

FY 2018-19
**CALTRANS SUSTAINABLE TRANSPORTATION PLANNING
 STRATEGIC PARTNERSHIPS GRANT APPLICATION**

Select one: ☐ Strategic Partnerships (FHWA SPR Part I) ☐ Strategic Partnerships – Transit (FTA 5304)

PROJECT TITLE	
PROJECT LOCATION (city and county)	

	APPLICANT	SUB-APPLICANT	SUB-APPLICANT
Organization			
Mailing Address			
City			
Zip Code			
Executive Director/designee and title	Mr. ☐ Ms. ☐ Mrs. ☐	Mr. ☐ Ms. ☐ Mrs. ☐	Mr. ☐ Ms. ☐ Mrs. ☐
E-mail Address			
Contact Person and title	Mr. ☐ Ms. ☐ Mrs. ☐	Mr. ☐ Ms. ☐ Mrs. ☐	Mr. ☐ Ms. ☐ Mrs. ☐
Contact E-mail Address			
Phone Number			

FUNDING INFORMATION
 Use the Match Calculator to complete this section.
[Match Calculator](#)

Grant Funds Requested	Local Match - Cash	Local Match - In-Kind	Total Project Cost
\$	\$	\$	\$

**Specific Source of Local Cash Match
 (i.e., local transportation funds, local sales tax, special bond measures, etc.)**

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LEGISLATIVE INFORMATION*			
Please list the legislative members in the project area. Attach additional pages if necessary.			
State Senator(s)		Assembly Member(s)	
Name(s)	District	Name(s)	District

*Use the following link to determine the legislators.
<http://findyourrep.legislature.ca.gov/> (search by address)

Please identify the Grant Program Overarching Objectives (Grant Application Guide, Page 4) that the proposed transportation planning grant project will address. Select all that apply and provide an explanation.

- ☐ Sustainability – Promote reliable and efficient mobility for people, goods, and services, while meeting the State’s GHG emission reduction goals, preserving the State’s natural and working lands, and preserving the unique character and livability of California’s communities.

Please explain how:

- ☐ Preservation – Preserve the transportation system through protecting and/or enhancing the environment, promoting energy conservation, improving the quality of life, and/or promoting consistency between transportation improvements and State and Local planning growth and economic development patterns.

Please explain how:

- ☐ Mobility – Increase the accessibility of the system and mobility of people and freight.

Please explain how:

- ☐ Safety – Increase the safety and/or security of the transportation system for motorized and active transportation users.

Please explain how:

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- ☐ Innovation – Promote the use of technology and innovative designs to improve the performance and social equity of our transportation system and provide sustainable transportation options.

Please explain how:

- ☐ Economy – Support the economic vitality of the area (i.e. enables global competitiveness, enables increased productivity, improves efficiency, increases economic equity by enabling robust economic opportunities for individuals with barriers to employment and for Disadvantaged Business Enterprises, etc.).

Please explain how:

- ☐ Health – Decrease exposure to local pollution sources, reduce serious injuries and fatalities on the transportation system, and promote physical activity especially through transportation means.

Please explain how:

- ☐ Social Equity – All of these overarching objectives should promote transportation solutions that focus on and prioritize the needs of communities most affected by poverty, air pollution and climate change, and promote solutions that integrate community values with transportation safety and performance while encouraging greater than average public involvement in the transportation decision making process.

Please explain how:

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1. Project Description (100 words maximum) (15 points): Briefly summarize project.

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2. Project Justification (Do not exceed the space provided.) (35 points): Describe the problems or deficiencies the project is attempting to address, as well as how the project will address the identified problems or deficiencies. Additionally, list the ramifications of not funding this project.

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3. Project Management (50 points)

- A. Scope of Work in required Microsoft Word format (25 points)
- B. Project Timeline in required Microsoft Excel format (25 points)

See Scope of Work and Project Timeline samples and checklists for requirements (Grant Application Guide, Pages 48-54), also online at: <http://www.dot.ca.gov/hq/tpp/grants.html>

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Application Signature Page

If selected for funding, the information contained in this application will become the foundation of the contract with Caltrans.

