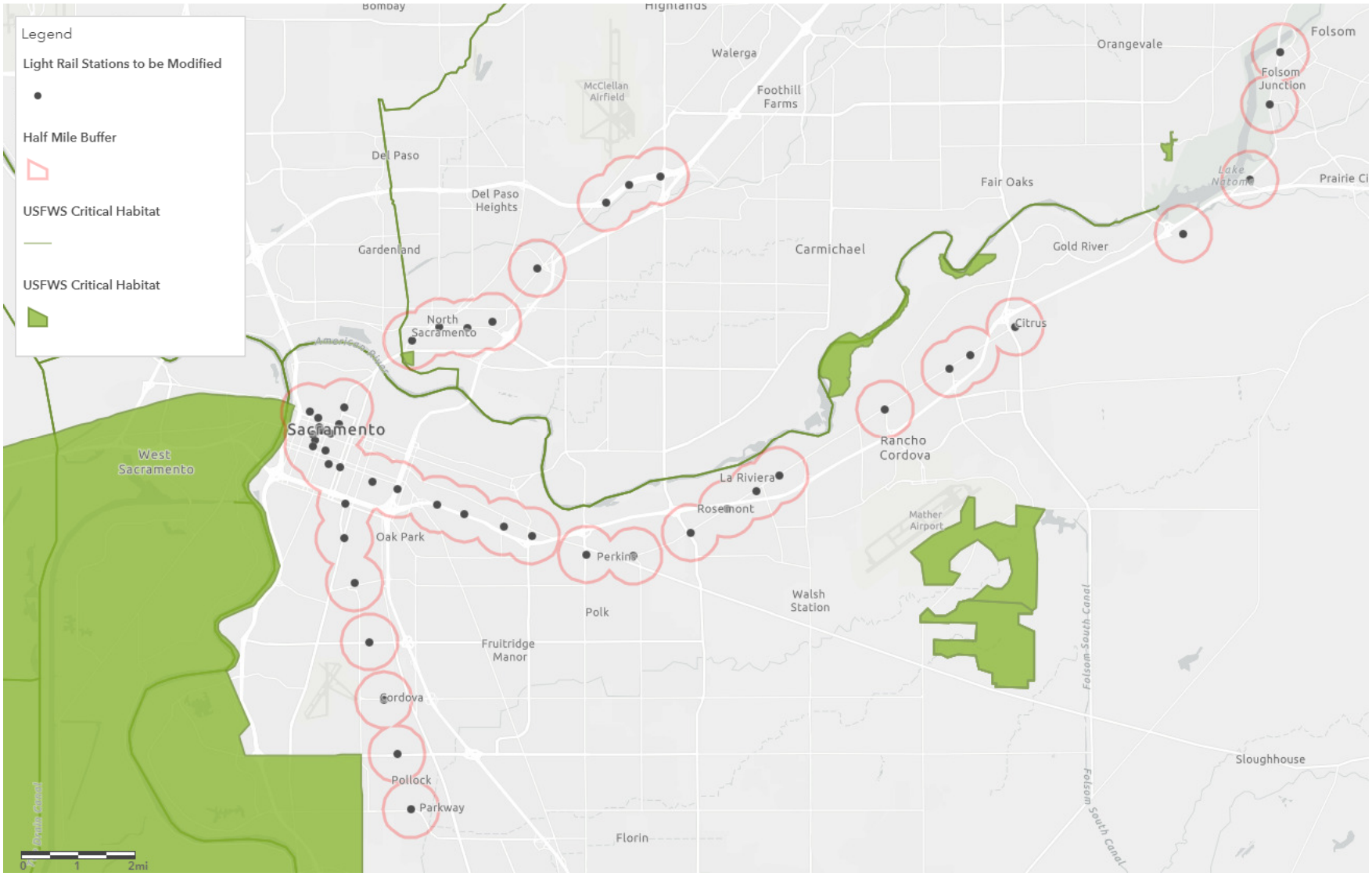
(8) Modernization or minor expansions of transit structures and facilities outside existing right-of-way, such as bridges, stations, or rail yards.

Attachment 1A – Site Map in relation to Section 4(f) Resources



Sources: National Register of Historic Places (National Park Service); Sac County

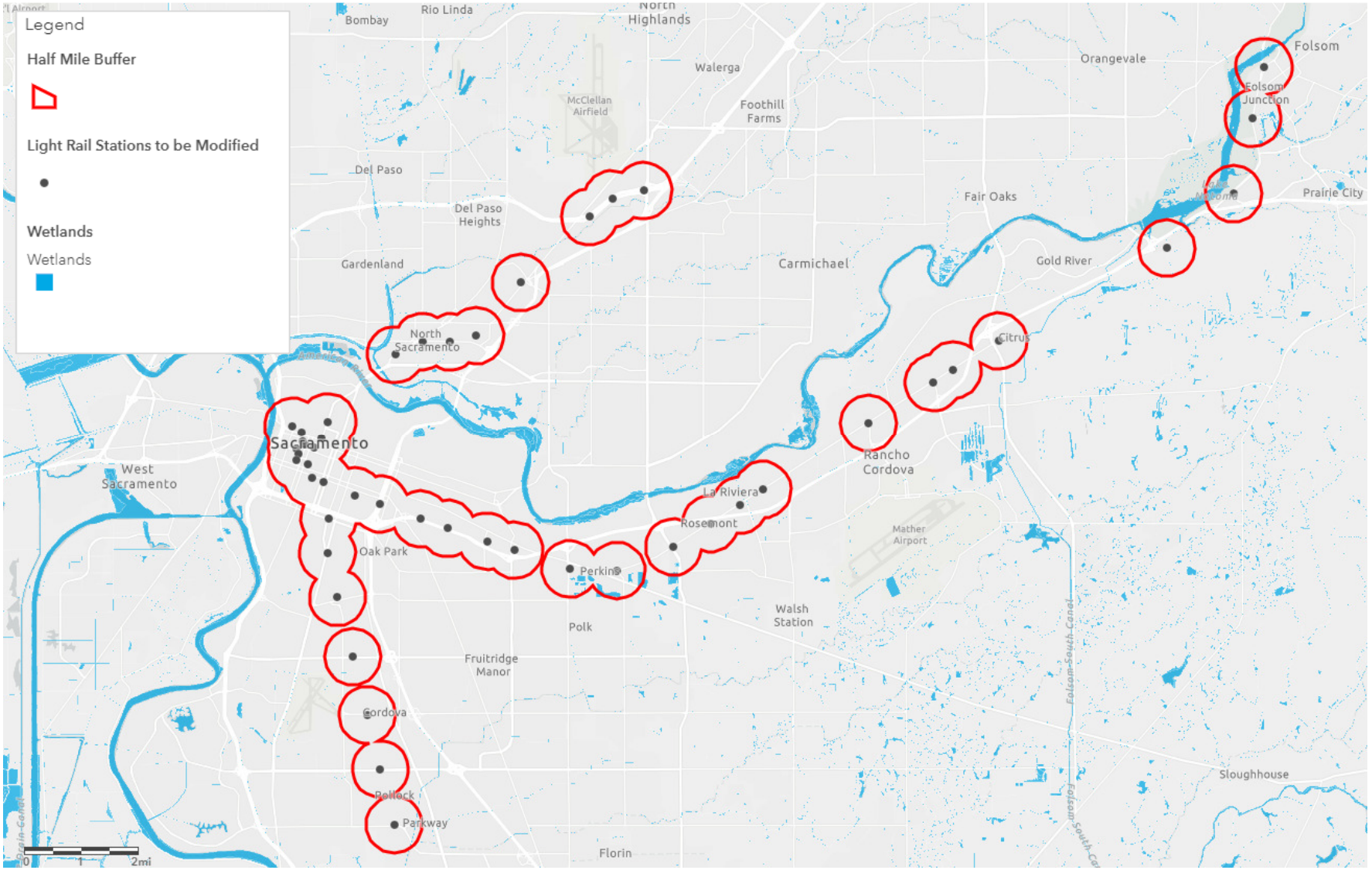
Attachment 1B – Site Map in relation to USFWS Critical Habitat *



