2022/23 REGIONAL PROGRAM MAINTENANCE & MODERNIZATION CATEGORY APPLICATION

Project Background (collected via electronic submittal)[1]

Project Title Power Inn Road Safety and Congestion Relief Project

Lead Agency City of Elk Grove

SACOG ID number (if available) TBD

Is this a phase of a larger project? If so, which project? No

Project Description In the City of Elk Grove and Sacramento County, on Power Inn Rd., from Calvine Rd. to Sheldon Rd.: Pavement resurfacing, green bike lane markings, new bike lane buffer, ADA curb ramp upgrades, and traffic signal installation (at Power Inn Rd. and Geneva Pointe Dr.).

Lead Agency Contact Information

- Christina Castro
- Capital Program Division Manager
- City of Elk Grove
- (916) 627-3339
- ccastro@elkgrovecity.org

Partner Agencies (if applicable)

- Sacramento County

Project Funding Request (*round costs to the nearest thousand dollars*)

- SACOG $3,140,000
- Total $3,547,000

Is your project identified as an 'exempt' project type for a regional air quality analysis?[2] ☒Yes ☐ No

Project Screening Criteria	Yes	No
Is your project listed in the 2020 MTP/SCS project list or in a lump sum project category?		X
Is your project a non- vehicle expansion transportation project?	X	
Is your project federal-aid eligible and able to use CMAQ, RSTP, and/or STIP funding?	X	
Does your funding request include a minimum of 11.47% match in non-federal funds? *or* Are you requesting to waive the match requirement for your project that serves a disadvantaged community?	X	

[1] *The Project Background section is entered via the application link on https://www.sacog.org/regional-program; applicants will upload all completed application documents through the application link.*

[2] *System expansion projects (e.g., new or widened roadways) are typically non-exempt. Non-exempt projects are still eligible if they are included in the 2020 MTP/SCS project list (i.e., your project is still eligible in the Transformative category even if you check no in this box, as long as your project is listed in the 2020 MTP/SCS). Exempt project types are identified in the Federal Conformity Rule Subpart A § 93.126 and 93.127, and include activities such as system maintenance and operations, active transportation projects, safety improvements, and purchasing transit replacement vehicles.*

Project Screening Criteria	Yes	No
Is the project's construction phase (or transit vehicle procurement) in an exempt group listing or ready to be programmed into the MTIP to occur no later than June 2026?	X	

Project Context

1. **What is the primary purpose for the project? What local or regional need does it address? Why is it a priority for your agency?** (suggested length: 1-3 paragraphs)

The project modernizes facilities in the corridor improving the movement of multi-modal travel for all users/modes of travel, including, public transit, pedestrians, and bicyclists. This project will perform pavement maintenance to improve pavement quality and extend the life of the roadway. It includes installation of a new traffic signal and curb ramp upgrades at the Power Inn Road and Geneva Pointe Drive intersection. This intersection is adjacent to Monterey Trail High School and Edward Harris Middle School, serving over 3,500 students. Other locations not meeting ADA requirements will be replaced with new ADA conforming curb ramps. Travel lanes will be narrowed to provide space for installation of buffered bike lanes upon completion of pavement rehabilitation and maintenance operations.

In addition to the nearby middle and high schools, in the vicinity there are commercial centers, parks, transit stops, a park and ride, and residential developments that provide a mix of origins and destinations within walking and biking distance. This project would improve safety and multi-modal access to these important local destinations.

This project is a priority because of its proximity to a middle and high school with large student populations and because it will improve access between Elk Grove and Sacramento County. The Power Inn and Geneva Pointe Dr ranked #6 on the most recent collision analysis for unsignalized intersections in the City of Elk Grove and is on Sacramento County's signal priority list. 12 out of 14 collisions at the intersection in the five-year period (2014-2018) were broadside collisions which can be reduced by a traffic signal pursuant to the Federal Highway Administration.

2. **If you are a special district (e.g., air district, JPA, transit agency, transportation management association), describe your coordination with the local jurisdiction(s) during the consultation phase and in setting priority rankings.** (suggested length: 1-3 paragraphs)

Not applicable

3. **Describe your community outreach for the project, including to community or business groups and how the project addresses the needs of disadvantaged communities and/or vulnerable populations shared through this outreach. Discuss how the community was involved in developing the proposed project (e.g., input from engagement activities, sharing decision-making power with key partners, accountability for implementing for what was identified by the community).**[3] (suggested length: 2-4 paragraphs)
    a. The project's PPA Data Table (application element 4a) includes information on regionally identified Environmental Justice areas and accessibility in the project area. You may also use your own definition of disadvantaged community.

[3] *SACOG staff will use the information you provide to better understand how nominated projects have been co-created with the communities they are meant to serve. This baseline may be used to evaluate and report on SACOG's major programs and planning work to identify to identify opportunities to increase racial equity and reduce disparities.*

During the 2021 update of the City's Bicycle, Pedestrian, and Trails Master Plan (BPTMP), the City conducted extensive public outreach including workshops, public meetings, booths at City events, surveys, and an online map to gather input about where bicycle and pedestrian improvements were needed. This project is a response to public request for upgrades to the existing Class II bike lanes to buffered bike lanes and is included in the BPTMP recommendations to add a buffered Class II bike lane.

This project is within a disadvantaged community as identified by SACOG's 2020 Disadvantaged Communities map. It will provide safety and mobility improvements to people within this community, including students at Monterey Trail High School and Edward Harris Middle School.

As this project moves to implementation, including environmental and design phases, the City will conduct additional public outreach to gather further public input on the design. The additional outreach may include public meetings, social media posts, booths at city events, and other virtual and in-person opportunities to collect feedback.

Evaluation & Performance Selection Criteria

Project Sponsor Priorities

Please be sure you include the Sponsor Priority Ranking Table (application element #7) either in the submittal of your highest ranked application or directly to the SACOG program coordinator (i.e., you do not need to include the table with every application, just once). The program guidelines give more information on how to fill out this exhibit.

Asset Condition and Use (State of Good Repair)

Maintenance Needs

- If your project consists of road rehab/operations or bike/ped elements but not transit vehicle replacement, only answer the following road rehabilitation data indicators and questions.
- If your project request is exclusively for transit vehicle replacement, only answer the following transit replacement vehicle data indicators and questions.
- If your project includes both road rehabilitation and transit replacement vehicle elements, answer both sets of questions.

Table 1: Road Rehabilitation Needs & Narrative

Data

What is the Pavement Condition Index (PCI) of the road segment proposed for funding? If you have different PCIs for different segments, use your best estimate of average PCI.	80
What is the average daily traffic (ADT) on the road segment proposed for funding?	10,000
What is the average multimodal daily volumes on the segment proposed for funding? (optional indicator)	N/A
What is the age of the ITS infrastructure requested for replacement? (optional indicator)	N/A

Table 2: Transit Replacement Vehicle Replacement Needs & Narrative

Data

What percentage of your agency's fleet exceeds the FTA's default useful life benchmark?	N/A
What is the average mileage of the vehicles you are requesting to replace?	N/A

Narrative Question for a funding request involving a construction phase or transit vehicle purchase:

For Roadway or Bike/Ped Facility: How are the proposed design elements/treatments the best treatments to preserve and extend the life of the facility? (Suggested length: 2-3 paragraphs.)

or

For Transit Replacement Vehicles: How did you define your vehicle replacement funding request? Please describe factors such as ridership over the last five years, anticipated future transit service, and/ or amount of agency reserves available for capital expenditures that led to your request. (Suggested length: 2-3 paragraphs.)

After completion of the pavement maintenance activities, and traffic signal construction, this project would restripe the bike lanes and add green pavement markings at the critical conflict points with motorized vehicles. The pavement quality is in relatively good condition (PCI above 80) and the selected pavement maintenance activity (Slurry Seal) would keep the pavement in good condition for the least cost. As pavement deteriorates below a PCI of 70, the pavement treatments get progressively more expensive. It's been shown that its more cost effective to keep pavements in good condition than it is to return them to good condition from a poorer condition.

Narrative Question for a funding request involving a Project Development (Environmental, Design, ROW) phase

How will this award help complete a phase of technical work? (e.g., completes environmental, preliminary engineering, etc.) What funding sources (e.g., local/ regional/state/federal) have you identified as a promising strategy to fund the construction phase of your project? Suggested length: 2-3 paragraphs)

This fund request is for funding all phases of the project including environmental and preliminary engineering. This award would provide a head start to begin the technical work on the project which has been identified as a high priority in the City of Elk Grove's 2020 Roadway Collision Analysis and Sacramento County. The project can be funded with the requested funds along with local matching funds, from both the City of Elk Grove and Sacramento County, avoiding having to wait until other funding becomes available.

Cost-Effectiveness

Bring in the cost effectiveness calculation completed as part of application element #5. In preparing the inputs, use your best available estimates. We recognize the level of estimates may vary based on the project's stage. Planning level estimates are acceptable. Section 2.5 of the program guidelines gives more information on the cost effectiveness calculation.

