SHOPP Asset Management Pilot Request Form

SHOPPCPR: Ver 3 11/14

Submittal Date 08/14/2015

Caltrans

Division of Transportation Programming
State Highway Operation and Protection Program (SHOPP)

Project Manager James Robinson

Phone (909) 917-8839

Dist	County	Route	Prefix	PM	Prefix	PM	EA	PPNO	Project ID
08	San Bernardino	US395		11.2		16.6	0F631	0260J	08-1300-0220

☐ Includes Multiple Locations (Complete Page 2 of this Form)

MPO: SCAG

Project Location/Description (Include the nearest city, town or landmark)

On US-395 from SR-18 to Chamberlaine Way in the Cities of Victorville and Adelanto PM 11.2 to PM16.6
Currently the project is a generally a two-lane conventional highway with 12 foot lanes and shoulders that vary from five to eight foot in width. This segment of US-395 has high traffic volumes with a high percentage of trucks. Operating conditions are expected to deteriorate as the traffic demands increase..

Need for project and proposed improvements (Elaborate using PID language)

This project will improve safety and operational efficiency.
The project will install a four wide rumble strip, rehabilitate existing pavement, construct standard shoulders with a class 2 bike lane, provide loop detectors and ADA ramps ramps at intersection.
SEE ATTACHMENT

PA&ED / M200	12/31/2009	R/W Cert / M410	02/01/2018	CCA / M600	12/01/2019
PS&E / M380	06/01/2017	RTL / M460	03/01/2018	END Project / M800	12/01/2020

Capital ($1,000)
(Escalated to FY of Programming)

	FY	Cost
R/W		$0
Construction	2018/19	$10,100
	Total Capital	$10,100

Support ($1,000)

	FY	Cost
PA & ED		
PS & E		
R/W		
Construction	2018/19	$2,800
	Total Support	$2,800

Legislative District Numbers
(Separate multiple Districts with a comma)

State Assembly	A33
State Senate	S21
Congressional	C8

☐ Approved ☐ Denied

CAPITAL CONSTRUCTION COST ESCALATION RATE 3%

District SFP (Print)	Syed Raza	District SFP (Sign)	Syed R	Phone	(909) 388-7149
District Director (Print)	John Bulinski	District Director (Sign)	Mike B. Bu	Phone	(909) 383-4055
SHOPP Exec. (Print)		SHOPP Exec. (Sign)		Phone	

Asset Management Pilot Project Nomination

SBd –US-395-11.2/16.6

August 13, 2015

This pilot project proposes the use of asset management principles to address the overall transportation needs and improve the operational efficiency and safety of United States Highway 395 (US-395) from State Route 18 to Chamberlaine Way from post-mile 11.2 to 16.6. (See attachment #1). This pilot project will improve safety, and rehabilitation needs and will propose the corresponding programming for each need. This pilot project is a multi-agency partnership between SANBAG, Cities of Victorville, Adelanto and Caltrans District 8.

Project Background

The existing facility is generally a two-lane roadway that has been widened at intersections to accommodate rapid urbanization along this corridor. This route is classified as a Rural Principal Arterial, and is included in the Surface Transportation Assistance Act (STAA) as a route for movement of extra-legal permit loads. It is as classified as a High Emphasis, Focus and Gateway route as part of the California Interregional Road System (IRRS), providing access to and links to economic centers, recreational areas and rural regions. It is also part of the Strategic Highway Network (STRAHNET) serving the Naval Air Weapons Station at China Lake and Edwards Air Force Base. The existing lanes are 12 foot wide and shoulders vary in width from five to eight foot in each direction. The traffic volumes on this route are high with a high percentages of the traffic being trucks. The improvements from this pilot program will include a rumble strip, pavement rehabilitation, full width shoulders with class2 bike lanes, installation of loop detectors and ADA ramps at signalized intersections. (PM11.2 to PM R16.6). This project will address existing deficiencies by improving the pavement, safety (collisions), loop detectors and ADA .