Source: U.S. Fish & Wildlife Service (USFWS) Critical Habitat

* Critical habitat = geographic areas believed to be essential to an endangered or threatened species' conservation

Attachment 1C – Site Map in relation to Wetlands



Source: U.S. Fish and Wildlife Service, National Wetlands Inventory

Attachment 2
Methodology for GHG Quantification for Project

California Air Resources Board
Calculator Tool for the
California State Transportation Agency
Transit and Intercity Rail Capital Program
Greenhouse Gas Reduction Fund
Fiscal Year 2018-19

Project Name:	Accelerating Rail Modern. & Expansion - Capitol Region

Input	Description	Quantified Component 1	
Identifying Descriptor (ID)	Brief description of the quantifiable component identifying it from other separable components.	Purchase 36 Light Rail Vehicles and modify 48 stations to accommodate low floor vehicles	
Funding Inputs			
TIRCP Funds Requested	Total TIRCP funds requested for this separable component.	$197,150,000	
Multi-Year	Will this component request several California Transportation Commission allocations over multiple calendar years?	Yes	
Additional CCI Program 1			
CCI Program	Other CCI Program from which project has or will be requesting GGRF funds.		
Additional GGRF Funds	Total GGRF funds requested or to be requested from Additional CCI Program 1.		
Additional CCI Program 2			
CCI Program	Other CCI Program from which project has or will be requesting GGRF funds.		
Additional GGRF Funds	Total GGRF funds requested or to be requested from Additional CCI Program 2.		
Total GGRF Funds Requested	Total GGRF funds requested from all CCI Programs	$197,150,000	
Project Inputs			
Project Type	For the purposes of this quantification, eligible TIRCP projects fall into four project types. Select the project type that best describes this component.	New/Expanded Service	
Service Type	The transit service (e.g., Intercity/Express Bus (Long Distance), Light Rail, Vanpool, etc.) directly associated with the proposed project. For projects that serve multiple services, select Multi-modal.	Light Rail	
Vehicle Type	The vehicle type (e.g., Transit Bus, Streetcar, Ferry, etc.) that will operate the new service or will be procured.	Light Rail	
Region	The region that best encompasses the geographic location for the proposed project type.	County	
Sub region	The County or Air Basin where the majority of the service occurs.	Sacramento	
Year 1 (Yr1)	The first year of service or the first year the facility or rolling stock will be in use.	2024	
Year F (YrF)	The final year of service or the final year the facility or rolling stock's useful life.	2055	
Useful Life	The number of years the service is funded or the useful life of the facility or rolling stock.	31	
Displaced Autos Inputs		**Input**	**Reference**
Yr1 Ridership	The increase in unlinked passenger trips directly associated with the proposed project in the first year (Yr1).	545,210	Sac RT internal analysis
YrF Ridership	The increase in unlinked passenger trips directly associated with the proposed project in the final year. If the ridership is not expected to change, Yr1 and YrF should be the same value.	13,418,053	2016 MTP/SCS growth rates
Adjustment Factor (A)	Discount factor applied to annual ridership to account for transit-dependent riders. Use: document project-specific data or system average developed from a recent, statistically valid survey or default.	0.83	CARB Default

Length of Average Trip (L)	Annual passenger miles over unlinked trips directly associated with the proposed project.	6.01	Sac RT FY17 NTD data
New/Expanded Service Vehicle Inputs		**Input**	**Reference**
Hybrid Vehicle	Is the vehicle for the new/expanded service, or vehicle(s) to be procured, a hybrid?	No	
Fuel Type	The fuel type (e.g., electric, diesel, etc.) of the vehicle for the new/expanded service, or of the new vehicle(s) to be procured.	Electric	
Model Year	The engine model year of the vehicle that will operate the new/expanded service, or of the new vehicle(s) to be procured.		
Project-Specific Emission Factor	If used, applicant must be able to demonstrate an approved carbon intensity value under the Low Carbon Fuel Standard and submit additional documentation.		
Annual VMT	The estimated annual VMT required to operate the new/expanded service or of the new vehicle(s) to be procured (e.g., 72,000). For rail and ferry vehicles, applicants may alternatively use Annual Fuel.		
Annual Fuel	The estimated annual fuel (i.e., gallon of diesel, KWh of electricity) required to operate the new/expanded service, or of the new rail or ferry vehicle(s) to be procured (e.g., 26,000).	1,147,572	Additional KWh during peak times
Displaced Vehicle/Fuel Reductions Inputs		**Input**	**Reference**
Fuel Type	The fuel type (e.g., electric, diesel, etc.) of the displaced vehicle(s) or of fuel reductions as a result of the project.		
Model Year	The average engine model year(s) of the displaced vehicle(s) or of the vehicle(s) to realize fuel reductions as a result of the project.		
Annual VMT	The estimated annual VMT of the displaced vehicle(s). For rail and ferry vehicles, applicants may alternatively use Annual Fuel.		
Annual Fuel	The estimated annual fuel reductions expected to be realized as a result of the project or the estimated annual fuel the displaced vehicle(s) would have required to operate the equivalent as the new vehicle to be procured.		