To the best of my knowledge, all information contained in this application is true and correct. If awarded a grant with Caltrans, I agree that I will adhere to the program guidelines.



Signature of Authorized Official (Applicant)

Daniel S. Little

Print Name

Executive Director

Title

2/23/18

Date

Signature of Authorized Official (Sub-Applicant)

Print Name

Title

Date

Signature of Authorized Official (Sub-Applicant)

Print Name

Title

Date

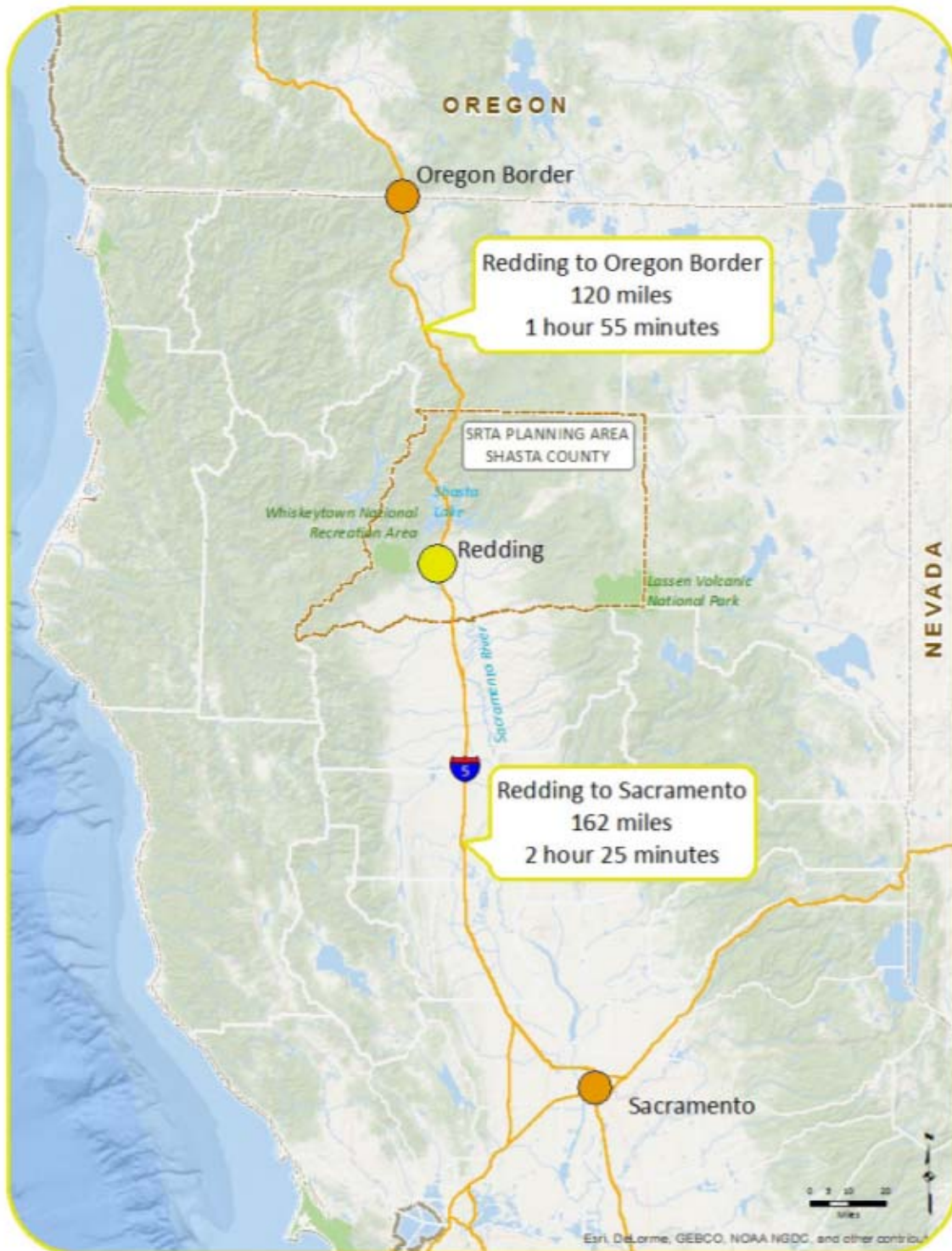
SCOPE OF WORK:
SUSTAINABLE AND CLIMATE RESILIENT
INTERSTATE 5 CORRIDOR MANAGEMENT SUPPORT