This project was environmentally cleared on December 31, 2009. Design work is well underway with RTL on track for delivery in the 18/19 FY.

[redacted]

Regional and System Planning

The proposed project is consistent with statewide, regional, and local planning goals, and is being coordinated with impacted governmental, regulatory and private agencies in the area to ensure consistency with their specific goals and objectives. The proposed improvements are consistent the Route Concept Report. This project will improve the travel time reliability and reduce the traffic delays.

Traffic

Current and Forecasted Traffic

The existing and projected traffic data for US-395 within the project limits are as shown in Table 1 below.

Table 1

LOCATION	ADT		DHV		Trucks (%)		Directional Split	
	2006	2035	2006	2035	2006	2035	2006	2035
PM 11.20/ 16.6	16,800	25,800	822	3,241	10	10	60/40	60/40

Existing and projected LOS and Volume Capacity Ratios have been developed and analyzed for the existing operating conditions and the proposed improvements. This data is presented in Table 2.

Table 2

LOCATION	LOS			Volume Capacity Ratio (V/C)		
	2006	2035 (No-build)	2035 (Alt 2&3)	2006	2035 (No-build)	2035 (Alt 2&3)
PM 11.2/ 16.6	C	F	C	0.28	1.11	18.6

At the current rate of growth, traffic is expected to increase by 30% by year 2035. As a result, levels of service are expected to deteriorate rapidly to breakdown conditions. The proposed widening improvements would restore the facility to its desirable level of service and would also enhance the overall operational safety of these segments along US-39

[redacted]

Stewardship and Efficiency Needs

The existing pavement condition is in fair condition with fatigue cracking and transverse cracks in the shoulder.

Asset: Distressed Pavement	Total Quantity	Pre-Project Condition			Post-Project Condition		
		Good	Fair	Poor	Good	Fair	Poor
PM 11.2/16.6	11 lane miles		X		X		

The following are the SHOPP related needs within the project limits of SBd US-395 11.2/16.6:

Item (Program)	Performance Measures	Description of Work	Cost
Pavement (121)	11 lane-miles of distressed pavement	Costs include: cold plane removal of existing friction course, overlaying existing two lanes and shoulders, and traffic control.	$7,804,740
Loop Detectors (315)	26 traffic loops	Cost include: Installation of new traffic sensing loops at five intersections	$50,000
Rumble Strip (015)	1200 LF	Costs to construct four wide rumble strip	$48,000
Standard Shoulders (015)	284,288 SF	Cost to install eight foot wide shoulders with a Class2 bike lane	$2,132,160
ADA Ramps (361)	28 new curb ramps	Costs to construct new curb ramps at five intersections	$26,100