California Air Resources Board
Calculator Tool for the
California State Transportation Agency
Transit and Intercity Rail Capital Program
Greenhouse Gas Reduction Fund
Fiscal Year 2018-19

Project Name:	Accelerating Rail Modern. & Expansion - Capitol Region

	Quantified GHG Component 1	Quantified GHG Component 2	Quantified GHG Component 3	Quantified GHG Component 4	Quantified GHG Component 5	Quantified GHG Component 6	Total Project
Identifying Descriptor	Purchase 36 Light Rail Vehicles and modify 48 stations to accommodate low floor	Folsom Light Rail Frequency Improvements-Purchase 10 LRVs		Dos Rios Light Rail Station Construction	Horn Rd. Light Rail Station Construction		
GHG Emission Reduction Start Date (Year)	2024	2023		2022	2022		
Total CCI							
Total GHG Emission Reductions ($MTCO_2e$)	315,808	87,659		26,380	24,083		453,931
Total GGRF Funds Requested ($)	197,150,000	78,899,360		24,000,000	10,850,000		310,899,360
Total GHG Emission Reductions/Total GGRF Funds Requested ($MTCO_2e$/$)	0.001602	0.001111		0.001099	0.002220		0.001460
TIRCP							
TIRCP GHG Emission Reductions ($MTCO_2e$)	315,808	84,771		26,380	24,083		451,043
TIRCP Funds Requested ($)	197,150,000	76,300,000		24,000,000	10,850,000		308,300,000
TIRCP GHG Emission Reductions/TIRCP Funds Requested ($MTCO_2e$/$)	0.001602	0.001111		0.001099	0.002220		0.001463
TIRCP Funds Requested/TIRCP GHG Emission Reductions ($/MTCO_2e$)	624	900		910	451		684
Additional CCI Program 1							
CCI Program							
GHG Emission Reductions Attributable to other GGRF Programs (MTCO2e)							
Total Additional GGRF Funds to Implement Project ($)							
Additional CCI Program 2							
CCI Program		LCTOP					
GHG Emission Reductions Attributable to other GGRF Programs (MTCO2e)		2,888					
Total Additional GGRF Funds to Implement Project ($)		2,599,360					

California Air Resources Board
Calculator Tool for the
California State Transportation Agency
Transit and Intercity Rail Capital Program
Greenhouse Gas Reduction Fund
Fiscal Year 2018-19

Project Name:	Accelerating Rail Modern. & Expansion - Capitol Region

		Quantified Co-Benefit Component 1	Quantified Co-Benefit Component 2	Quantified Co-Benefit Component 3	Quantified Co-Benefit Component 4	Quantified Co-Benefit Component 5	Quantified Co-Benefit Component 6	Total Project
	Identifying Descriptor	Purchase 36 Light Rail Vehicles and modify 48 stations to accommodate low floor vehicles	...ison Light Rail Frequency ...provements- Purchase 10 ...LRVs and Double Track 2 ... Sections of Gold Line		Dos Rios Light Rail Station Construction	Horn Rd. Light Rail Station Construction		
	Total CCI							
Key Variables	Passenger VMT Reductions (miles)	34,826,472	10,466,570		1,624,505	1,451,597		48,369,143
Key Variables	Fossil Fuel Use Reductions	N/A	N/A		N/A	N/A		
Key Variables	Fossil Fuel Energy Use Reductions (kWh)	N/A	N/A		N/A	N/A		
Co-Benefits	ROG Emission Reductions (lbs)	10,338	5,777		1,065	1,042		18,221
Co-Benefits	NOx Emission Reductions (lbs)	57,750	30,200		5,735	5,561		99,246
Co-Benefits	PM2.5 Emission Reductions (lbs)	1,554	758		143	137		2,592
Co-Benefits	Diesel PM Emission Reductions (lbs)	2,756	2,905		440	466		6,568
	TIRCP							
Key Variables	Passenger VMT Reductions (miles)	34,826,472	10,121,746		1,624,505	1,451,597		48,024,320
Key Variables	Fossil Fuel Use Reductions	N/A			N/A	N/A		
Key Variables	Fossil Fuel Energy Use Reductions (kWh)	N/A			N/A	N/A		
Co-Benefits	ROG Emission Reductions (lbs)	10,338	5,586		1,065	1,042		18,031
Co-Benefits	NOx Emission Reductions (lbs)	57,750	29,205		5,735	5,561		98,251
Co-Benefits	PM2.5 Emission Reductions (lbs)	1,554	733		143	137		2,567
Co-Benefits	Diesel PM Emission Reductions (lbs)	2,756	2,810		440	466		6,472
	Additional CCI Program 1							
Key Variables	Passenger VMT Reductions (miles)							
Key Variables	Fossil Fuel Use Reductions							
Key Variables	Fossil Fuel Energy Use Reductions (kWh)							
Co-Benefits	ROG Emission Reductions (lbs)			#VALUE!				#VALUE!
Co-Benefits	NOx Emission Reductions (lbs)			#VALUE!				#VALUE!
Co-Benefits	PM2.5 Emission Reductions (lbs)			#VALUE!				#VALUE!
Co-Benefits	Diesel PM Emission Reductions (lbs)			#VALUE!				#VALUE!
	Additional CCI Program 2							
Key Variables	Passenger VMT Reductions (miles)		344,824					344,824
Key Variables	Fossil Fuel Use Reductions							
Key Variables	Fossil Fuel Energy Use Reductions (kWh)							
Co-Benefits	ROG Emission Reductions (lbs)		190	#VALUE!				#VALUE!
Co-Benefits	NOx Emission Reductions (lbs)		995	#VALUE!				#VALUE!
Co-Benefits	PM2.5 Emission Reductions (lbs)		25	#VALUE!				#VALUE!
Co-Benefits	Diesel PM Emission Reductions (lbs)		96	#VALUE!				#VALUE!

ATTACHMENT 2 - Narrative

GHGR Component 1 (Project Components 1 and 2): Low Floor LRV Station Conversion/Acquire 36 LRVs:

PeakTimes: Out of a fleet of 97 LRVs, 26 vehicles have reached the end of their 31 year useful life and 10 will reach it by 2022. These vehicles have a high floor design and because technology has moved to the low floor configuration, the industry no longer supports them, and it is increasingly difficult to find replacement parts. Because of their age repairs on these 36 vehicles are more frequent, costly, and time consuming. During peak times RT has had to run trains with fewer vehicles. In a sample period June to Nov 2017 out of the peak requirement of 69 vehicles, RT was only able to run 63- see "Available LRVs vs Peak Requirement," Exhibit 1.* Annual riders displaced- not able to board trains- represented 8.7% of peak rail ridership (Table 1) or 423,584 riders annually. If new vehicles were available to replace those out of service, and using a sensitivity factor of .62, it is estimated 259,148 riders would return within the first year - see Table 1. Over time, the remainder of those displaced riders would return along with other riders due to population growth in the Sacramento region, particular in the center and corridor communities, thereby resulting in a total increase during peak times of 5,861,081 riders annually by year 31.