Table 3: Project Cost-Effectiveness Inputs

Daily Travel (ADT or transit boardings)	**10,000**
Annualization Factor	**365**
Project Cost	**$3,547,250**

Useful Life Estimate (years)	**20**

Table 4: Project Cost-Effectiveness Calculation

Cost Effectiveness Calculation = (daily travel x annualization factor) / (project cost/ useful life estimate)
21

Modernization Benefits

Describe the project modernization benefits in the context of **up to two** of the following outcomes (i.e., choose to respond to one or two of the following outcomes), including how the benefits would impact residents of disinvested communities:

☐ 1. Reduce regional vehicle miles travelled (VMT) and/or greenhouse gases (GHG)

☒ 2. Increase multi-modal travel/alternative travel/choice of transportation options

☐ 3. Provide long-term economic benefit within the region

☐ 4. Improve goods movement

☒ 5. Improve safety and security

Projects will be evaluated on the selected outcome(s). The PPA data table will give quantitative indicators for the outcome(s). (Suggested length: 4-5 paragraphs.)

2. Increase multi-modal travel/alternative travel/choice of transportation options

The project modernizes facilities in the corridor improving the movement of multi-modal travel for public transit, pedestrians, and bicyclists. Within the project vicinity there are commercial centers, parks, transit stops, a park and ride, schools, and residential developments that provide a mix of origins and destinations within walking and biking distance.

The installation of a traffic signal at the busy intersection of Power Inn Rd and Geneva Pointe Dr provides operational improvements at the location by increasing intersection capacity, allowing the orderly movement of pedestrians, bicyclists and pedestrian traffic. Moreover, connection to the existing ITS network allows for future adaptive and bus rapid transit signal implementation. Modernizing the corridor's bicycle facility by installing bicycle buffers and green pavement in vehicle-bicycle conflict zones, will provide a distinct continuous lane for bicyclists encouraging the use of the bicycle facilities. There are several transit stops along the corridor linking bicyclists to regional transit services for longer commutes. ADA curb ramp upgrades at the Power Inn Road and Geneva Pointe Drive intersection will provide residents, commuters, and students with disabilities more efficient mobility while utilizing the pedestrian facilities. With all improvements combined, the project will benefit all types of users and modes of transportation.

5. Improve safety and security

The Project addresses the need for safety and security for pedestrians, bicyclists and motorists in the Project area. The Power Inn and Geneva Pointe Dr Ranked No. 6 on the most recent collision analysis for unsignalized intersections in the City of Elk Grove and is on Sacramento County's signal priority list. 12 out of 14 collisions at the intersection in the five-year period (20014-2018) were broadside collisions which can be reduced by a traffic signal pursuant to the Federal Highway Administration. Traffic signals allow for emergency vehicle preemption at intersections reducing their response time. A new traffic signal will allow orderly movement of vehicular and pedestrian traffic improving safety and efficiency over the existing stop control for all modes of transportation.

The proposed bicycle facility enhancements include buffered bike lanes along midblock segments of the roadway and green bike lane pavement markings in vehicle-bicycle conflict zones (in front of driveways, intersection approaches, and bus turnouts). These enhancements improve safety by increasing awareness of the bicycle facilities and its' users to vehicular traffic. The buffered bike lanes provide a safer and more comfortable space for bicyclists than conventional bike lanes by further separating bicycle and vehicular traffic. The project will upgrade non-ADA compliant curb ramps as they currently present challenges for people with disabilities to safely and efficiently use the sidewalk as a mode of transportation. Overall, this project will enhance safety for all modes of transportation.

Project Deliverability & Readiness

(1) Describe any project delivery risks and how you will resolve them; (2) Describe community and policy body support for the project; (3) Discuss the O&M commitment and resources for the capital improvement once it is completed, or for the requested transit asset improvements. (Suggested length: 2-3 paragraphs.)

Every project has elements which can pose risks to delivering a project if not planned accordingly. The City of Elk Grove and Sacramento County have proven their ability to efficiently deliver similar projects by developing inclusive plans, schedules and maintaining effective coordination for both the working group and all stakeholders at all stages of the project including:

- Requests for Authorizations
- PA&ED
- Environmental Engineering – likely CEs due to minimal ground disturbance
- PS&E
- Right of Way (all work to be performed in existing ROW)
- Utilities
- Bidding and Awarding
- Construction

The proposed signal has been identified by both the City of Elk Grove and Sacramento County in their local planning documents as priority projects as well as meeting signal warrants. The proposed bicycle and pedestrian improvements are consistent with the City of Elk Grove's Bicycle, Pedestrian, and Trails Master (BPTMP) which was developed with community input.

O&M departments in both agencies have annual pavement maintenance programs that plan for street maintenance on a rotating basis. In addition, traffic signal maintenance staff continuously monitor the status and condition of traffic signal assets. Funding for street and signal maintenance is funded through local funds (including SB-1 RMRA) that are programmed each year through the Capital Improvements Program and Operation and Maintenance budgets.

Application exhibit checklist

The submittal to the Maintenance & Modernization program category requires several associated exhibits as part of the full application packet (in addition to this completed application form). The program guidelines describe each of these exhibits in greater detail. Application elements 1-6 are required for each project. Element 7 only needs to be included with one application per project sponsor, and elements 8 and 9 are optional. Use the checklist below to make sure your application includes the necessary exhibits. Include the application and each exhibit as separate attachments when you submit your electronic application packet.

Required element

☒ 1. Project application

☒ 2. Project Programming Request

☒ 3. Engineers Cost Estimate

☒ 4a. Project Performance Assessment Data Table ***or***

☐ 4b. Transit Asset Management Data Table (for transit vehicle replacement and equipment projects)

☒ 5. Cost-Effectiveness Calculation

☒ 6. CMAQ Calculation

Additional elements

☐ 7. Sponsor priority ranking table *(only needed once per sponsor, not in every application)*

☐ 8. Supplemental section for local match waiver *(Optional. Only for projects serving a disadvantaged community that are requesting a match waiver)*

☒ 9. Optional additional exhibits (graphics, letters of support, etc.)

9a. Power Inn Road – Streetmix Section

9b. Power Inn Road Safety and Congestion Relief Project Calvin Road to Sheldon Road

Application Element #2. SACOG Funding Program - Project Programming Request (PPR)

Derived from the State of California Department of Transportation PPR

Project Title
Power Inn Road Safety and Congestion Relief Project

Location (Project Limits), Description (Scope of Work)
In the City of Elk Grove and Sacramento County, on Power Inn Rd., from Calvine Rd. to Sheldon Rd.: Pavement resurfacing, green bike lane markings, new bike lane buffer, ADA curb ramp upgrades, and traffic signal installation (at Power Inn Rd. and Geneva Pointe Dr.).

Lead Project Sponsor	Project Partner (if applicable)	County
City of Elk Grove	Sacramento County	Sacramento

Project Manager Name	Phone	E-mail Address
Christina Castro	(916) 627-3339	ccastro@elkgrovecity.org

Component	Implementing Agency
PA&ED	City of Elk Grove
PS&E	City of Elk Grove
Right of Way	City of Elk Grove
Construction	City of Elk Grove

Project Milestone		Completed	Planned
Project Study Report Approved			**07/03/23**
Begin Environmental (PA&ED) Phase			11/10/23
Circulate Draft Environmental Document	**CEQA/NEPA CE**		02/12/24
Draft Project Report			03/04/24
End Environmental Phase (PA&ED Milestone)			03/01/24
Begin Design (PS&E) Phase			05/17/24
End Design Phase (Ready to List for Advertisement Milestone)			03/07/25
Begin Right of Way Phase			03/04/24
End Right of Way Phase (Right of Way Certification Milestone)			08/16/24
Begin Construction Phase (Contract Award Milestone)			07/11/25
End Construction Phase (Construction Contract Acceptance Milestone)			07/10/26
Begin Closeout Phase			07/13/26
End Closeout Phase (Closeout Report)			11/13/26

SACOG has simplified the state Project Programming Request (PPR) form for the regional funding round.

SACOG Funding Program - Project Programming Request (PPR)

Derived from the State of California Department of Transportation PPR

Project Title:	Power Inn Road Safety and Congestion Relief Project
Location (Project Limits), Description (Scope of Work)	In the City of Elk Grove and Sacramento County, on Power Inn Rd., from Calvine Rd. to Sheldon Rd.: Pavement resurfacing, green bike lane markings, new bike lane buffer, ADA curb ramp upgrades, and traffic signal installation (at Power Inn Rd. and Geneva Pointe Dr.).