$10,100,000

Recommendation

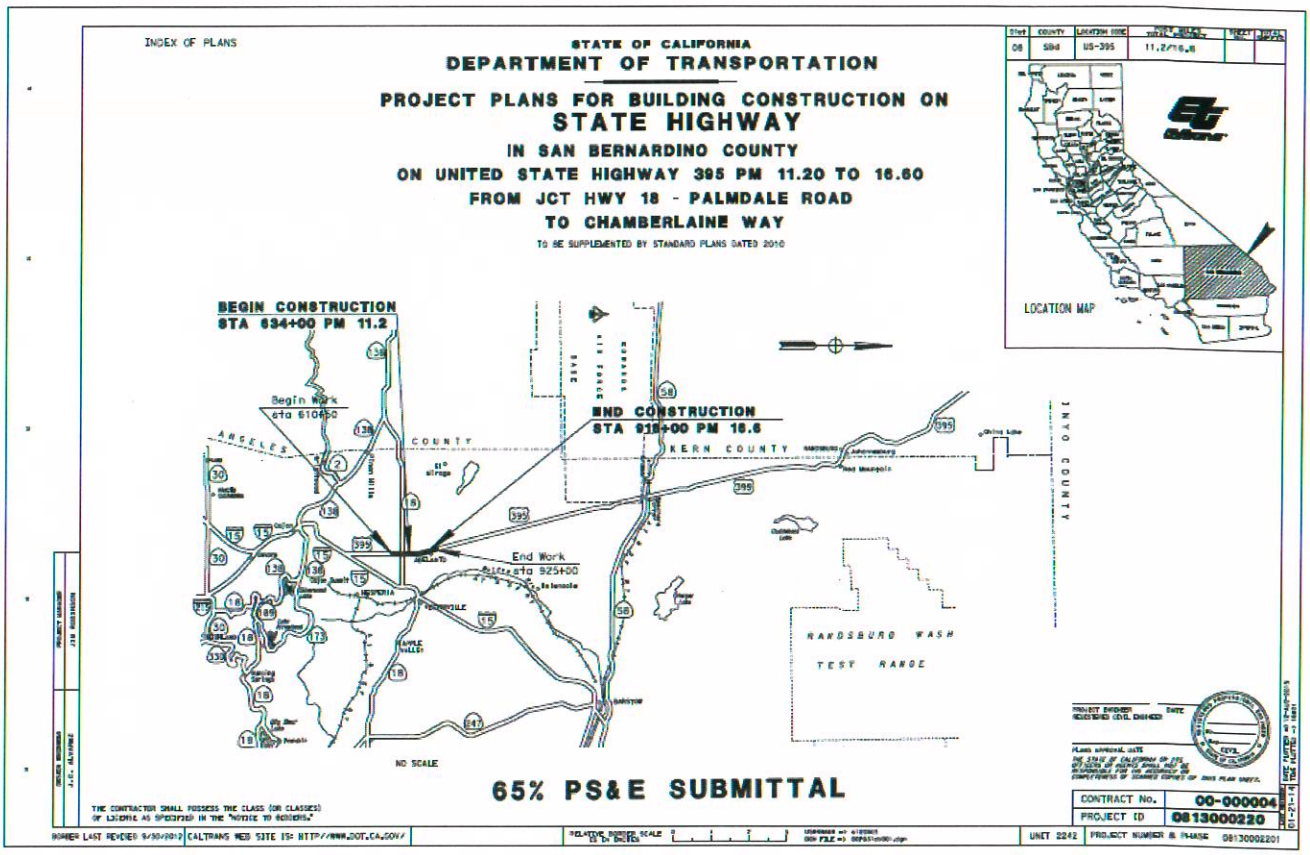
In an effort to promote asset management, it is proposed to program from the FY18/19 of the SHOPP $10.1M for (construction capital) and $2.8M for (construction support) for a total of $12.9M This project is currently on track for delivery in the FY18/19. It is proposed that the CTC will vote at the July 2018 CTC meeting.

Attachments:

Attachment #1: Title Sheet

Attachment #2: US-395

Attachment #3: US-395



Attachment #1 Title Sheet

Attachment #2 US-395

Attachment #3 US-395

SHOPP Nomination Sustainability Contacts:

Gina Moran (916) 651-8164
Amy Bailey (916) 651-8166
Mary Beth Herritt (916) 653-4166
Melissa Thompson *(out July 29-Aug 11)* (916) 653-7569

Complete 20 question below: Sections in Green

Please answer these 20 question to help develop sustainability components (highlighted in Green) for your SHOPP Pilot project. This will be used for the project sustainability score as it relates to the Department's Strategic Goals for Sustainability, Livability and Economy (See Tab on Sustainability Goal for reference). For further background you can see the Envision Guidance tab.