By restoring consists to peak vehicle needs, additional GHG is generated to run the additional cars. The additional annual fuel consumed is 1,147,572 KWh. See Table 1.

Non Peak Times: Non peak ridership is expected to increase with population growth over the 31 year life of this component- see Table 2. This assumes no increase in consist size for non peak trains, as new cars will have greater capacity, so no additional KWh of fuel would be consumed during non peak times.

Station low floor conversions No separate ridership impact data is included for the 48 Station low floor conversion subcomponent, though it is reasonable to assume the modification to a low floor configuration itself would attract riders.

See Table 2A for summary of ridership impact.

RT Rider Alert

Bus and Light Rail Service Disruptions Notice Log

Text	AccidentDate	EstimateDate	Contact	Phone	Pager	Category	ShowOnWeb	Notes
Message Regarding Commute Time Trains	1/27/2017 15:44	1/27/2017 15:44	NULL	NULL	NULL	NULL	1	RT has received comments regarding short trains during commute hours. Unfortunately, RT has been struggling for some time now to meet our commute time peak vehicle requirement of 4-car trains (3-cars for VTA trains). A major part of our fleet, the Siemens light rail vehicles, reach the end of their 30-year useful life in March of this year. We realize that this causes crowding and while "standing room only" trips are common and considered normal during commute times for transit systems around the country, we certainly want to operate the design capacity of the system. A 30-year-old vehicle with several million miles of service, has more issues requiring maintenance and are less reliable overall. Staff is working diligently to repair and return vehicles to service as quickly as possible, but the real solution is to replace our aging fleet as they reach the end of their 30 year life. This will require a major financial commitment on the part of the community in order to fund light rail vehicle replacement and other state of good repair projects for RT's aging system. We apologize for any inconvenience this may cause and thank you for your patience.

ATTACHMENT 2
TABLE 1
Low Floor LRV Station Conversion/Acquire 36 LRVs
Ridership Impact during Peak Hours

			Source/ Comment
Peak period LRT Boardings	4,871,217		NTD 2017
#LRVs peak service	69		See Exhibit 1
Actual vehicles available	63		See Exhibit 1
Capacity loss from out of service vehicles	6		
Riders displaced =6/69*4,871,217	423,584		per year
Headway elasticity (a)	-0.46		TCRP report 95, Ch. 9, p. 9-8 (b)
Unplanned adjustment factor - unannounced or sudden vehicle unavailability (c)	1.33		TCRP report 95, Ch. 9, p. 9-20 (b)
Ridership loss per year-will get back because of immediate availability of more cars.	259,149		Headway elasticity x unplanned factor x riders
Recaptured riders and new riders who would be attracted over time because of population/jobs/employment growth Population growth 2.5% per year over the life of project	5,601,933		2016 MTP/SCS growth rates- Exhibit 5

	Year 1 increase	Year F increase
Peak	380,929	5,861,081

Capacity loss from out of service vehicles	8.70%		
Capacity restored from replacement with new vehicles	8.70%		
Miles per day per vehicle during peak service	100.4	VM	Existing service data
# of vehicles restored to service under low floor conversion project	6		
Additional VMT to run 6 vehicles	602.4		
Additional VMT per year: 254 weekdays X 602.4 mi/day	153,009.60	mi	254 weekdays of peak service
Additional KWh used: 153009.6 mi x 7.5 KWh=	1,147,572		See Exhibit 6 for KWh rate

(a) Percent change in ridership in response to a 1% change in the headway. A negative sign indicates the effect is opposite in direction from the cause. In this case a 1% increase in headway- because riders have to wait (cannot board an already full peak time train that is running a smaller than optimal consist)- results in a 0.46% loss in ridership.

(b) TCRP = Transit Cooperative Research Program. Traveler Response to Transportation Systems Handbook, Third Edition: Chapter 9, Transit Scheduling and Frequency.

(c) This factor measures the impact on ridership of "unplanned" (versus scheduled) service cuts- such as out of service vehicles

ATTACHMENT 2

TABLE 2

Low Floor LRV Station Conversion/Acquire36 LRVs

Ridership Impact during Non Peak Hours

		Source/ Comment
Total Rail boardings	11,442,458	NTD data 2017
Peak Boardings	4,871,217	NTD data 2017
Non Peak Boardings	6,571,241	
Population growth 2.5% per year over the life of project		2016 MTP/SCS growth rates- Exhibit 2
Year 1 increase in non peak ridership	164,281	
Year F increase in non peak ridership	7,556,972	2017 Nonpeak boardings X 2.5% per year (over 31 years)

ATTACHMENT 2

TABLE 2A

Low Floor LRV Station Conversion/Acquire36 LRVs

Summary of Ridership Impact

Service	**Year 1 Ridership Increase**	**Year F Ridership Increase**
Peak	380,929	5,861,081
Non Peak	164,281	7,556,972
Total	**545,210**	**13,418,053**

ATTACHMENT 2
EXHIBIT 1
Low Floor LRV Station Conversion/Acquire 36 LRVs
Available LRVs vs Peak Requirement
June- Nov 2017

