

ROAD REPAIR AND ACCOUNTABILITY ACT OF 2017  
PROJECT BASELINE AGREEMENT  
SM-101 Pavement CAPM (EA 04-3J060)

Resolution SHOPP - P - 1819 - 10B  
(will 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) for the *SM-101 Pavement CAPM (EA 04-3J060)*, effective on, 1-31-19 (will be completed by CTC), is made by and between the California Transportation Commission (Commission), the California Department of Transportation (Caltrans), the Project Applicant, *Caltrans*, and the Implementing Agency, *Caltrans*, sometimes collectively referred to as the "Parties".

**3. RECITAL**

- 3.2 Whereas at its March 22, 2018 meeting the Commission approved the State Highway Operation and Protection Program, and included in this program of projects the *SM-101 Pavement CAPM (EA 04-3J060)*, 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 and the Project Report attached hereto as Exhibit B, as the baseline for project monitoring by the Commission.
- 3.3 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 *Insert Number*, "Adoption of Program of Projects for the Active Transportation Program", dated
  - Resolution *Insert Number*, "Adoption of Program of Projects for the Local Partnership Program", dated
  - Resolution *Insert Number*, "Adoption of Program of Projects for the Solutions for Congested Corridors Program", dated
  - Resolution G-18-13, "Adoption of Program of Projects for the State Highway Operation and Protection Program", dated March 22, 2018
  - Resolution *Insert Number*, "Adoption of Program of Projects for the Trade Corridor Enhancement Program", dated

- 4.3 All signatories agree to adhere to the Commission's State Highway Operation and Protection Program, 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 Caltrans agrees to secure funds for any additional costs of the project.
- 4.6 Caltrans agrees to report on a quarterly basis; after July 2019, reports will be on a semi-annual basis on the progress made toward the implementation of the project, including scope, cost, schedule, outcomes, and anticipated benefits.
- 4.7 Caltrans agrees to prepare program progress reports on a quarterly basis; after July 2019, reports will be 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 Caltrans 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 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 during the course of the project, and retain those records for four years from the date of the final closeout of the project. Financial records will be maintained in accordance with Generally Accepted Accounting Principles.
- 4.10 The Transportation 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 four 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 Other Project Specific Provisions and Conditions

## Attachments:

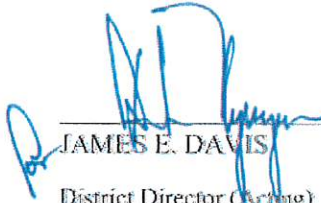
Exhibit A: Project Programming Request Form

Exhibit B: Project Report

SIGNATURE PAGE  
TO  
PROJECT BASELINE AGREEMENT

Pavement CAPM, EA# 04-3J060

Resolution SHOPP - P - 1819 - 10B

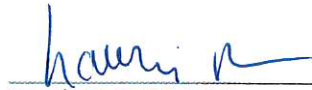
  
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JAMES E. DAVIS

District Director (Acting)

California Department of Transportation

8/10/18  
Date

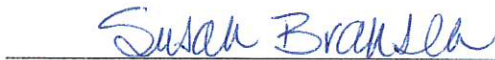
  
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LAURIE BERMAN

Director

California Department of Transportation

1-4-19  
Date

  
\_\_\_\_\_

SUSAN BRANSEN

Executive Director

California Transportation Commission

1/31/19  
Date

Baseline agreement information was extracted from Caltrans' project data systems. Project description, funding and performance measures are from CTIPS. Project delivery milestones are from PRSM. All information is current and accurate.

STATE OF CALIFORNIA • DEPARTMENT OF TRANSPORTATION

**BASELINE AGREEMENT**

<b>Date:</b>	01/02/19 11:42:41 AM
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District	EA	Project ID		PPNO	Project Manager	
04	3J060	0415000080		1487J	KANG, JOON K	
County	Route	Begin Postmile	End Postmile	Implementing Agency		
SM	101	16.5	23.0	PA&ED	Caltrans	
				PS&E	Caltrans	
				Right of Way	Caltrans	
				Construction	Caltrans	

**Project Nickname**

SM-101 Pavement Preservation

**Location/Description**

In the cities of Burlingame, Millbrae, San Bruno and South San Francisco, from Broadway to Oyster Point Boulevard. Pavement rehabilitation.