	Sustainability Goal measures	Project Title:	Yes/No	Description (of Yes responses)
Quality of Life				
		Stimulate Sustainable Growth and Development *(Envision QL 1.2)*	Yes	Class 2 bike lanes for non motorized traveler will be an integral part of this project and allow people the mobility to access work centers through economic justice
		Intent: Support and stimulate sustainable growth and development, including improvements in job growth, capacity building, productivity, business attractiveness and livability.		
1	Prosperity	Will the project enhance the community's quality of life and economic prosperity?		
		Improve Community Mobility and Access *(Envision QL 1.2)*		
		Intent: Locate, design and construct the project in a way that eases traffic congestion, improves mobility and access, does not promote urban sprawl, and otherwise improves community livability.		
2	Access	Will the project provide good, safe access to adjacent facilities, amenities and transportation hubs, including appropriate wayfinding signage?	Yes	This project will increase accessibility and connectivity to work centers through economic justice
3	Non-Auto Mode Share	Will the project encourage the use of transit and/or non-motorized transportation?	Yes	This project will add bike lanes and allow for non-motorized transportation
4	Non-Auto Mode Share	Has the project team coordinated the design with other infrastructure assets to improve walkability and livability?	Yes	The project with the has added ADA ramps and a class 2 bike lanes to improve walkability and livability
		Preserve Historic and Cultural Resources *(Envision QL 3.1)*		
		Intent: Preserve or restore significant historical and cultural sites and related resources to preserve and enhance community cultural resources.	Yes	This project has been in consultation with the Indian Tribes to identity and preserve historic and cultural resources
5	Env	Will the project minimize impacts on historic and cultural resources? (Consulted the tribal, historic and cultural resource staff in Environmental (PQS)?		
		Enhance Public Space *(Envision QL 3.3)*		
		Intent: Improve existing public space including parks, plazas, recreational facilities, or wildlife refuges to enhance community livability.		
6	Livability	Will the proposed project make meaningful enhancements to public space or address Section 4(f) properties, (examples include parks, plazas, recreational facilities, or wildlife refuges) to enhance community, livability, and quality of life?	Yes	The addition of bike lanes will add connectivity and accessibility to public facilities, recreational facilities to enhance livability and quality of life.
Leadership				
		Foster Collaboration and Teamwork *(Envision LD 1.3)*		
		Intent: Eliminate conflicting design elements, and optimize system by using integrated design and delivery methodologies and collaborative processes.		
7	Sustainable Corridor Master Plan (SCMP)	Are the project owner and the project team intending to take a Context Sensitive Solutions view of the project?	Yes	The project team has been engaged with the Cities of Victorville and Adalanto in the planning and design elements of the project
		Improve Infrastructure Integration *(Envision LD 2.2)*		
		Intent: Design the project to take into account the operational relationships among other elements of community infrastructure which results in an overall improvement in infrastructure efficiency and effectiveness.		
8	Livability	Will the project team seek input from local stakeholders regarding how the project impacts or enhances the community infrastructure?	Yes	The project team has been engaged with the Cities of Victorville and Adalanto in the planning and design elements of the project
9	Freight	Will the project address the needs on the priority freight network included in the Freight Mobility Plan?	Yes	The pavement and safety improvements will help address the priority needs for freight along this corridor
Resource Allocation				
		Use Recycled Materials *(Envision RA 1.3)*		
		Intent: Minimize transportation costs and impacts and retain regional benefits through specifying local sources.		
10	Resource Consumption	Will the project team consider reuse of existing materials or recycled materials or use of materials from within 100 miles of the project site?	Yes	It is intended that recycled pavement materials will be integrated into this project
		Reduce Energy Consumption *(Envision RA 2.1)*		