	Total Fleet	LRV Hold List	Pull-out LRV's	Stored LRV's for adds	**VAMS**	*VOMS*	**LRV spares or (shortage)**
11/01/17	*97*	31	42	24	**66**	*69*	**(3)**
11/03/17	*97*	33	42	22	**64**	*69*	**(5)**
11/09/17	*97*	29	43	25	**68**	*69*	**(1)**
11/14/17	*97*	27	44	26	**70**	*69*	**1**
11/16/17	*97*	31	44	22	**66**	*69*	**(3)**
11/21/17	*97*	29	44	24	**68**	*69*	**(1)**
11/28/17	*97*	32	44	21	**65**	*69*	**(4)**
10/06/17	*97*	35	40	22	**62**	*69*	**(7)**
10/09/17	*97*	32	42	23	**65**	*69*	**(4)**
10/10/17	*97*	31	43	23	**66**	*69*	**(3)**
10/13/17	*97*	32	43	22	**65**	*69*	**(4)**
10/25/17	*97*	30	42	25	**67**	*69*	**(2)**
10/27/17	*97*	30	43	24	**67**	*69*	**(2)**
10/31/17	*97*	30	44	23	**67**	*69*	**(2)**
09/05/17	*97*	36	39	22	**61**	*69*	**(8)**
09/06/17	*97*	40	34	23	**57**	*69*	**(12)**
09/11/17	*97*	33	42	22	**64**	*69*	**(5)**
09/13/17	*97*	35	40	22	**62**	*69*	**(7)**
09/18/17	*97*	36	38	23	**61**	*69*	**(8)**
09/21/17	*97*	34	41	22	**63**	*69*	**(6)**
09/29/17	*97*	31	44	22	**66**	*69*	**(3)**
08/03/17	*97*	39	36	22	**58**	*69*	**(11)**
08/09/17	*97*	37	38	22	**60**	*69*	**(9)**
08/14/17	*97*	42	35	20	**55**	*69*	**(14)**
08/16/17	*97*	38	37	22	**59**	*69*	**(10)**
08/23/17	*97*	36	38	23	**61**	*69*	**(8)**
08/28/17	*97*	35	40	22	**62**	*69*	**(7)**
08/30/17	*97*	38	36	23	**59**	*69*	**(10)**
07/03/17	*97*	37	39	21	**60**	*69*	**(9)**
07/11/17	*97*	36	39	22	**61**	*69*	**(8)**
07/13/17	*97*	33	42	22	**64**	*69*	**(5)**
07/14/17	*97*	31	44	22	**66**	*69*	**(3)**
07/19/17	*97*	34	41	22	**63**	*69*	**(6)**
07/25/17	*97*	35	41	21	**62**	*69*	**(7)**
07/26/17	*97*	36	39	22	**61**	*69*	**(8)**
06/01/17	*97*	31	41	25	**66**	*69*	**(3)**
06/02/17	*97*	31	42	24	**66**	*69*	**(3)**
06/06/17	*97*	32	40	25	**65**	*69*	**(4)**
06/14/17	*97*	37	36	24	**60**	*69*	**(9)**
06/22/17	*97*	41	32	24	**56**	*69*	**(13)**
06/29/17	*97*	40	34	23	**57**	*69*	**(12)**
06/30/17	*97*	37	37	23	**60**	*69*	**(9)**
AVERAGE LRV Shortage							**(6)**

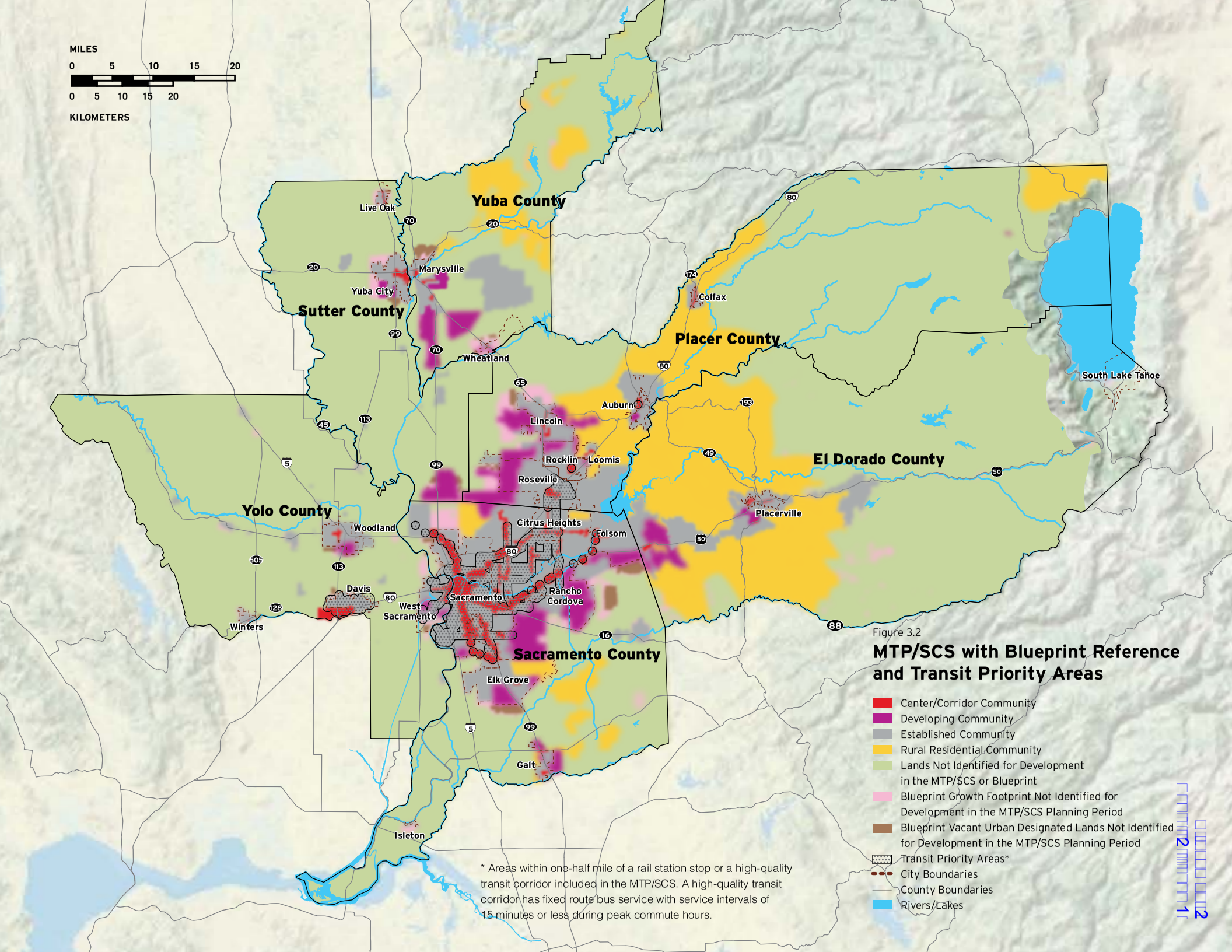


Figure 3.2

MTP/SCS with Blueprint Reference and Transit Priority Areas

- Center/Corridor Community
- Developing Community
- Established Community
- Rural Residential Community
- Lands Not Identified for Development in the MTP/SCS or Blueprint
- Blueprint Growth Footprint Not Identified for Development in the MTP/SCS Planning Period
- Blueprint Vacant Urban Designated Lands Not Identified for Development in the MTP/SCS Planning Period
- Transit Priority Areas*
- City Boundaries
- County Boundaries
- Rivers/Lakes

MTP/SCS Land Use Distribution by Community Type

A summary discussion of the approach taken to growth allocations for each Community Type follows. In each case, the forecast largely relies on growth that is generally consistent with the location, density and intensity of use (Gov. Code, § 65080(b)(2)(B)) in existing general plans or other local adopted plans, but does not utilize all available capacity in those plans by 2036. Tables 3.2 and 3.3 show the housing and employment by sector projected in the MTP/SCS. The Community Type map in Figure 3.2 is included in this plan to depict the general areas projected for growth.