**Legislative Districts**

<b>Assembly:</b>	22	<b>Senate:</b>	11, 13	<b>Congressional:</b>	14
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**PERFORMANCE MEASURES**

	Primary Asset	Good	Fair	Poor	New	Total	Units
Existing Condition	Pavement		56.2	2.4		58.6	Lane-miles
Programmed Condition	Pavement	58.6				58.6	Lane-miles

**Project Milestone**

	Actual	Planned
Project Approval and Environmental Document Milestone	12/28/18	
Right of Way Certification Milestone		10/15/19
Ready to List for Advertisement Milestone		11/01/19
Begin Construction Milestone (Approve Contract)		05/15/20

**FUNDING**

Component	Fiscal Year	SHOPP				Total
PA&ED	17/18	1,056				1,056
PS&E	17/18	1,342				1,342
RW Support	17/18	132				132
Const Support	19/20	1,628				1,628
RW Capital	19/20	100				100
Const Capital	19/20	16,500				16,500
<b>Total</b>		20,758				20,758



# Capital Preventive Maintenance Project Report


## *For Project Approval*

On Route 101  
Between Broadway Overcrossing  
And 0.2 mile North of Oyster Point Boulevard Overcrossing

I have reviewed the right-of-way information contained in this report and the right-of-way data sheet attached hereto, and find the data to be complete, current and accurate:


  
Mark L. Weaver, Deputy District Director  
Right of Way and Land Surveys

APPROVAL RECOMMENDED:

  
Mohammad Suleiman, Project Manager

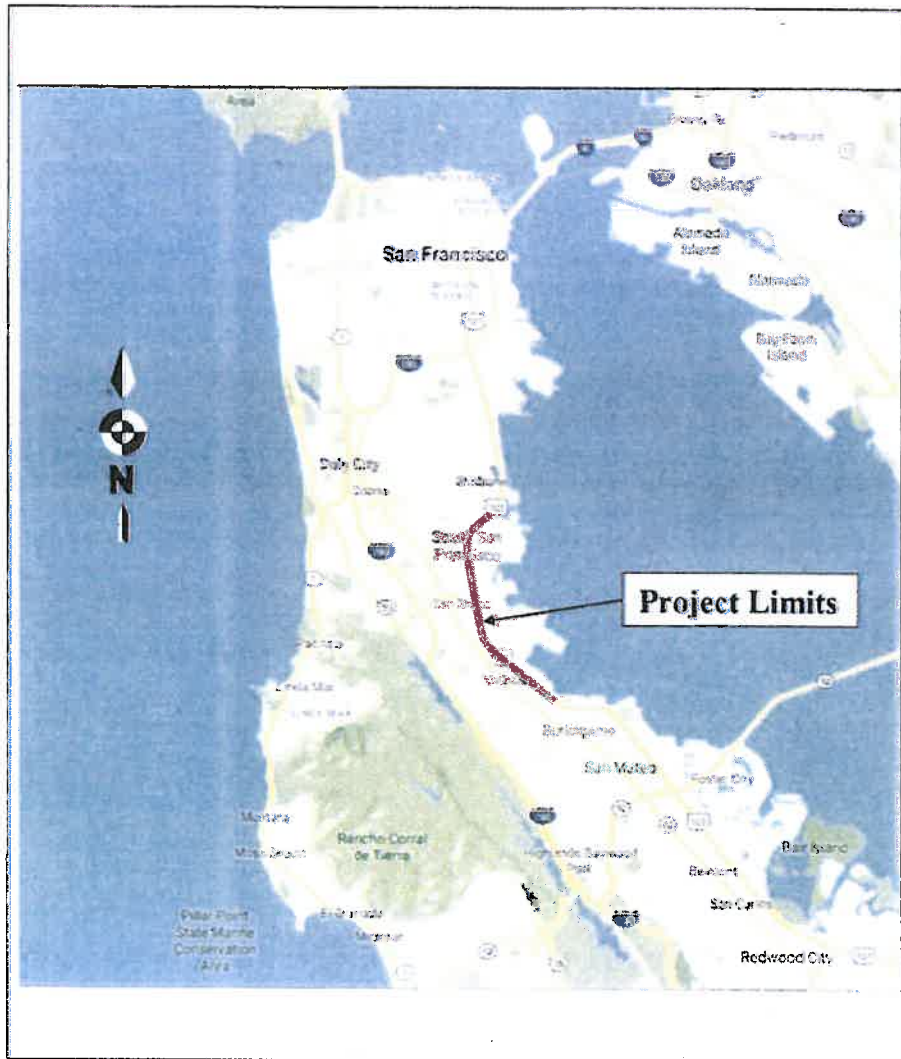
  
Lawrence A. Jones, Office Chief, Design, Special Projects

PROJECT APPROVED:

  
Helena (Lenka) Culik-Caro  
Deputy District Director, Design

December 28, 2018  
Date

## Vicinity Map



IN SAN MATEO COUNTY ON ROUTE 101 FROM BROADWAY  
OVERCROSSING TO 0.2 MILE NORTH OF OYSTER POINT  
BOULEVARD OVERCROSSING

# Capital Preventive Maintenance Project Report

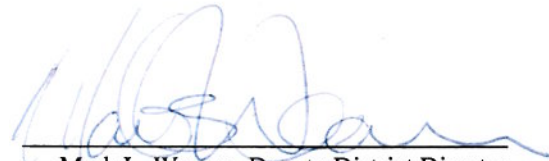
## *For Project Approval*

On Route 101

Between Broadway Overcrossing

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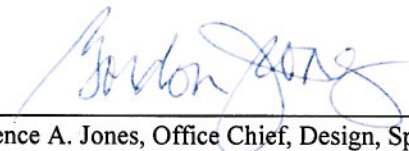


Mark L. Weaver, Deputy District Director  
Right of Way and Land Surveys

APPROVAL RECOMMENDED:



Mohammad Suleiman, Project Manager

*for*   
Lawrence A. Jones, Office Chief, Design, Special Projects

PROJECT APPROVED:

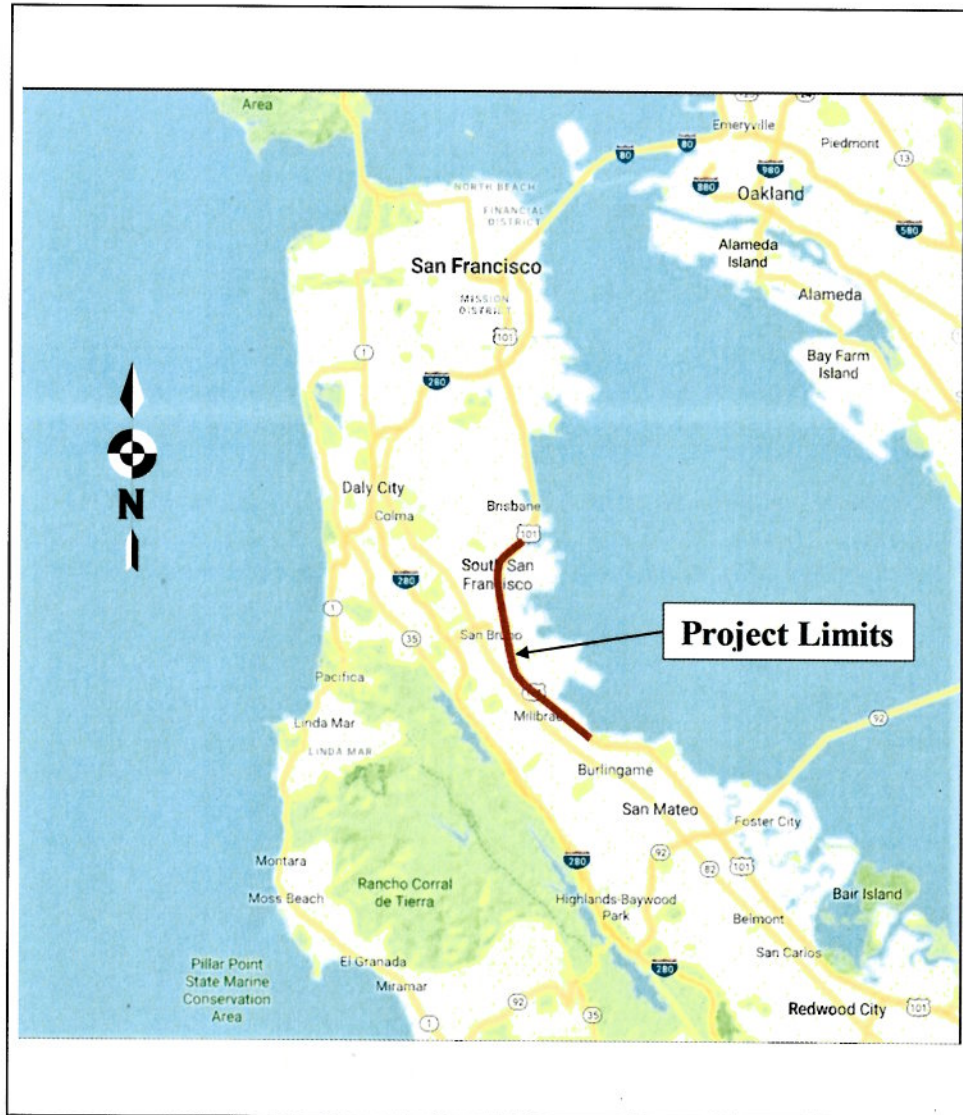


Helena (Lenka) Culik-Caro  
Deputy District Director, Design

December 28, 2018

Date

## Vicinity Map



IN SAN MATEO COUNTY ON ROUTE 101 FROM BROADWAY  
OVERCROSSING TO 0.2 MILE NORTH OF OYSTER POINT  
BOULEVARD OVERCROSSING



This capital preventive maintenance project report has been prepared under the direction of the following registered civil engineer. The registered civil engineer attests to the technical information contained herein and the engineering data upon which recommendations, conclusions, and decisions are based.

*Gordon W. Jeong*

*28 DECEMBER 2018*

REGISTERED CIVIL ENGINEER

DATE



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## 1. INTRODUCTION

### Project Description:

The project involves Route 101 from the city of Burlingame at post mile (PM) 16.5 and goes through the cities of Millbrae and San Bruno and ends at PM 23.0 in the city of South San Francisco. The number of lanes varies from four to six lanes constructed of asphalt concrete (AC) or Portland cement concrete (PCC) pavement with median and outside AC shoulder in each direction. The pavement constructed with AC consists of Dense Graded Asphalt Concrete (DGAC) from PM 16.5 to 22.061 and PCC from PM 22.061 to the northern end of the project at PM 23.0.

This Capital Preventive Maintenance (CAPM) project is mainly composed of asphalt concrete overlay throughout the project limits and will be in compliance with the Americans with Disabilities Act (ADA) due to curb ramp upgrades at 32 locations.

The scope of work in this CAPM project also includes the following incidental work:

- Loop detector replacements
- Metal Beam Guard Railing (MBGR) replacement with Midwest Guardrail System (MGS)
- Re-stripe the pavement delineation within the project limits to current standards
- Upgrading drainage inlets with bicycle friendly grates

The Project Scope Summary Report (PSSR) for this project was approved on June 30, 2015.

<b>Project Limits</b>	04-SM-101-16.5/23.0	
	<b>Current Cost Estimate:</b>	<b>Escalated Cost Estimate:</b>
<b>Capital Outlay Support</b>	\$5,595,000	\$5,595,000
<b>Capital Outlay Construction</b>	\$23,710,000	\$25,050,000
<b>Capital Outlay Right-of-Way</b>	\$100,000	\$106,000
<b>Funding Source</b>	20.XX.201.121	
<b>Funding Year</b>	2019/20	
<b>Type of Facility</b>	Multi-lane freeway with on and off-ramps	
<b>Number of Structures</b>	N/A	
<b>SHOPP Project Output</b>	58.6 Lane miles of pavement rehabilitation	
<b>Environmental Determination or Document</b>	CEQA – CE NEPA – CE	
<b>Legal Description</b>	In San Mateo County on Route 101, in the cities of Burlingame, Millbrae, San Bruno and South San Francisco, from Broadway Overcrossing to 0.2 mile north of Oyster Point Boulevard Overcrossing.	
<b>Project Development Category</b>	5	