	Sustainability Goal measures	Project Title:	Yes/No	Description (of Yes responses)
		Intent: Conserve energy by reducing overall operation and maintenance energy consumption throughout the project life cycle.		
11	Energy	Can the project incorporate reducing eneregy consumption or generating energy supply during the construction phase or after as a purpose for the project?	Yes	This project will endeavor to minimize or reduce the energy consumption in the construction phase
Natural World				
		Preserve Prime Habitat and Species *(Envision NW 1.1)*		
		Intent: Avoid placing the project – and the site compound/temporary works – on land that has been identified as of high ecological value or as having species of high value.		
12	Env	Does the project concept incorporate solutions to preserve, improve or connect important natural resources (habitat, species needs, or fish and wildlife movement corridors)?	Yes	Impacts to biological resources and cultural resources will be minimized. Consultation and Mitigation agreements are being negotiated with United States Fish and Wildlife and California Fish and Wildlife Services to minimize impacts to the environment.
		Protect Wetlands and Surface Water *(Envision NW 1.2)*		
		Intent: Protect, buffer, enhance and restore areas designated as wetlands, shorelines, and waterbodies by providing natural buffer zones, vegetation and soil protection zones.		
13	Water	Does the project concept address or enhance adjacent wetlands, hydraulic connection and waters functions, values, or existing deficiencies?	Yes	This project will not impact the adjacent wetland area the existing wash areas will remain intact.
		Preserve Prime Farmland *(Envision NW 1.3)*		
		Intent: Identify and protect soils designated as prime farmland, unique farmland, or farmland of statewide importance.		
14	Env	Does the project concept improve or enhance the existing farming conditions or associated interface with the transportation facility (water conveyance, quality, habitat preservation, weed management, farming operation, etc.)?	Yes	This project will not impact the upstream or downstream watershed areas
		Preserve Floodplain Functions *(Envision NW 1.5)*		
		Intent: Preserve floodplain functions by limiting development and development impacts to maintain water management capacities and capabilities.		
15	Water	Does the project concept allow for natural floodplain functions restored or rectified related to existing infrastructure impingements?	Yes	This project will not impact the upstream or downstream watershed areas
		Manage Stormwater *(Envision NW 2.1)*		
		Intent: Minimize the impact of infrastructure on stormwater runoff quantity and quality.		
16	Water Quality	Can the project be designed to treat more than minimum stormwater treatment requirements, for example post construction or TMDL compliance units?	Yes	A SWPPP will be required to address the needs for temorary and permanent BMP's
		Roadside Vegetation Environment *(Envision NW 3.4)*		
		Intent: Use appropriate non-invasive species and control or eliminate existing invasive species.		
17	Env	Does the project concept incorporate improvements to roadside vegetation through restorative actions to native/appropriate vegetation to reduce/eliminate need for future management (maintenance, water use, pesticides, invasive species, etc.)?	Yes	The existing native vegetation within the State Right of Way will be preserved. Joshua trees affected by the project are to be relocated to other areas within State Right of Way
Climate & Risk				
		Reduce Greenhouse Gas Emissions *(Envision CR 1.1)*		
		Intent: Conduct a comprehensive life-cycle carbon analysis and use this assessment to reduce the anticipated amount of net greenhouse gas emissions during the life cycle of the project, reducing project contribution to climate change.		
18	GHG	Based on a life-cycle carbon assessment, will the project be designed in a way that substantially reduces carbon emissions?	Yes	The installation of bike lanes will allow for potential reductions incarbon emissions
		Assess Climate Threat *(Envision CR 2.1)*		
		Intent: Develop a comprehensive Climate Vulnerability Assessment and Adaptation Plan.		
19	Resiliency	Will the project address potential risks or vulnerability deficiencies identifed in state, regional, local or site specific plans?	Yes	Facilitating active transportation for bikes and improve of ADA facilities will address access and mobility deficiencies.
		Manage Heat Island Effects *(Envision CR 2.5)*		
		Intent: Minimize surfaces with a high solar reflectance index (SRI) to reduce localized heat accumulation and manage microclimates.	No	If product become available we will integrate them into the project
20	Green Infrastructure	Will the project be designed to include green infrastructure such as reducing heat island effects by reducing the percentage of low solar reflectance index (SRI) surfaces?		