TABLE 3.2

Summary of Housing Units Forecasted in MTP/SCS

Community Type	2012 Existing Housing Units	Total 2036 Forecasted Housing Units
Center and Corridor Communities	107,718	193,885
Established Communities	686,075	764,825
Developing Communities	31,422	146,258
Rural Residential Communities	78,237	83,380
Region Total	**903,451**	**1,188,347**

TABLE 3.3

Summary of Employment Forecasted in MTP/SCS[1]

Community Type	Center and Corridor	Established	Developing	Rural Residential	Region Total
2012 Retail Employees	92,444	144,159	6,622	13,503	256,728
2036 Retail Employees	**120,273**	**172,443**	**28,062**	**14,312**	**335,090**
2012 Office Employees	150,150	202,231	3,692	5,853	361,926
2036 Office Employees	**267,955**	**354,393**	**38,467**	**7,278**	**668,094**
2012 Industrial Employees	24,347	93,339	5,603	6,778	130,067
2036 Industrial Employees	**24,977**	**112,633**	**7,858**	**7,728**	**153,196**
2012 Public Employees	35,833	51,742	2,718	2,978	93,272
2036 Public Employees	**41,667**	**66,440**	**13,132**	**3,053**	**124,292**

1 Does not include employees of home-based businesses.

Attachment 1- Exhibit 2 page 3

2016 MTP/SCS
Sacramento Region - Center and Corridor Communities*

	2012	2036	% increase 2016-2036
Jobs	302,774	454,872	50%
Housing Units	107,718	193,885	80%

Annual population growth rate	2.5%

* Assumed same rate of increase in future years

Attachment 3
Signed and Stamped CEQA Notice of Exemption (NOE)

Print Form

Notice of Exemption

Appendix E

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

County Clerk
County of: Sacramento
600 8th St.
Sacramento, CA 95814

From: (Public Agency): Sacramento Regional Transit
P.O. Box 2110
Sacramento, CA 95812-2110
(Address)

ENDORSED
SACRAMENTO COUNTY
JUL 02 2019
DONNA ALLRED, CLERK/RECORDER
BY _____ DEPUTY

Project Title: Light Rail Vehicle (LRV) Replacement/ LRV Station Modifications

Project Applicant: Sacramento Regional Transit District

Project Location - Specific:
Purchase of replacement light rail vehicles to replace existing light rail vehicles that have reached the end of their useful life. Vehicles to be run on Sacramento RT's existing light rail track.

Project Location - City: Sacramento Project Location - County: Sacramento

Description of Nature, Purpose and Beneficiaries of Project:
Replace light rail vehicles that have reached the end of their useful life. Existing vehicles are becoming increasingly unreliable and more costly to maintain. Replacement vehicles will be low floor. Benefits include increased boarding speed , capacity, reliability, safety, and enhanced access for everyone.

Name of Public Agency Approving Project: Sacramento Regional Transit District

Name of Person or Agency Carrying Out Project: Sacramento Regional Transit District

Exempt Status: **(check one):**

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☐ Categorical Exemption. State type and section number: _____
- ☒ Statutory Exemptions. State code number: PRC Sec. 21080 (b) (10) and CEQA Guidelines 15275

Reasons why project is exempt:
Replacement LRVs will run on rail lines already in use. Replacement would be done in conjunction with conversion of existing light rail stations to accommodate low floor vehicles. Collectively these activities are statutorily exempt from CEQA per PRC section 21080 (b)(10) and CEQA guidelines Sections 15275

Lead Agency Contact Person: Darryl Abansado Area Code/Telephone/Extension: (916) 321-3876

If filed by applicant:
1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? ☐ Yes ☒ No

Signature: _____ Date: 7/1/2019 Title: Director, Eng & Constr

☒ Signed by Lead Agency ☒ Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: _____

Revised 2011

Nominating Agency: Sacramento Transportation Authority
Implementing Agencies: Sacramento County & Sacramento Regional Transit District

US 50 GOLD LINE CORRIDOR ENHANCEMENT PROJECT

Appendix C: Performance Metrics

Measure	Metric	Project Type	Build	Future No Build	Change	Increase or Decrease
Congestion Reduction	Change in Daily Vehicle Miles Travelled	Local Road Hwy Road Transit	5,741,943	5,751,463	9,520	Decrease
	Person Hours of Travel Time Saved	Local Road Hwy Road Transit	NA	NA	47.52	Decrease
Throughput	Bicyclist and Pedestrian Screen Line Counts (Optional)	Active Transportation				
System Reliability	Peak Period Travel Time Reliability Index	Hwy Road	NA	2.92	2.92	NA
	Level of Transit Delay	Transit	0	0	0	No Change
Safety	Number of Fatalities	All	1	1	0	No Change
	Number of Serious Injuries	All	14.75	14.8	0.05	Decrease
	Rate of Fatalities	All	0.0575	0.0575	0	No Change
	Rate of Serious Injuries	All	0.8520	0.8549	0.0029	Decrease
Economic Development	Jobs Created	All	1,731	0	1,731	Increase
Air Quality	Particulate Matter (PM 2.5 PM 10)	All	NA	NA	-0.0406 PM2.5 -0.0414 PM10	Increase
	Carbon Dioxide (CO_2)	All	NA	NA	885	Decrease
	Volatile Organic Compounds (VOC)	All	NA	NA	2.37	Decrease
	Sulphur Oxides (SO_x)	All	NA	NA	-0.0592	Increase
	Carbon Monoxide (CO)	All	NA	NA	28.4	Decrease
	Nitrogen Oxides (NO_x)	All	NA	NA	3.40	Decrease
Cost Effectiveness	Benefit Cost Ratio	All	NA	NA	1.03	NA
Accessibility	Number of Jobs Accessible by Mode	All			0	NA
	Access to Key Destinations by Mode	All			0	NA