Project Description – SRTA is working on several innovative mobility initiatives using approaches that were not possible of envisioned 10-15 years ago. The most important of these projects is modernization of the Interstate 5 corridor. Big data and the ability to share data is redefining conventional wisdom on corridor management. While capacity and land use are still a critical part of the equation, technology is creating more planning options, helping individuals make more informed travel choices, and enlarging the toolbox of traffic operations strategies. Examples include GPS-enabled tracking, autonomous vehicles, and vehicle-to-vehicle and vehicle-to-infrastructure communication. Together, these strategies will help regions make the best and highest use of existing infrastructure; deliver more customer-responsive services; reduce collisions, injuries, and deaths; eliminate or reduce the scale of costly capacity-increasing projects; and avoid the accumulation of further unfunded maintenance burdens.

SRTA and Caltrans District 2 have joined forces to develop a Northern Sacramento Valley Interstate 5 Comprehensive Corridor Management Plan. The project and funding have been programmed in SRTA's overall work program; however, gap funding is needed to complete the full scope of work. More specifically, grant funds are requested for the following tasks:

- Interstate 5 Advance Traveler Information & Incident Response Action Plan – Real-time data is needed to explain the cascading impacts of exceptional incidences (e.g. weather- and collision-related closures/restrictions). In addition, the performance of mitigating strategies need to be evaluated. This will be accomplished through remote sensors located along the corridor and affected local arterials.
- ITS Data Gap Purchase – The Upstate ITS Architecture Plan has identified ITS data collection gaps that are outside of current and anticipated funds to address. This gap will be addressed by purchasing travel data for the Northern Sacramento Valley I-5 corridor and integrating it with data generated via conventional ITS infrastructure.
- Disadvantaged Communities Impact Analysis – The impacts of travel and congestion are disproportionately felt by residents. So too are the impacts of prospective mitigation strategies. This task includes an impact analysis on disadvantaged communities, including a targeted survey to better understand localized impacts and how to avoid or adequately mitigate identified impacts through alternative strategies.

Project Area – The project area includes the Shasta Region (comprised of the cities of Redding, Anderson, and Shasta Lake, and unincorporated Shasta County) and the Interstate 5 corridor in District 2 and 3. The primary focus of data collection will, however, be in the south-central urbanized area along the Interstate 5 corridor.