District	County	Lead Project Sponsor	SACOG ID	Project Partner
03	Sacramento	City of Elk Grove		Sacramento County

Total Project Cost ($1,000s)

Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total
E&P (PA&ED)			127					127
PS&E			253					253
R/W SUP (CT)								
CON SUP (CT)								
R/W								
CON				3,167				3,167
TOTAL			380	3,167				3,547

Fund No. 1: **2022/2023 SACOG Funding Round Request**

Requested Funding ($1,000s)

Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total
E&P (PA&ED)			112					112
PS&E			224					224
R/W SUP (CT)								
CON SUP (CT)								
R/W								
CON				2,804				2,804
TOTAL			336	2,804				3,140

Fund No. 2: **City of Elk Grove Local funds**

Other Funding ($1,000s) *note funding status here*

Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total
E&P (PA&ED)			15					15
PS&E			29					29
R/W SUP (CT)								
CON SUP (CT)								
R/W								
CON				363				363
TOTAL			44	363				407

Fund No. 3:

Other Funding ($1,000s) *note funding status here*

Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total
E&P (PA&ED)								
PS&E								
R/W SUP (CT)								
CON SUP (CT)								
R/W								
CON								
TOTAL								

Fund No. 4:								
Other Funding ($1,000s)					*note funding status here*			
Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total
E&P (PA&ED)								
PS&E								
R/W SUP (CT)								
CON SUP (CT)								
R/W								
CON								
TOTAL								

Fund No. 5:								
Other Funding ($1,000s)					*note funding status here*			
Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total
E&P (PA&ED)								
PS&E								
R/W SUP (CT)								
CON SUP (CT)								
R/W								
CON								
TOTAL								

Fund No. 6:								
Other Funding ($1,000s)					*note funding status here*			
Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total
E&P (PA&ED)								
PS&E								
R/W SUP (CT)								
CON SUP (CT)								
R/W								
CON								
TOTAL								

Fund No. 7:								
Other Funding ($1,000s)					*note funding status here*			
Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total
E&P (PA&ED)								
PS&E								
R/W SUP (CT)								
CON SUP (CT)								
R/W								
CON								
TOTAL								

Fund No. 8:								
Other Funding ($1,000s)					*note funding status here*			
Component	Prior	22-23	23-24	24-25	25-26	26-27	27-28+	Total
E&P (PA&ED)								
PS&E								
R/W SUP (CT)								
CON SUP (CT)								
R/W								
CON								
TOTAL								

SACOG 2022/23 Funding Program - Engineer's Estimate (application element #3)							Fill out cells in blue		
PROJECT NAME: Power Inn Road Safety and Congestion Relief Project									
SPONSOR: City of Elk Grove									
Item No.	Item Description	Unit	Qty	Unit price	Amount ($)	Participating costs	Non-part. costs	RSTP-Eligible	CMAQ-Eligible
1	Mobilization	LS	1	$101,000	$101,000	$101,000	$0	$101,000	$101,000
2	Water Pollution Control Plan	LS	1	$10,000	$10,000	$10,000	$0	$10,000	$10,000
3	Traffic Control	LS	1	$50,000	$50,000	$50,000	$0	$50,000	$50,000
4	Public Notification	LS	1	$5,000	$5,000	$5,000	$0	$5,000	$5,000
5	Curb Ramps (Geneva Pointe)	EA	28	$8,000.00	$224,000	$224,000	$0	$224,000	$224,000
6	Concrete walk at bus stops	SF	125	$100.00	$12,500	$12,500	$0	$12,500	$12,500
7	Base Repair	SF	20,000	$20.00	$400,000	$400,000	$0	$400,000	$400,000
8	Slurrry Seal, Type II	SY	68,900	$3.50	$241,150	$241,150	$0	$241,150	$241,150
9	Crack Sealing	SF	620,000	$0.15	$93,000	$93,000	$0	$93,000	$93,000
10	Remove Thermoplastic Traffic Striping and Markers	LF	20,000	$1.00	$20,000	$20,000	$0	$20,000	$20,000
11	Remove Thermoplastic Pavement Markings	SF	4,800	$4.00	$19,200	$19,200	$0	$19,200	$19,200
12	Thermoplastic Traffic Striping and Markers	LF	17,000	$5.00	$85,000	$85,000	$0	$85,000	$85,000
13	Thermoplastic Pavement Markings	SF	5,300	$10.00	$53,000	$53,000	$0	$53,000	$53,000
14	Green Bike Lane Marking (MMA)	SF	10,700	$20.00	$214,000	$214,000	$0	$214,000	$214,000
15	Traffic Signal	LS	1	$550,000	$550,000	$550,000	$0	$550,000	$550,000
16	Signal Interconnect System	LF	1,650	$15.00	$24,750	$24,750	$0	$24,750	$24,750
17	Transit Stop Shelters (locations TBD)	EA	2	$50,000.00	$100,000	$100,000	$0	$100,000	$100,000
18					$0	$0	$0	$0	$0
19					$0	$0	$0	$0	$0
20					$0	$0	$0	$0	$0
21					$0	$0	$0	$0	$0
22					$0	$0	$0	$0	$0
23					$0	$0	$0	$0	$0
24					$0	$0	$0	$0	$0
	SUBTOTAL				**$2,202,600**	**$2,202,600**	**$0**	**$2,202,600**	**$2,202,600**
					Total	*Participating*	*Non-part*	*RSTP-elig.*	*CMAQ-elig.*
	Construction Contingency			25%	$550,650	$550,650	$0	$550,650	$550,650
5%	**Construction Engineering**				$138,000	$138,000	$0	$138,000	$138,000
10%	**Construction Management/Contract Administration**				$276,000	$276,000	$0	$276,000	$276,000
	Total construction costs				***$3,167,250***	***$3,167,250***	***$0***	***$3,167,250***	***$3,167,250***
	Please indicate current status of project:	Feasibility Study							
	(e.g., Feasibility Study, PSR, Environmental, 30% Design, 60% Design, 90% Design, 100% Design)								

Project Performance Assessment Report: Power Inn Road Safety and Congestion Relief Project

Project Summary

Project name	Power Inn Road Safety and Congestion Relief Project
Jurisdiction	Elk Grove
Project type	Arterial State of Good Repair
Project AADT	10000
Project Pavement Condition Index (PCI)	80
Posted Speed Limit	40
Project Length (Centerline Miles)	1.47
Project Community Type	Established Communities
Project UID	92afe4ea-f4bc-4970-97d6-83bfddaf60f5

Report Generated:
Wednesday, November 16, 2022 02:54 PM

Using This Report

What this report does

This report provides base year data from 2016-2018 and, where not observed data are not available, on base-year modeled data. It aims to provide rich, quantitative contextual information about each project to aid reviewers in deciding which projects most align with program goals.

For example, if a sponsor states that a project's goal is to reduce congestion, the report provides data on how congested the project corridor is under current conditions along with expected job and housing growth in the corridor. Such data, along with any supplemental application narrative provided by the sponsor, are provided to help reviewers decide if the project has potential to be an effective congestion reduction tool.

What this report does NOT do

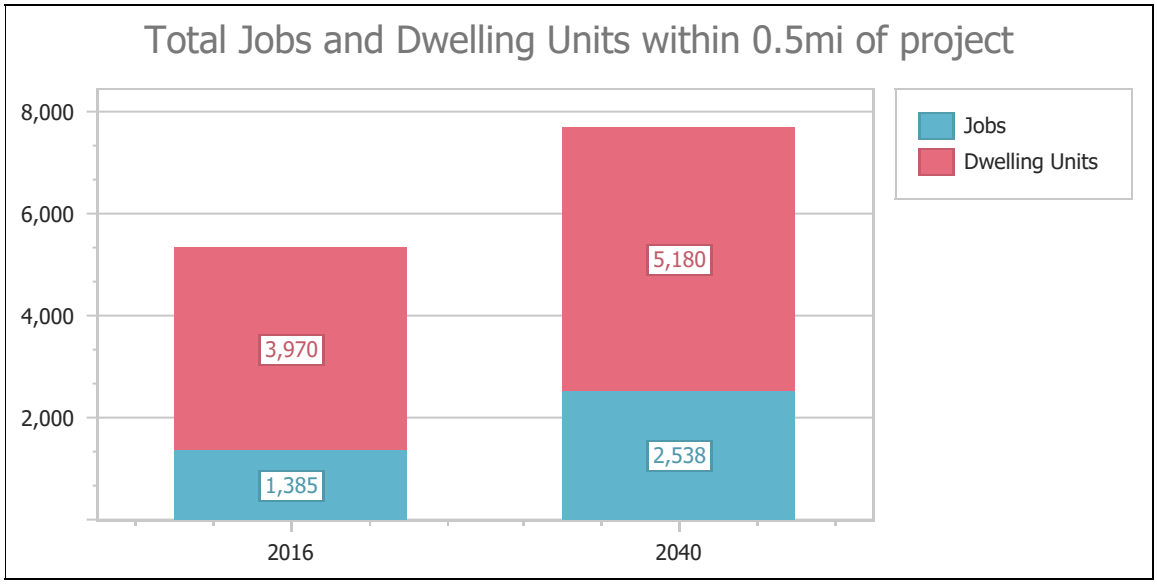
This report does not in any way model the effects that the proposed project would have if it were built. Any future-year data shown is based on SACOG's travel demand model and MTP-SCS land use forecast and does not necessarily factor in the effects of the proposed project.

Future-year data are included to show how well the project aligns with the MTP's vision of the project area, but not to show the effects that the project itself will have. For example, the future-year population and job growth around a road capacity project answers the question "how many people is this road expected to serve in the future?", not "how much growth will this road project cause?".