	Percent of Population Defined as Low Income or Disadvantaged within ½ mile of rail station, ferry terminal, or high-frequency bus stop	All	18.6%	18.6%	0	No Change
System Preservation (*Pavement and Bridge Rehabilitation only*)	Pavement Condition Index	Local Road Hwy Road	76	45	31	Increase
	Bridge Condition Rating for Bridge Deck, Superstructure, Substructure	Local Road Hwy Road	80	0	80	Increase
Noise Level *Sound walls only* (For reporting only)	Number of Receptors	Sound walls				
	Properties Directly Benefited	Sound walls				
	Number of Decibels	Sound walls				

Metric Name:	Daily Vehicle Miles Traveled (VMT)
Source Data:	Kittelson used a modified version of Sacramento Area Council of Governments (SACOG's) SACSIM 19 model to develop the following metrics for the SACSIM 19 model boundary: • Average daily traffic volumes • Daily vehicle trips • Daily vehicle miles traveled • Daily vehicle hours traveled • Daily transit person trips • Daily transit passenger miles traveled • Daily transit passenger hours traveled In addition, we also performed a local subarea analysis, focused on the sub area along US 50, including the service streets, from Folsom Boulevard to the 10th Street interchange to account for the localized benefits of the transit and interchange improvements. Kittelson used SACSIM 19 to forecast and extract the following metrics for the selected local sub area: • Average daily traffic volumes • Daily vehicle miles traveled • Daily vehicle hours traveled • Daily vehicle hours of delay

Base Numbers & Calculation for "No Build" Estimate

- Auto: 5,747,863
- Transit: 40 trips x 22.5 miles x 2 car trains x 2 directions = 3,600
- 5,747,863 + 3,600 = 5,751,463

Base Numbers, Trends or Assumptions, and Calculation for "Build" Number

- Auto: 5,736,093
- Transit: 30 trips x 22.5 miles x 3 car trains x 2 directions + 10 trips x 22.5 miles x 4 car trains x 2 directions = 2,925
- 5,736,093 + 5,850 = 5,741,943

Change

5,751,463 – 5,741,943 = 9,520 miles

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Person Hours of Travel Time Saved*
Source Data:	*Cal B/C Corridor Model*
Base Numbers & Calculation for "No Build" Estimate	
Not Required	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
Not Required	
Change	
17,345 (in year 20) / 365 = 47.52	

Metric Name:	Peak Period Travel Time Reliability Index
Source Data:	CTC – The Travel Time Reliability Crosswalk

Base Numbers & Calculation for "No Build" Estimate

The Maximum LOTTR for segments and time periods within the project is 2.92 for US-50 at 34th Street in the PM Peak hour

Base Numbers, Trends or Assumptions, and Calculation for "Build" Number

Not Required

Change

2.92

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Level of Transit Delay*
Source Data:	*SacRT FY 2020 Key Performance Report & 2022 Short Range Transit Plan*

Base Numbers & Calculation for "No Build" Estimate

Average length of delay: 5 min.
Percentage of instances with delay: 100 – 95.6 = 4.4%
Total number of trains: 40 each direction
Total number of stops per trip: 28 each direction
Total number of stops: 40 * 28 * 2 (both directions) = 2240
Number of stops with delay: 0.044 * 2240 = 98.56
Median delay per train per stop: 0 minutes

Base Numbers, Trends or Assumptions, and Calculation for "Build" Number

Average length of delay: 5 min.
Percentage of instances with delay: 100 – 95.6 = 4.4%
Total number of trains: 40 each direction
Total number of stops per trip: 28 each direction
Total number of stops: 40 * 28 * 2 (both directions) = 2240
Number of stops with delay: 0.044 * 2240 = 98.56
Median delay per train per stop: 0 minutes

Change

0 – 0 = 0

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Number of Fatalities*
Source Data:	*Transportation Injury Mapping System – Statewide Integrated Traffic Reporting System*
Base Numbers & Calculation for "No Build" Estimate	
Total 2016 through 2020 fatalities: 5 *5 / 5 years = 1*	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
The project includes no safety improvements that will affect fatality collisions, so the build scenario will have the same number of fatalities: 5 *5 / 5 years = 1*	
Change	
1 – 1 = 0	

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Number of Serious Injuries*
Source Data:	*Transportation Injury Mapping System – Statewide Integrated Traffic Reporting System*

Base Numbers & Calculation for "No Build" Estimate

Total 2016 through 2020 serious injuries: 74
74 / 5 years = 14.8

Base Numbers, Trends or Assumptions, and Calculation for "Build" Number

The project safety improvements will effect only one collision from 2016 with a reduction factor of 25%: 73.75 collisions
73.75 / 5 years = 14.75

Change

14.8 – 14.75 = 0.05

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Rate of Fatalities per 100 Million VMT*
Source Data:	*Transportation Injury Mapping System – Statewide Integrated Traffic Reporting System Regional Model*

Base Numbers & Calculation for "No Build" Estimate

*2016 Fatalities / 2016 VMT (daily vmt * 365) = 0 / (4,665,556*365)* 100,000,000 = 0*
*2017 Fatalities / 2017 VMT (daily vmt * 365) = 2 / (4,701,633*365)* 100,000,000 = 0.1165*
*2018 Fatalities / 2018 VMT (daily vmt * 365) = 0 / (4,737,710*365)* 100,000,000 = 0*
*2019 Fatalities / 2019 VMT (daily vmt * 365) = 1 / (4,773,787*365)* 100,000,000 = 0.0574*
*2020 Fatalities / 2020 VMT (daily vmt * 365) = 2 / (4,809,864*365)* 100,000,000 = 0.1139*
(0 + 0.1165 + 0 + 0.0574 + 0.1139) / 5 = 0.0576

Base Numbers, Trends or Assumptions, and Calculation for "Build" Number

The project includes no safety improvements that will affect fatality collisions, so the rates will be the same in the "build" and "no build" scenarios.
*2016 Fatalities / 2016 VMT (daily vmt * 365) = 0 / (4,665,556*365)* 100,000,000 = 0*
*2017 Fatalities / 2017 VMT (daily vmt * 365) = 2 / (4,701,633*365)* 100,000,000 = 0.1165*
*2018 Fatalities / 2018 VMT (daily vmt * 365) = 0 / (4,737,710*365)* 100,000,000 = 0*
*2019 Fatalities / 2019 VMT (daily vmt * 365) = 1 / (4,773,787*365)* 100,000,000 = 0.0574*
*2020 Fatalities / 2020 VMT (daily vmt * 365) = 2 / (4,809,864*365)* 100,000,000 = 0.1139*
(0 + 0.1165 + 0 + 0.0574 + 0.1139) / 5 = 0.0576

Change

.0575 - .0575 = 0

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Rate of Serious Injuries per 100 Million VMT*
Source Data:	*Transportation Injury Mapping System – Statewide Integrated Traffic Reporting System Regional Model*