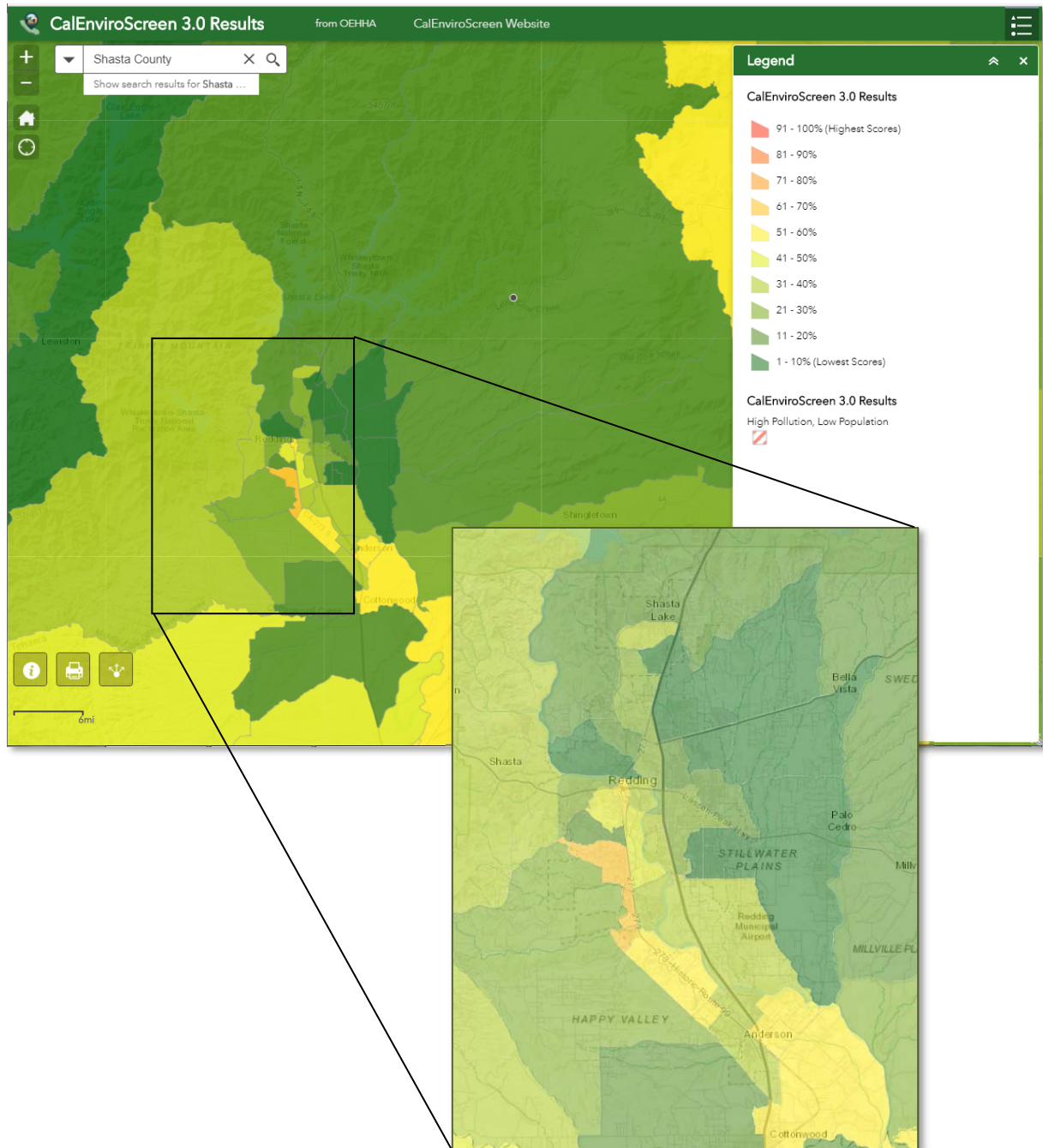


Area Demographics –

Demographic	Shasta County
Population estimates, July 1, 2016, (V2016)	179,631
Population estimates base, April 1, 2010, (V2016)	177,223
Population, percent change - April 1, 2010 (estimates base) to July 1, 2016, (V2016)	1.40%
Population, Census, April 1, 2010	177,223
Persons under 18 years, percent, July 1, 2016, (V2016)	21.50%
Persons 65 years and over, percent, July 1, 2016, (V2016)	20.40%
White alone, percent, July 1, 2016, (V2016)	88.30%
Black or African American alone, percent, July 1, 2016, (V2016)	1.10%
American Indian and Alaska Native alone, percent, July 1, 2016, (V2016)	3.10%
Asian alone, percent, July 1, 2016, (V2016)	3.00%
Native Hawaiian and Other Pacific Islander alone, percent, July 1, 2016, (V2016)	0.20%
Two or More Races, percent, July 1, 2016, (V2016)	4.30%
Hispanic or Latino, percent, July 1, 2016, (V2016)	9.80%
White alone, not Hispanic or Latino, percent, July 1, 2016, (V2016)	80.40%
Housing units, July 1, 2016, (V2016)	78,311
Housing units, April 1, 2010	77,313
Owner-occupied housing unit rate, 2011-2015	62.50%
Median value of owner-occupied housing units, 2011-2015	\$216,600
Median gross rent, 2011-2015	\$926
Building permits, 2016	400
Households, 2011-2015	69,375
Persons per household, 2011-2015	2.54
Language other than English spoken at home, percent of persons age 5 years+, 2011-2015	8.40%
High school graduate or higher, percent of persons age 25 years+, 2011-2015	89.30%
Bachelor's degree or higher, percent of persons age 25 years+, 2011-2015	19.60%
With a disability, under age 65 years, percent, 2011-2015	13.00%
Mean travel time to work (minutes), workers age 16 years+, 2011-2015	20
Median household income (in 2015 dollars), 2011-2015	\$44,620
Per capita income in past 12 months (in 2015 dollars), 2011-2015	\$24,107
Persons in poverty, percent	19.00%
Total employment, 2015	49,163
Population per square mile, 2010	46.9
Land area in square miles, 2010	3,775.40

Disadvantaged Communities – The following outputs illustrate the location and degree of disadvantaged community areas according to CalEnviroScreen 3.0 as well as regional analysis documented in the 2015 Regional Transportation Plan for the Shasta Region.