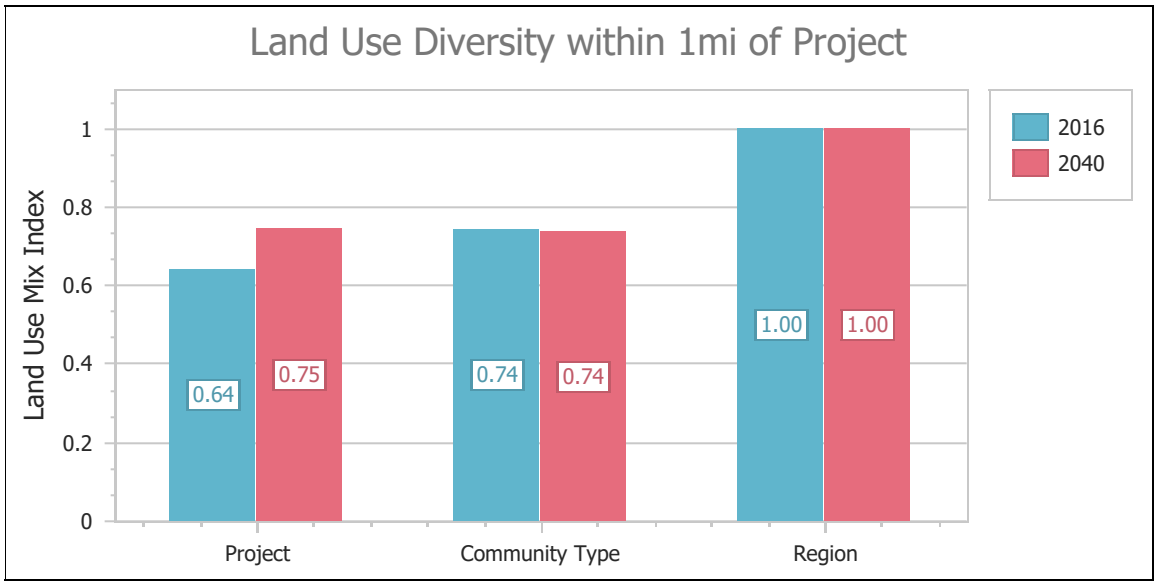
Similarly, for performance outcomes like safety or congestion reduction, the report tells the reviewer if there currently is a problem with congestion or safety (e.g., high collision rate), but it does not say whether the proposed project will improve the issue, e.g., it won't say whether widening a congested segment will reduce its congestion, nor will it say whether a proposed safety project will address the root cause of the safety issue.

Reduce Vehicle Miles Traveled (VMT) per Capita

VMT Indicator 1: Total change in jobs and dwelling units within 0.5mi of project:

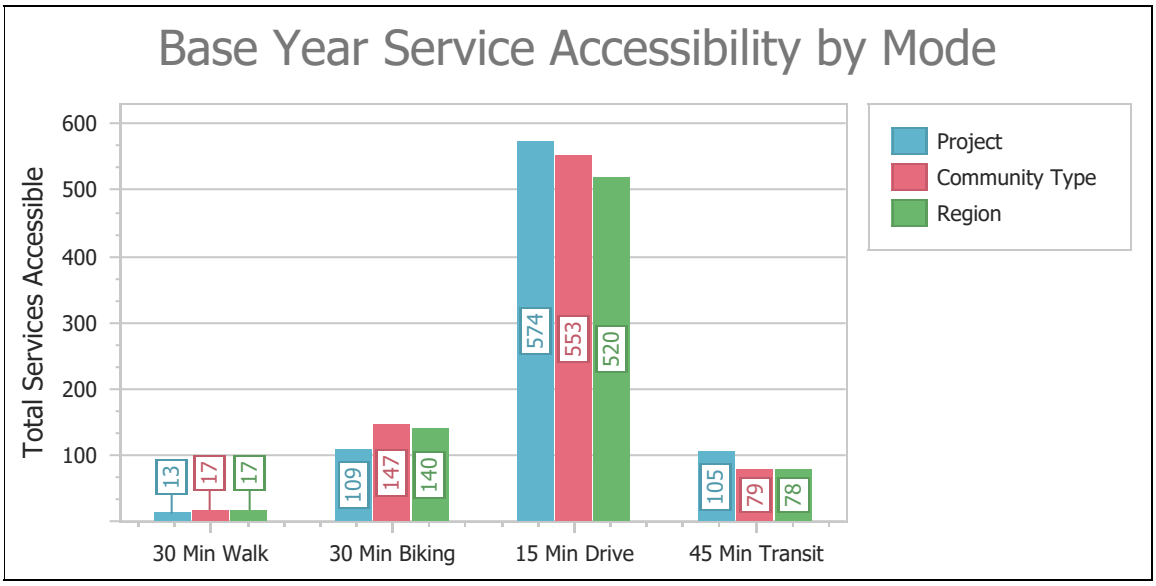


VMT Indicator 2: Land use diversity index*



*The land use diversity index ranges from 0 to 1 and measures an area's ratio of households to K-12 student enrollment, park acreage, and employment in the retail, service, and food sectors. A score of 1 indicates an "ideal" ratio of households to amenities that people use on a daily basis like shopping, restaurants, schools, etc. that in turn increases the likelihood that people living in those households will either walk or bike to these destinations, or drive a shorter distance.

VMT Indicator 3: Access to services*:



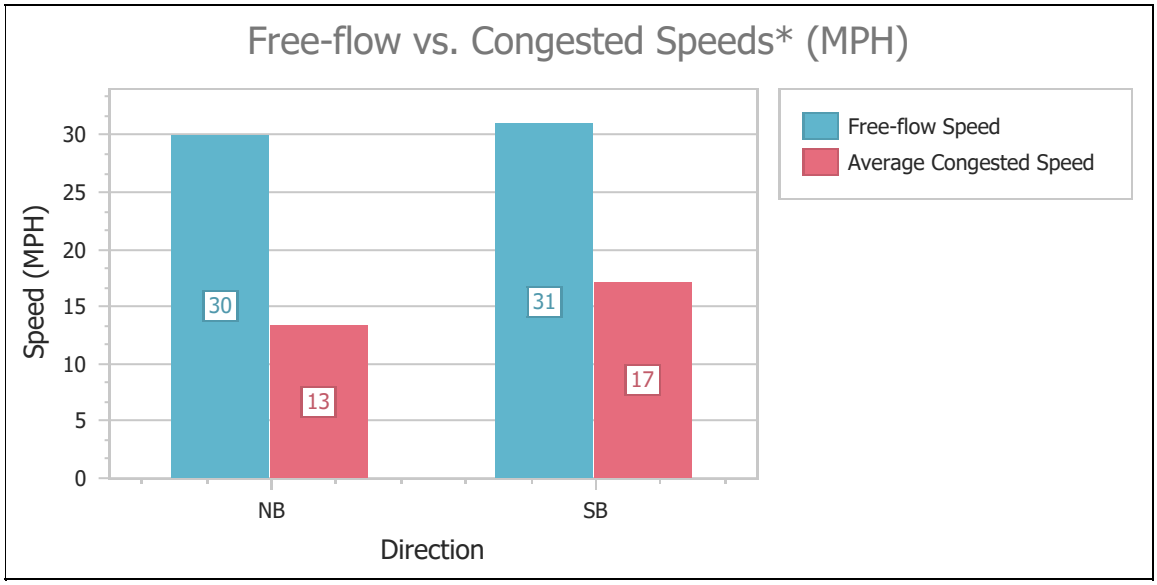
*"Services" include parks, K-12 schools, higher education facilities, libraries, hospitals, other medical service facilities, grocery stores, pharmacies, clothing stores, and banks.

Similar to the land use diversity index, if a project has more of these types of services within a feasible biking distance or shorter (15min) driving distance, then people who live or work near the project segment will on average generate less VMT in order to access these services.

And in contrast to the diversity index, which shows services as a ratio of households to services, this indicator gives a better sense of the total amount of services available.

Reduce congestion

Congestion indicator 1: Traffic congestion severity on project segment



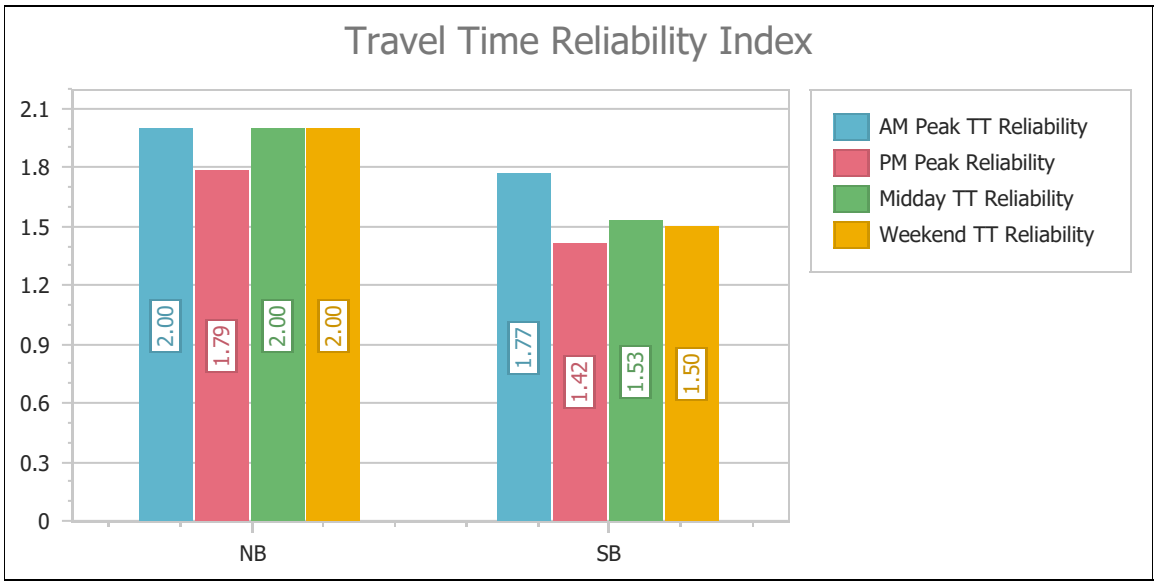
Congestion Ratio	NB	SB
Congested Speed / Freeflow Speed	0.44	0.55

Project ADT: 10,000

For arterials, the free-flow speed is the 60th percentile speed from 8pm-6am. It is supposed to approximate uncongested travel speed while excluding signal delay (i.e., delay not caused by demand exceeding supply).