Base Numbers & Calculation for "No Build" Estimate

*2016 Serious Injuries / 2016 VMT (daily vmt * 365) = 16 / (4,665,556*365)* 100,000,000 = 0.9396*
*2017 Serious Injuries / 2017 VMT (daily vmt * 365) = 7 / (4,701,633*365)* 100,000,000 = 0.4079*
*2018 Serious Injuries / 2018 VMT (daily vmt * 365) = 13 / (4,737,710*365)* 100,000,000 = 0.7518*
*2019 Serious Injuries / 2019 VMT (daily vmt * 365) = 25 / (4,773,787*365)* 100,000,000 = 1.435*
*2020 Serious Injuries / 2020 VMT (daily vmt * 365) = 13 / (4,809,864*365)* 100,000,000 = 0.7405*
(0.9396 + 0.4079 + 0.7518 + 1.435 + 0.7405) / 5 = 0.8549

Base Numbers, Trends or Assumptions, and Calculation for "Build" Number

The project safety improvements will effect only one collision from 2016 with a reduction factor of 25%
*2016 Serious Injuries / 2016 VMT (daily vmt * 365) = 15.75 / (4,665,556*365)* 100,000,000 = 0.9249*
*2017 Serious Injuries / 2017 VMT (daily vmt * 365) = 7 / (4,701,633*365)* 100,000,000 = 0.4079*
*2018 Serious Injuries / 2018 VMT (daily vmt * 365) = 13 / (4,737,710*365)* 100,000,000 = 0.7518*
*2019 Serious Injuries / 2019 VMT (daily vmt * 365) = 25 / (4,773,787*365)* 100,000,000 = 1.435*
*2020 Serious Injuries / 2020 VMT (daily vmt * 365) = 13 / (4,809,864*365)* 100,000,000 = 0.7405*
(0.9249 + 0.4079 + 0.7518 + 1.435 + 0.7405) / 5 = 0.8520

Change

.8549 - .8520 = 0.0029

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Jobs Created*
Source Data:	*FHWA Employment Impacts of Highway Infrastructure Investment*
Base Numbers & Calculation for "No Build" Estimate	
No new jobs created in a "no build" scenario	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
*$133,152,000 total project cost * .000013 jobs per dollar = 1,731 jobs*	
Change	
1,731 – 0 = 1,731	

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Particulate Matter (PM 2.5)*
Source Data:	*Cal B/C Corridor Model*
Base Numbers & Calculation for "No Build" Estimate	
N/A	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
N/A	
Change	
-0.0406 tons	

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Particulate Matter (PM 10)*
Source Data:	*Cal B/C Corridor Model*
Base Numbers & Calculation for "No Build" Estimate	
N/A	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
N/A	
Change	
-0.0414 tons	

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Particulate Matter (CO2)*
Source Data:	*Cal B/C Corridor Model*
Base Numbers & Calculation for "No Build" Estimate	
N/A	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
N/A	
Change	
885 tons	

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Particulate Matter (VOC)*
Source Data:	*Cal B/C Corridor Model*
Base Numbers & Calculation for "No Build" Estimate	
N/A	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
N/A	
Change	
2.37 tons	

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Particulate Matter (SOX)*
Source Data:	*Cal B/C Corridor Model*
Base Numbers & Calculation for "No Build" Estimate	
N/A	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
N/A	
Change	
-0.0592 tons	

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Particulate Matter (CO)*
Source Data:	*Cal B/C Corridor Model*
Base Numbers & Calculation for "No Build" Estimate	
N/A	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
N/A	
Change	
28.4 tons	

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Particulate Matter (NOX)*
Source Data:	*Cal B/C Corridor Model*
Base Numbers & Calculation for "No Build" Estimate	
N/A	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
N/A	
Change	
3.40 tons	

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Cost-Benefit Ratio*
Source Data:	*Cal B/C Corridor Model*
Base Numbers & Calculation for "No Build" Estimate	
Not required	
Base Numbers, Trends or Assumptions, and Calculation for "Build" Number	
Not required	
Change	
$119.4 million (Benefits)/ $116.5 million (Costs) = 1.03	

Number of Jobs/Key Destinations	No Build	Build	Improvement
Jobs Accessible by Auto	450,252	450,252	0
Jobs Accessible by Bike	0	39,022	39,022
Jobs Accessible by Walking	8,944	8,944	0
Jobs Accessible by Transit	181,433	181,433	0
Key Destinations Accessible by Auto	1,730	1,730	0
Key Destinations Accessible by Bike	0	111	111
Key Destinations Accessible by Walking	54	54	0
Key Destinations Accessible by Transit	297	297	0

No Build Speed: 35.8 mph
Build Speed: 35.8 mph
Walk half mile
Bike 3 miles
Auto 20 min: No Build: 11.93 mi, Build: 11.93 mi
Transit 40 min: (.5 miles from Gold Line)

Auto Schools: 37,457/68.6=546
Auto Medical: 79,364/473.3=15.6
Auto Retail: 51,400/44=1,168.2
Auto Total: 1,730 destinations
Auto Jobs: 450,252

Walk Schools: 1,084/68.6=15.8
Walk Medical: 937/473.3=2.0
Walk Retail: 1,574/44=35.8
Walk Total: 54
Walk Jobs: 8,944

Bicycle Schools: 1,834/68.6=26.7
Bicycle Medical: 2,881/473.3=6.1
Bicycle Retail: 3,442/44=78.2
Bicycle Total: 111
Bicycle Jobs: 39,022

Transit Schools: 5,138/68.6=74.9
Transit Medical: 16,794/473.3=35.5
Transit Retail: 8,220/44=186.8
Transit Total: 297
Transit Jobs: 181,433

Required Back-Up Information

Please fill out this information, using this template if desired, for each metric. Even if this template is not used, this back-up information is required for all required metrics.

Metric Name:	*Percent of Population Defined as Low Income or Disadvantaged within ½ mile of rail station, ferry terminal, or high-frequency bus stop*
Source Data:	*US Census Bureau OnTheMap*

Base Numbers & Calculation for "No Build" Estimate

Within a half mile of each Gold Line station, based on the homes of workers:
6,079 make $1,250 or less each month
32,649 total jobs
6,079 / 32,649 = 0.1861 = 18.6%

Base Numbers, Trends or Assumptions, and Calculation for "Build" Number

Within a half mile of each Gold Line station, based on the homes of workers:
6,079 make $1,250 or less each month
32,649 total jobs
6,079 / 32,649 = 0.1861 = 18.6%

Change

18.6% - 18.6% = 0