- **CalEnviroScreen 3.0:**

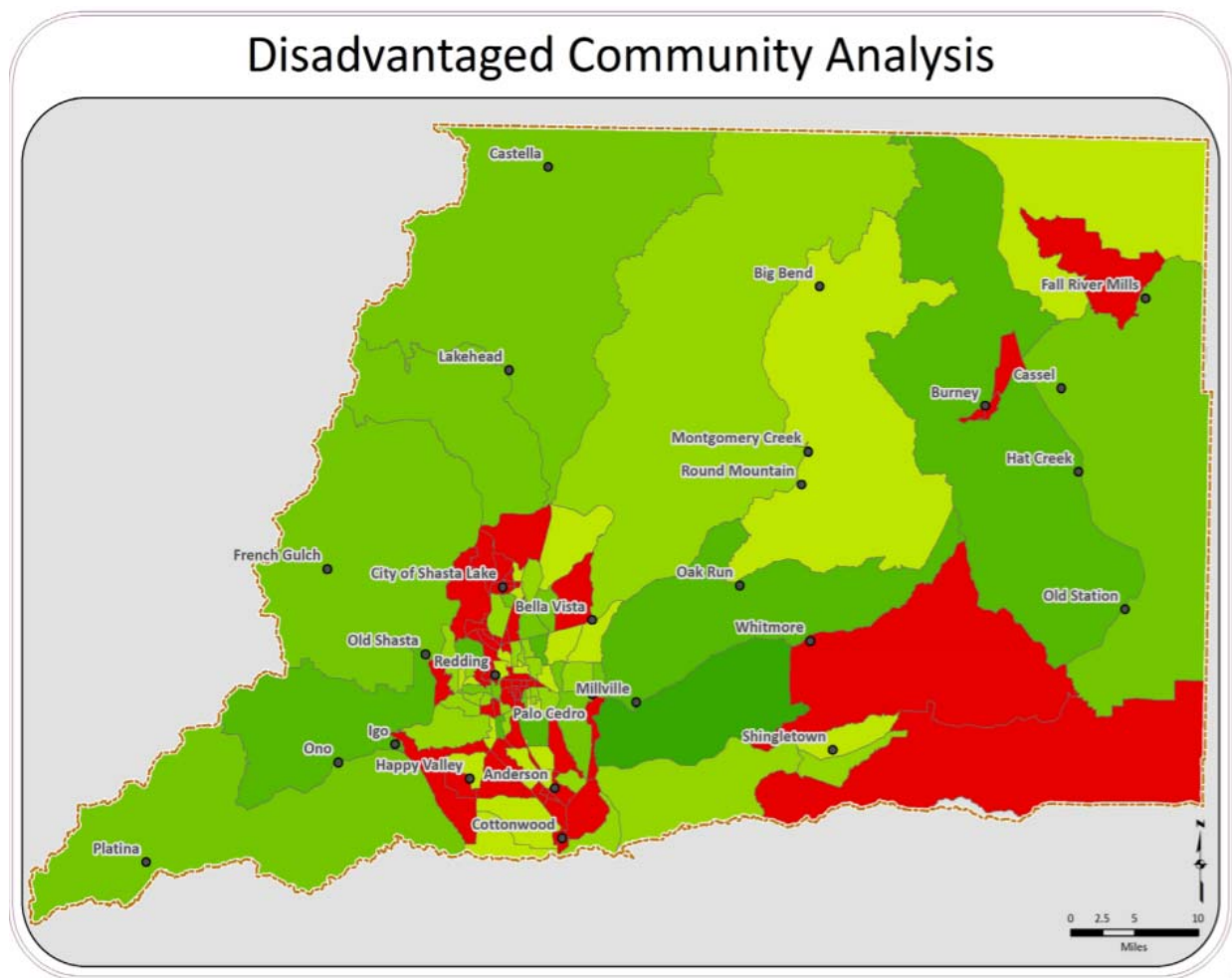


- **Disadvantaged Communities Analysis from 2015 Regional Transportation Plan for the Shasta Region:**

Disadvantaged communities are defined as areas that, according to statistical data, have a markedly higher share of individuals challenged by the cumulative impact of:

- o Poverty and unemployment
- o Lack of mobility options, including access to automobile, active transportation, and public transportation
- o Housing and transportation cost burden
- o Single parent households
- o Young and elderly
- o Educational attainment
- o Linguistic isolation
- o Minority status

Block groups flagged as disadvantaged in five or more indicators are shown in Red in the map below.



RESPONSIBLE PARTIES:

Shasta Regional Transportation Agency (SRTA) will be responsible for administering the grant and procuring all products. Caltrans District 2 will be participating in-kind.

OVERALL PROJECT OBJECTIVES:

The Sustainable Communities Grant Program supports innovative planning activities toward a safe, sustainable, integrated, and efficient transportation system - one that enhances California's economy and livability. Consistent with this objective, requested grant funds will be utilized by SRTA and Caltrans District 2 to:

- Modernize operations on the Interstate 5 corridor;
- Reduce community impacts in an equitable fashion;
- Eliminate or significantly delay the need for costly capacity-increasing projects;
- Avoid unfunded maintenance burdens; and
- Maximize corridor throughput, velocity, and reliability for freight and the traveling public.

WORK TASKS & DELIVERABLES:

1. **Project Initiation** – The I-5 corridor is the backbone of freight and personal mobility in the Shasta Region and a critical link in the state and national transportation. This task will engage affected or otherwise interested stakeholders to assist in scoping project details and deliverables.

Task 1.1 – Project kick-off meeting with Caltrans District 2

Task 1.2 – Stakeholder consultation to finalize details of project scope and deliverables

Responsible Party: SRTA

Task	Deliverable
1.1	Minutes from kick-off meeting with Caltrans
1.2	Documentation of consultation with stakeholders, including applicable agencies, transit providers, and community stakeholders.

2. **Project Management & Grant Administration** – Includes SRTA staff time required to oversee the project and administer the grant contract.