Congested speed is the average speed during the slowest four hours of a typical weekday and for most project segments is during the AM and PM peak periods.

Congestion indicator 2: Travel time reliability* on project segment



*Travel time reliability (TTR) = 80th percentile travel time / 50th percentile travel time. Per 2017 MAP-21 performance criteria, a TTR score greater than 1.5 is considered "unreliable" for the indicated time period. A TTR of 1.00 corresponds to perfect reliability (i.e., it always takes the same amount of time to travel the project segment).

Increase multi-modal travel

Multi-modal indicator 1: Street connectivity (total 3- and 4-way intersections per acre):

Intersections per acre

Within 0.25mi of project	Within community type	Within region
0.20	0.13	0.02

Multi-modal indicator 2: Percent of total network centerline miles that are either off-street bike paths or streets with bike lanes:

Bike lanes and paths as share of total road miles

Within 0.25mi of project	Within community type	Within region
7%	7%	4%

Project Area Bikeway Map

Multi-modal indicator 3: Transit activity:

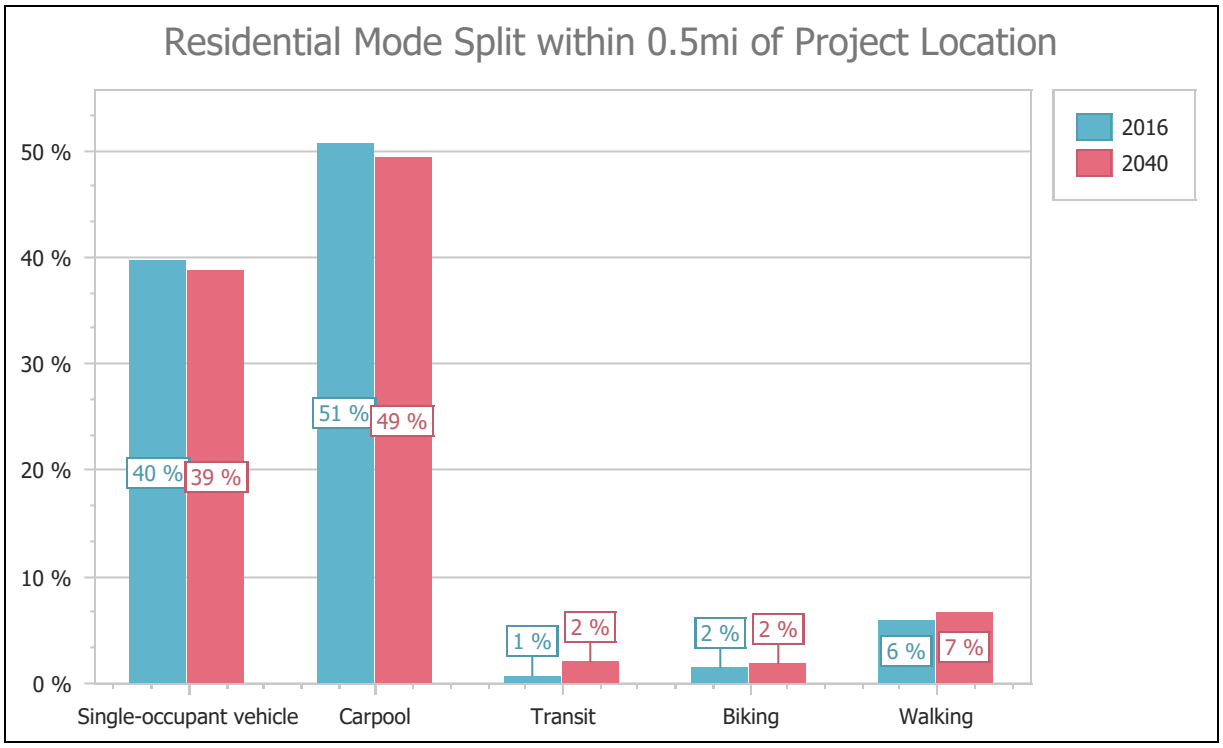
Transit vehicle stops per acre

Within 0.25mi of project	Within community type	Within region
0.62	0.31	0.04

Project Area Transit Service Map

Multi-modal indicator 4: Residential Mode Split:

NOTE - The 2040 mode split shown below is based on modeled values estimated for SACOG's 2020 MTP-SCS. As with all other 2040 values in this report, they do NOT factor in the potential effects of the project for which this report was generated.

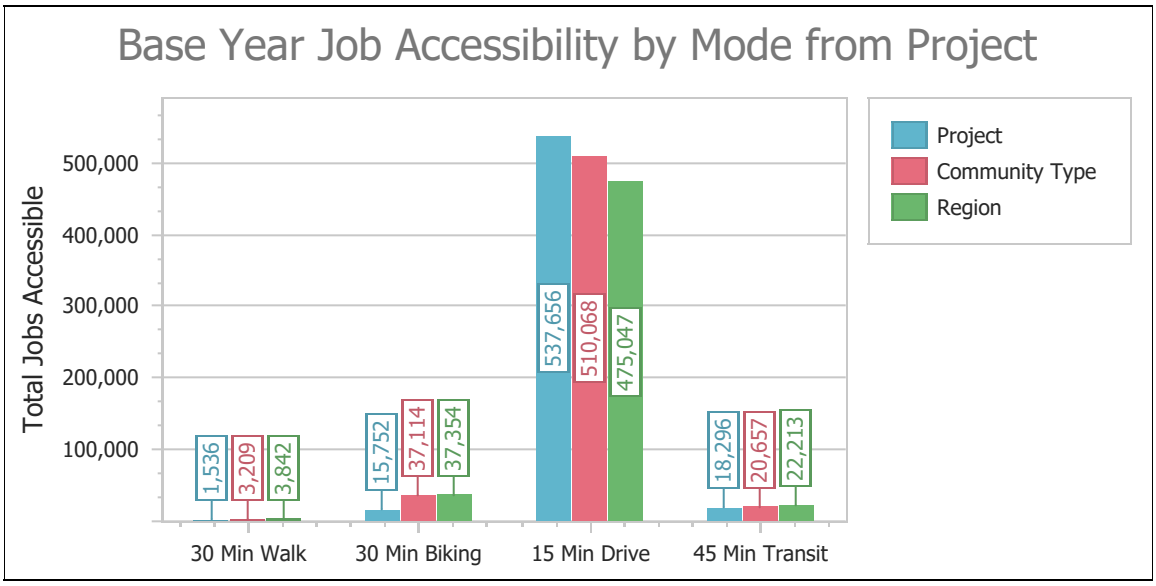


Promote Economic Prosperity

The Promote Economic Prosperity performance outcome includes three suboutcomes: job access, school access, and supporting the agricultural economy. Each of these suboutcomes has its own set of performance indicators. In your application you can choose which of these suboutcomes you want to be evaluated on. You can choose to be evaluated on one, two, or all three .

Increase Job Access

Economic Prosperity Indicator 1: Access to jobs in all sectors by mode

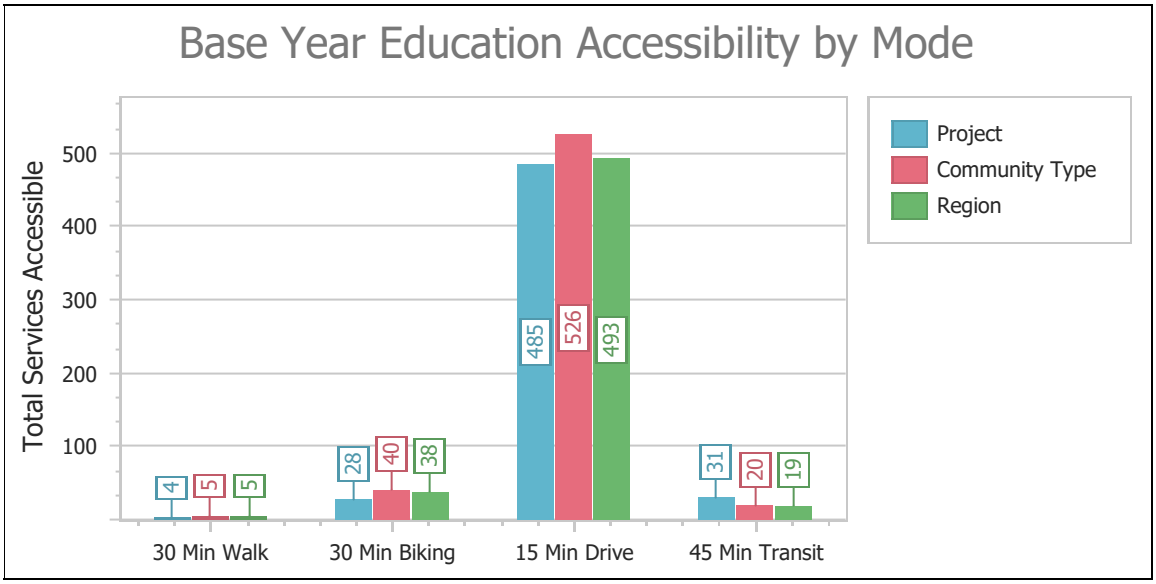


Increase School Access

Economic Prosperity Indicator 3: K-12 Enrollment within 0.5mi of project location:

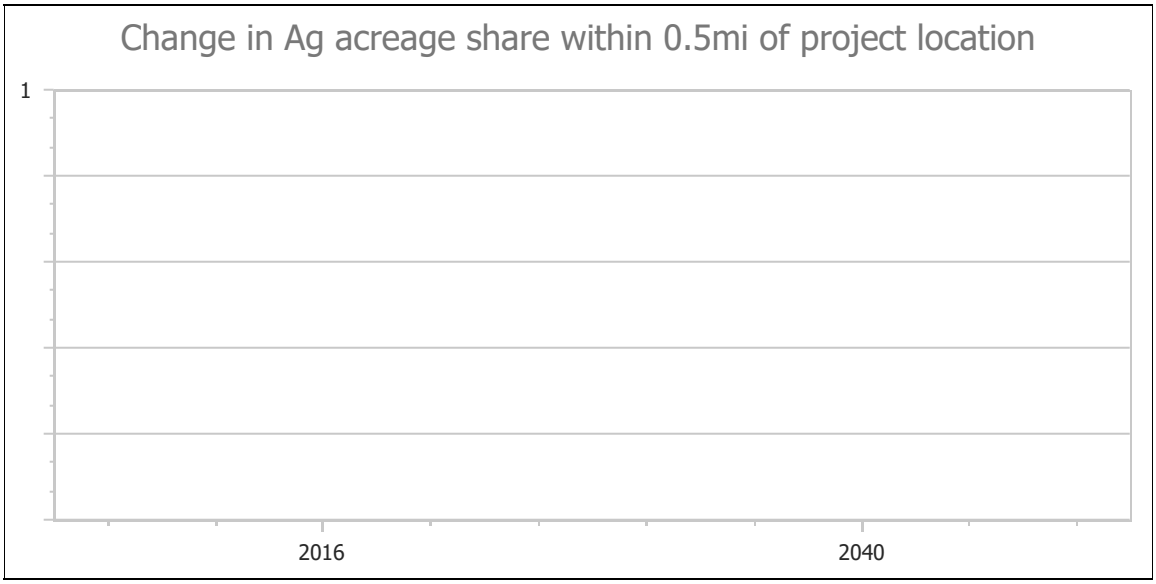
4,142

Economic Prosperity Indicator 4: Education Facility (K12 schools and higher education) Access



Support Ag Economy

Economic Prosperity Indicator 5: Change in Ag acreage share within 0.5mi of project location



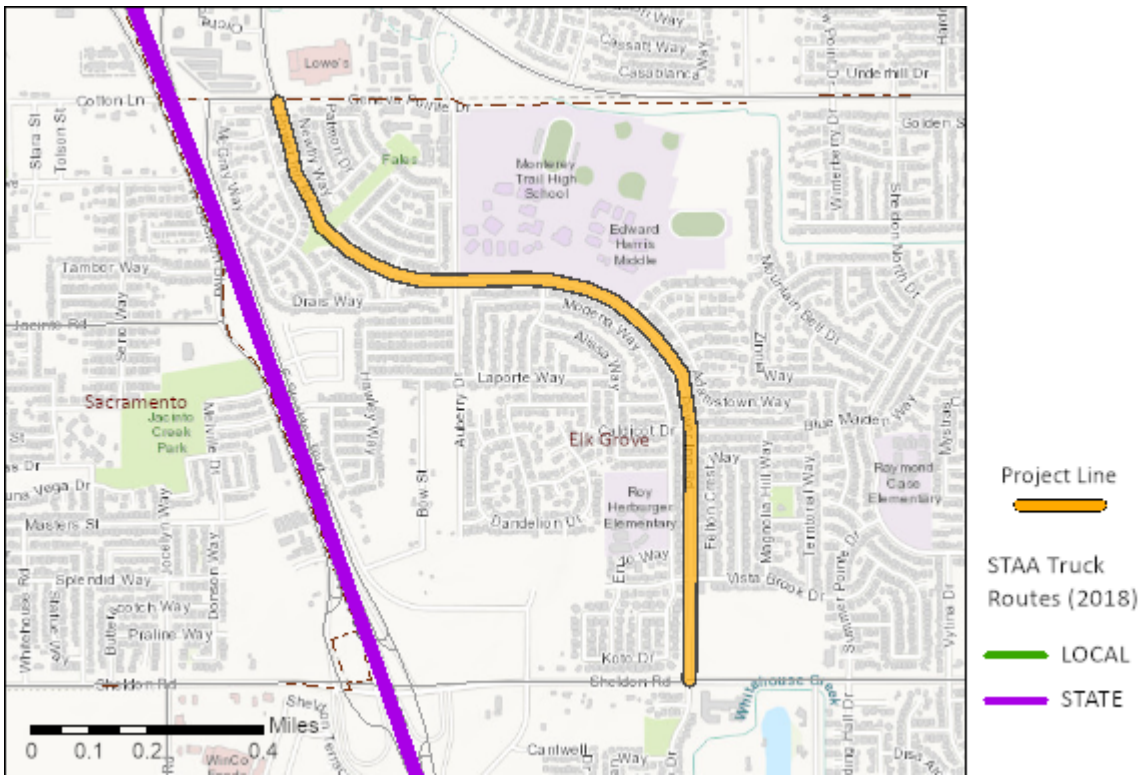
Improve Freight Movement

Freight Performance Indicator 1: Percent of project that is on federally-recognized STAA truck route*:

0%

*STAA = Surface Transportation Assistance Act. Under this act, designated STAA truck routes must meet federal design guidelines to safely accommodate large trucks.

Map of project against STAA network



Freight Performance Indicator 2: Share of jobs within industrial sectors

Share of jobs in industrial sectors

Within 0.25mi of project	Within community type	Within region
1%	16%	13%

Make a safer transportation system

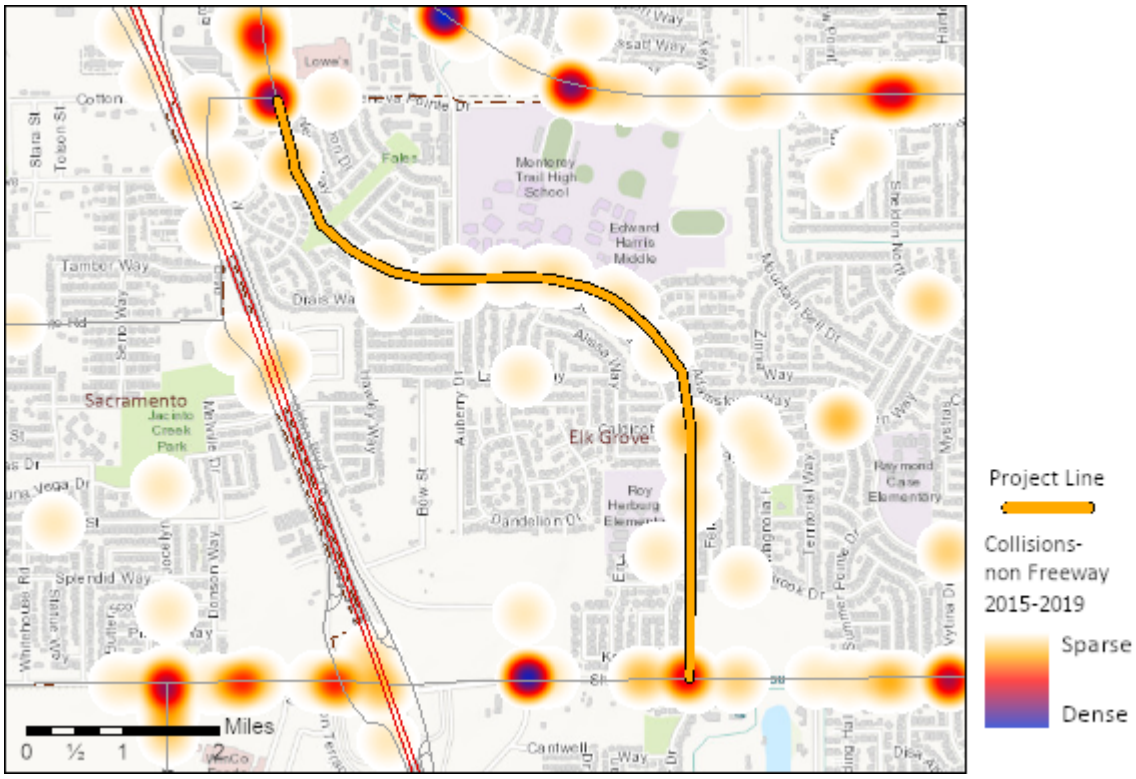
Note: Collision data only include collisions involving an injury or fatality and are from UC Berkeley's Transportation Injury Mapping System (TIMS)

All grade-separated freeways within the SACOG region are designated STAA truck routes

Safety Indicator 1: Total collisions (2014-2018)

37

Collision heat map of corridor



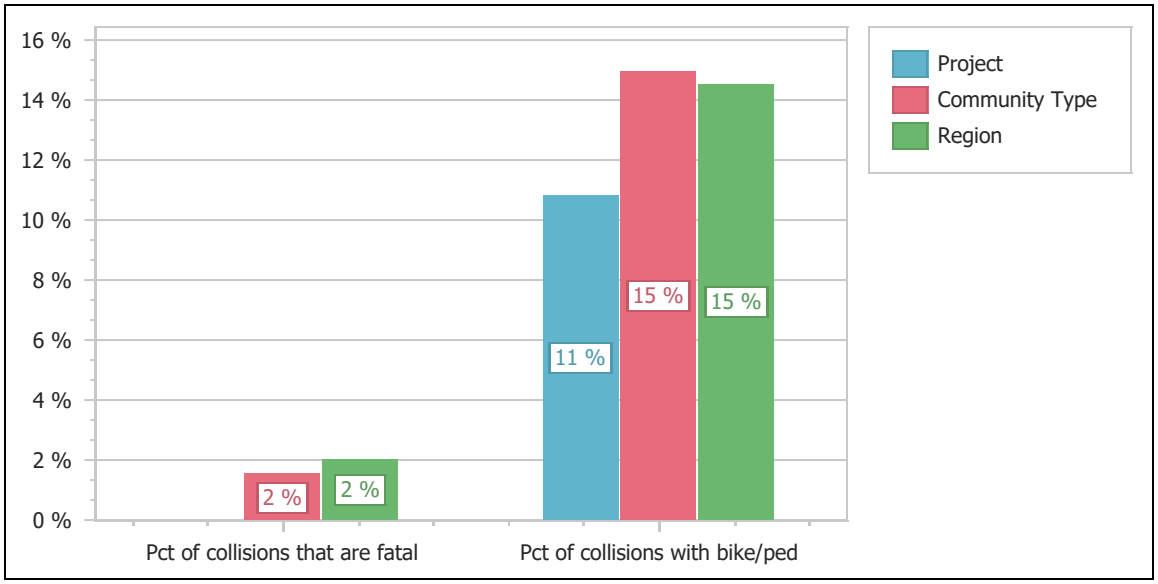
Safety Indicator 2: Fatal and Bike/Ped Collisions

Collisions per 100M VMT

On project segment*	Within community type	Within region
158.0	107.2	104.6

*The on-project collision rate will be -1.0 if the user did not provide an average daily traffic value.

Safety Indicator 2: Collisions per 100 million VMT



Safety Indicator 4: Bike + Ped Collisions per Project Centerline Mile

Bike/ped collisions per road centerline mile

Project	Community Type	Region
2.73	2.20	1.45

Maintain a state of good repair

State of good repair indicator 1: PCI

80

State of good repair indicator 2: AADT

10,000

State of good repair indicator 3: Complete Streets Index

2.40

The complete streets index (CSI) is based on the densities of students, transit service, jobs, and dwelling units within a half mile of the project location and the project location's posted speed limit. A higher CSI means higher densities of these input factors, meaning the street is more likely have many users of all modes (bike, walk, transit, drive) and thus derive greater benefit from complete streets treatments that make the project location better serve all types of road users. As posted speed limit increases beyond 40mph, the CSI will fall with all else being equal since fast vehicle speeds are less conducive to the street serving all users.

If the complete streets score is -1, it could mean that the project type selected is not eligible to be evaluated based on complete streets potential (e.g. freeway projects are not eligible for complete streets evaluation), or that a speed limit was not entered.

Promote Socioeconomic Equity

Equity Indicator 1: Population within 0.5mi of project living in designated Environmental Justice (EJ) community

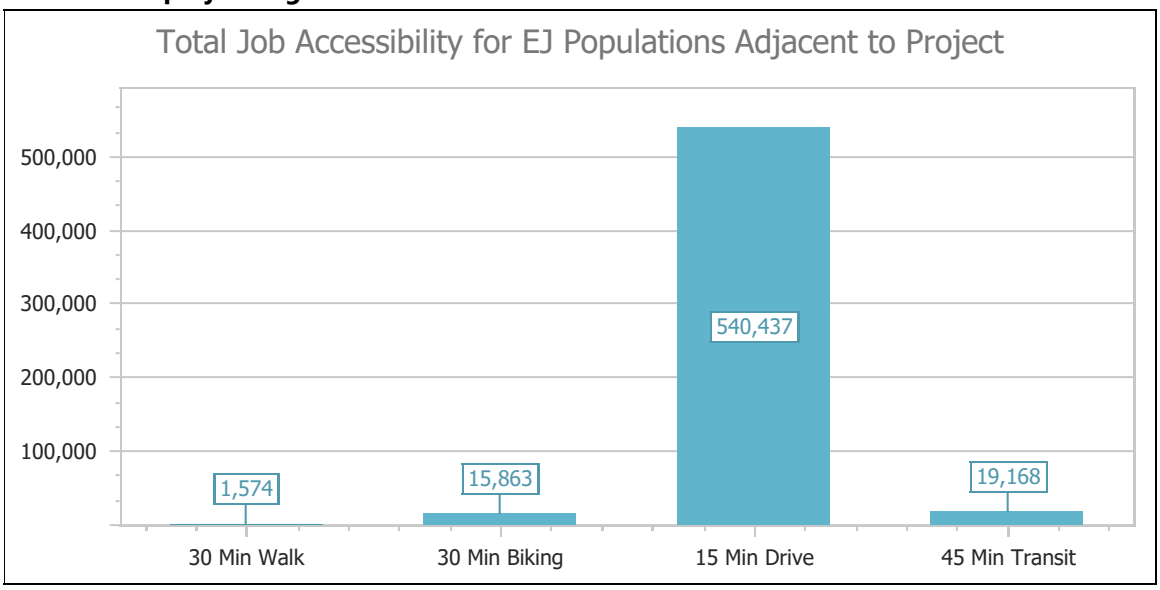
10,278

Equity Indicator 2: Share of population living in EJ community

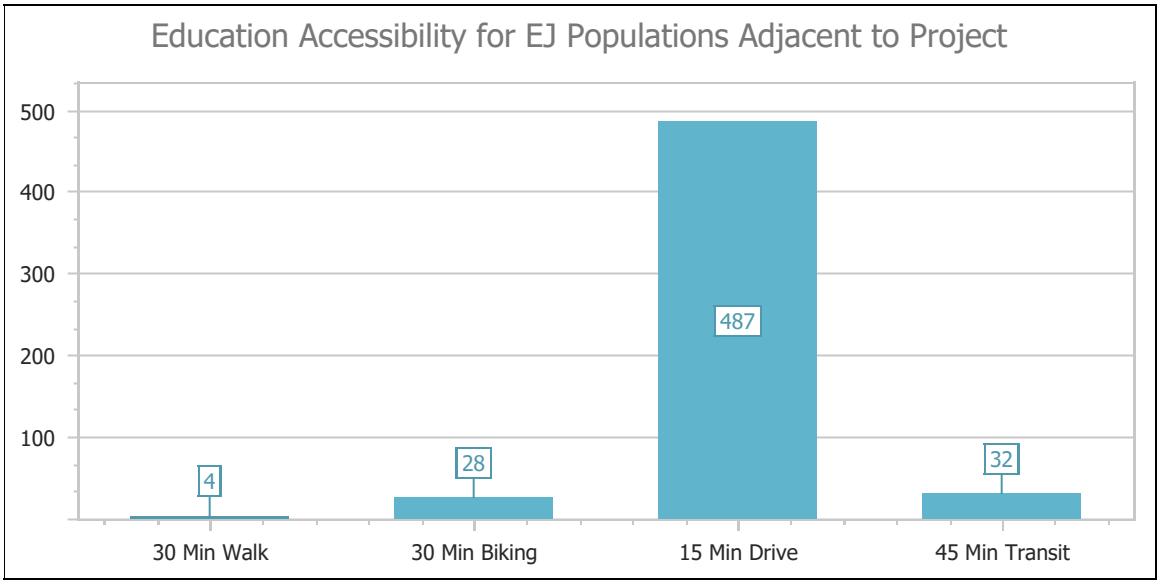
Within 0.5mi of project location	Within community type	Within region
75%	37%	37%

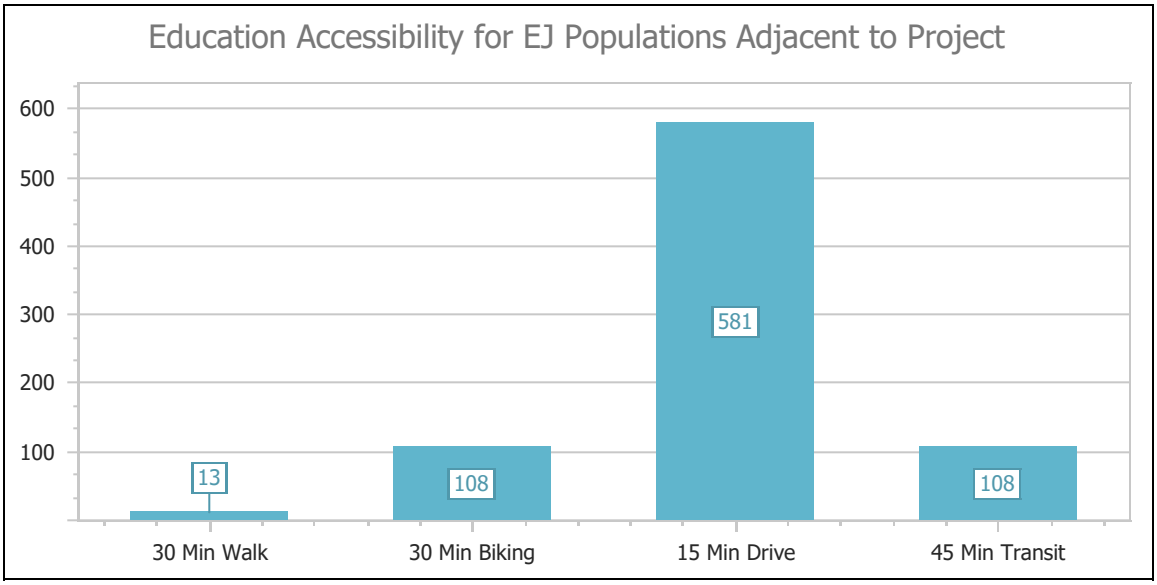
*EJ Categories include: <insert categories here>

Equity Indicator 3: Accessibility for people in EJ communities that are near project segment*



*Weighted based on population that lives both within 0.5mi of project segment and within an EJ area.