Task 2.1 – Invoicing

Task 2.2 – Quarterly reporting

Task 2.3 – Project oversight and management

Responsible Party: SRTA

Task	Deliverable
2.1	Invoicing, including necessary documentation
2.2	Quarterly reports
2.3	N/A

3. **Advance Traveler Information & Incident Response Action Plan** – Interstate 5 in the Shasta Region is acutely affected by winter weather- and collision-related closures and lane restrictions. During I-5 snow closures, trucks and vehicles back up for miles between the city of Shasta Lake and through central Redding, effectively shutting the corridor down to local traffic for extended periods of time. Trucks and interregional traffic overflows onto local streets and roads, creating further congestion and impacting local businesses. In addition to weather related events, traffic collisions frequently require lane restrictions on I-5 while incidents are investigated and cleared. Interstate 5 level of service for freight and the traveling public cannot be maintained with only supply-side strategies (i.e. adding capacity). Requested funding will support demand-side strategies (i.e. travel demand management, traffic operations, ITS, etc) to maintain corridor throughput, velocity, and reliability.

Grant-funded deliverables will be incorporated into the Northern Sacramento Valley I-5 Corridor Management Plan – a joint effort between SRTA and Caltrans District 2. Grant funds will be used to develop a plan for advance traveler information and incident response management, as well as to employ remote sensors needed to evaluate the cascading affects of exceptional events (e.g. weather- and collision-related closures). Sensors will also be used to evaluate the effectiveness of mitigation strategies. Findings will be incorporated into the Northern Sacramento Valley I-5 Comprehensive Corridor Management Plan.

Task 3.1 – Outreach to stakeholders representing freight; economic development; and state, regional, and local partners.

Task 3.2 – Administer procurement process for remote traffic sensors, including request for proposals, evaluation of proposals, preparation of technical services agreement, and other actions necessary for board approval.

Task 3.3 – Develop action plan and incorporate into Northern Sacramento Valley I-5 Comprehensive Corridor Management Plan.

Responsible Party: SRTA

Task	Deliverable
3.1	<i>Detailed specifications for the data purchase and remote sensor scope of work</i>
3.2	<i>Request for proposals, staff report summarizing results of procurement process, executed purchase agreement.</i>
3.3	<i>Advance Traveler Information & Incident Response Action Plan</i>

4. **Travel Data Gap Purchase** – The Upstate California Regional ITS Master Plan (completion in early 2018) provides a 10-year roadmap for ITS system development across the sixteen-county North State. Conventional ITS infrastructure is, however, expensive to procure, install, and maintain; it tends to become outdated and obsolete over time; and seldom achieves full implementation, integration, and benefit. Whereas North State resources are inadequate to fully implement identified ITS infrastructure in a reasonable timeframe, an alternative strategy has been identified to fill gaps in ITS infrastructure in an economical way. More specifically, data collected by conventional stationary ITS infrastructure will be supplanted with data collected from GPS-enabled devices and remotely placed sensors at a much low cost.

Grant-funded deliverables will be used to mitigate the high cost and timely implementation of the Upstate California Regional ITS Master Plan. Purchased data will provide full-trip data (origin and destination, trip duration, trip frequency, etc) and will be combined with data collected via remote traffic sensors (Task #3) to spatially measure travel patterns over time. Benefits of the deliverables include a substantial reduction in costs associated with the North State ITS Architecture Plan, accelerated delivery of the full system, and resources that are more strategically applied to maximize cost-benefit.

Task 4.1 – Administer procurement process for remote traffic sensors, including request for proposals, evaluation of proposals, preparation of technical services agreement, and other actions necessary for board approval.

Responsible Party: SRTA, consultant (to be determined)

Task	Deliverable
4.1	<i>Request for proposals, staff report summarizing results of procurement process, executed technical services agreement, and data/analytics package.</i>

5. **Disadvantaged Communities Impact Analysis** – Extensive data has been generated and analyses performed to determine the location and degree of disadvantaged communities in the Shasta Region. Efforts include CalEnviroScreen and SRTA's own Disadvantaged Communities Analysis, as documented in the 2015 RTP. While the results are helpful, there's a difference between being aware of the problem and understanding how best to address specific, localized needs.