*"Services" include parks, K-12 schools, higher education facilities, libraries, hospitals, other medical service facilities, grocery stores, pharmacies, clothing stores, and banks.

Input values in blue cells

SPONSOR INPUTS ON COST EFFECTIVENESS

Daily Travel (ADT or boardings)	10,000
Annualization Factor	365
Project Cost ($)	$ 3,547,250
Useful Life Estimate (years)	20

COST EFFECTIVENESS CALCULATION	21

(will auto calculate once above inputs are complete)

Formula = (daily travel x annualization factor) / (project cost/ useful life estimate)

BICYCLE FACILITIES

County: Sacramento

Federal Number:

Approval Date:

Caltrans DIST-EA:

Short Description: Power Inn Road Safety and Congenstion Relief Project

Project Scope: Improve Class 2 bike lanes

Project Sponsor: City of Elk Grove **Private Agency:** No

CMAQ Funding:	$1,000,000	**Annual Auto Trips Reduced:**	1,170
Local Match:	$140,000	**Annual Auto VMT Reduced:**	1,989
Capital Recovery Factor:	0.08		
Project Analysis Period:	15	**years**	
Days (D):	300	**days of use/year**	
Average Daily Traffic (ADT):	1,000	**trips per day**	
Adjustment (A) on ADT:	0.0029		
Credit (C) for Activity Centers near project:	0.0010		

EMISSION FACTORS:

	Auto Trip End Factor		**Auto VMT Factor**	
ROG :	0.343	***grams per trip***	0.065	***grams per mile***
NOx :	0.184		0.050	
PM2.5 :	0.002		0.047	

EMISSION REDUCTIONS:

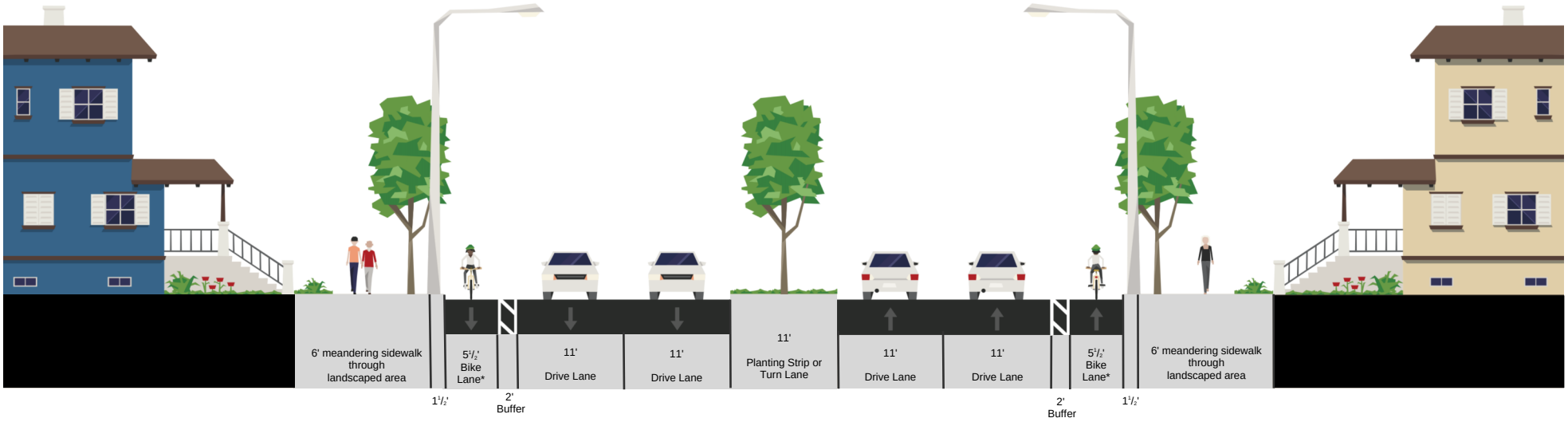
	Pounds per Year	**Kilograms per Day**
ROG:	1	0
NOx:	1	0
PM2.5:	0	0
Total:	***2***	***0***

COST-EFFECTIVENESS OF:

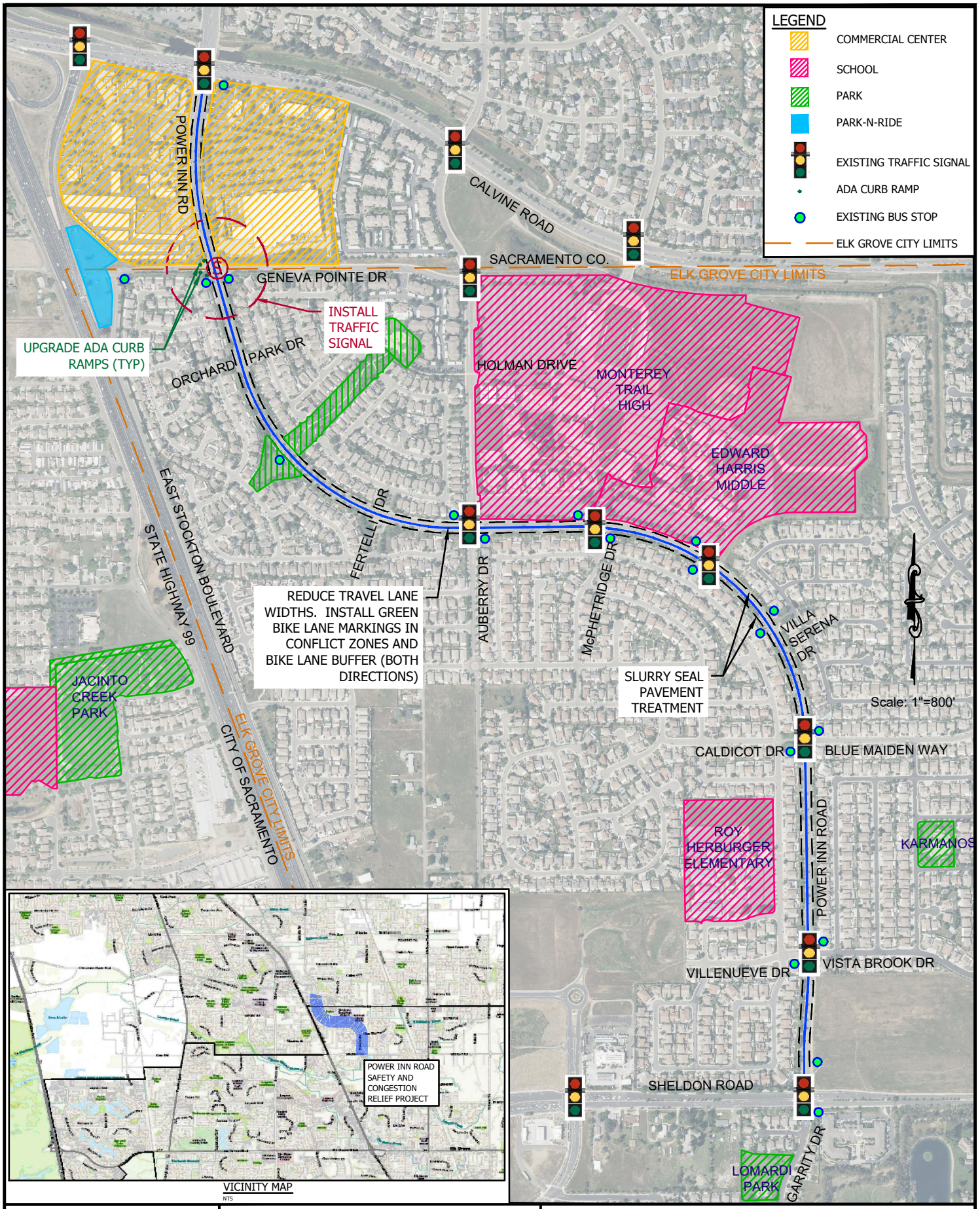
CMAQ Funds:	ł0,408.13	**per pound**	,816,253	**per ton**
All Funding Sources:	ł6,065.26	**per pound**	,130,529	**per ton**

9a

Typical Roadway Section
Power Inn Road
From Calvine Road to Sheldon Road



*Green bike lane in vehicle conflict zones includes gutter pan.



COASTLAND | DCCM
COASTLAND | DCCM
11641 Blocker Dr, Ste 170
Auburn, CA 95603
530.888.9929 | coastlandcivil.com

CITY OF ELK GROVE
DEPARTMENT OF PUBLIC WORKS
8401 LAGUNA PALMS WAY
ELK GROVE, CALIFORNIA 95758
916.683.7111

SACOG 2023 REGIONAL FUNDING GRANT APPLICATION
POWER INN ROAD SAFETY AND CONGESTION RELIEF PROJECT
CALVIN ROAD TO SHELDON ROAD

Path: F:\Projects\Elk Grove\Grants FY23\Power Inn Rd\Dwgs\Power-Inn-Rd_SACOG Grant 2020.dwg Layout Name: 8.5X11 800 Plot Date: Jan 18, 2023 at 05:53 pm