Grant-funded deliverables will be used to better understand the localized impacts of Interstate-5 congestion and to develop strategies that eliminate or effectively mitigate for these impacts. The services of a qualified vendor will be procured to develop and perform a statistically-valid sample survey of identified DACs. The survey shall include, but not be limited to, questions regarding: 1) the adverse impacts of vehicle and freight movement; 2) mobility-related obstacles to employment, education, community services, and health and well-being; and 3) the most effective ways to address these obstacles. Without this information, regional partners are left to guess at what services, infrastructure, policies, and programs will be beneficial and cost-effective.

Task 5.1 – Procure survey consultant services

Task 5.2 – Develop survey instrument

Task 5.3 – Conduct survey and process findings

Task	Deliverable
5.1	<i>Request for proposals, staff report summarizing results of procurement process, executed technical services agreement.</i>
5.2	<i>Survey instrument and results</i>
5.3	<i>Impact analysis findings and recommendations</i>

Responsible Party: SRTA, consultant (to be determined)

**California Department of Transportation
Transportation Planning Grants
Fiscal Year 2018-2019**

PROJECT TIMELINE

	Project Title:	Sustainable and Climate Resilient Interstate 5 Corridor Management Support															Grantee:	Shasta Regional Transportation Agency													
		Fund Source					Fiscal Year 2017/18					FY 2018/19					FY 2019/20														
Task Number		Responsible Party	Total Cost	Grant Amount	Local Cash Match	Local In-Kind Match	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	Deliverable
1	Project Initiation																														
1.1	Project Kick-off with Caltrans	SRTA	\$836	\$750	\$86	\$0																								Kick-off meeting minutes	
1.2	Stakeholder consultation	SRTA	\$836	\$750	\$86	\$0																								Documentation of stakeholder consultation	
2	Project Administration																														
2.1	Invoicing	SRTA	\$1,672	\$1,500	\$172	\$0																								Invoices	
2.2	Quarterly reporting	SRTA	\$1,672	\$1,500	\$172	\$0																								Quarterly reports	
2.3	Project oversight and management	SRTA	\$15,048	\$13,500	\$1,548	\$0																								n/a	
3	Advance Traveler Information & Incident Response Action Plan																														
3.1	Stakeholder outreach	SRTA	\$4,459	\$4,000	\$459	\$0																								Data purchase specifications and remote sensor scope of work	
3.2	Administer procurement process			\$4,000	\$459																									Request for proposals, staff report summarizing results of procurement process, executed purchase agreement.	
3.3	Prepare action plan	SRTA	\$39,015	\$35,000	\$4,015	\$0																								Advance Traveler Information & Incident Response Action Plan	
4	Travel Data Gap Purchase																														
4.1	Administer procurement process	SRTA	\$61,309	\$55,000	\$6,309	\$0																								Request for proposals, staff report summarizing results of procurement process, executed technical services agreement, and data/analytics	
5	Disadvantaged Communities Impact Analysis																														
5.1	Administer procurement process	SRTA	\$4,459	\$4,000	\$459	\$0																								Request for proposals, staff report summarizing results of procurement process, executed technical services agreement.	
5.2	Survey instrument and administration		\$11,147	\$10,000	\$1,147	\$0																								Survey instrument and results	
5.3	DAC impact analysis	SRTA	\$44,588	\$40,000	\$4,588	\$0																								Impact analysis findings and recommendations	
	TOTALS		\$189,499	\$170,000	\$19,499	\$0																									

Reimbursement of indirect costs is allowable upon approval of an Indirect Cost Allocation Plan for each year of project activities.
Provide rate if indirect costs are included in the project budget. Approved Indirect Cost Rate: **109.74%**

Note: Each task must contain a grant amount and a local cash match amount. Local cash match must be proportionally distributed by the same percentage throughout each task. Local in-kind match needs to be indicated where in-kind services will be used. Please review the grant program section that you are applying to for details on local match requirements. The project timeline must be consistent with the scope of work.