## 2. RECOMMENDATION

It is recommended that this CAPM Project Report (PR) be approved and that Plans, Specifications and Estimate (PS&E) be prepared to implement rehabilitative strategies on Route 101.

## 3. PURPOSE AND NEED

### Purpose:

The purpose of this project is to preserve and extend the life of the existing pavement and improve ride quality of Route 101 in San Mateo County.

### Need:

The 2015 Pavement Condition Survey for this section of road has an overall Pavement Condition Survey/Pavement Management System (PCS/PMS) priority number 5, which characterizes the road as having minor to moderate pavement distress and poor ride quality. Rehabilitating the pavement and upgrading the ADA facilities will extend the life of the existing pavement and improve mobility of road users (see attachment F).

## 4. EXISTING FACILITY, DEFICIENCIES AND TRAFFIC DATA

### 4A. Roadway Geometric Information

This CAPM project will preserve and extend the life of the existing pavement and roadway. Existing roadway geometric conditions will be maintained and will not be reduced below the current standards in the Highway Design Manual and associated Design Information Bulletins.

Facility Location	Minimum Curve Radius	Through Traffic Lanes			Paved Shoulder Width		Median Width	Additional Paved Width for Bicycle Lane or Other
		Number of Lanes	Lane Width (ft)	Type (Flexible, Rigid, or Composite)	Left (ft)	Right (ft)		
16.5/23.0	2500	4 - 6	12	Flexible & Rigid	8 & var	8 & var	0	0

### Remarks:

This CAPM project would maintain existing roadway geometrics.



**4B. Condition of Existing Facility**

**1) Traveled Way Data**

PMS Category (1-29) 5 Priority Classification (.1-4) 0.3

International Roughness Index (IRI) 225

**\*Rigid Pavement:**

**\*Flexible Pavement:**

\* From latest PMS-Pavement Condition Inventory Survey Data.

3rd Stage Cracking % 0.39 Alligator B Cracking % 6.31

Faulting 1.8 Patching % N/A

Joint Spalls N/A Rutting 0.16

Pumping N/A Bleeding N/A

Corner Breaks % 1 Raveling Yes

**2) Pedestrian Facility Data**

Facility Type and Location(s)	Meets ADA Standards?	If Facility does not meet ADA Standards, what feature(s) are not ADA compliant?	Status of Each Noncompliant Location
<b>Curb Ramps:</b> <i>(See attachment G for locations)</i>	No	Missing Detectable Warning Surface (DWS), and cross slope grades do not meet current standards	Will be corrected as part of this project

**4C. Structures Information**

Structures	Vertical Clearance		
	Existing (ft)	RRR Standard (ft)	Proposed (ft)
<i>n/a</i>			

Remarks throughout the project limits:

MBGR will be replaced with MGS.

**4D. Traffic Data**Construction Year ADT 2020DHV 150,000 % Trucks 3.77Safety Review Date: May 2018**5. CORRIDOR AND SYSTEM COORDINATION****5A. Corridor Overview**

Route 101 in San Mateo is a vital link between Silicon Valley to the south and San Francisco to the north. Route 101 is also the main access route to both San Francisco International Airport (SFO) and San Jose International Airport. Along the San Francisco Peninsula, the route is known as the Bayshore Freeway. Route 101 links with the East Bay across San Francisco Bay via the Dumbarton Bridge (SR 84), the San Mateo Bridge (SR 92), and the San Francisco-Oakland Bay Bridge (I-80).

The corridor is urban and includes I-280 to the west, SR 82 "El Camino Real" and Caltrain between San Jose and San Francisco. Traffic volumes on Route 101 in San Mateo range from 196,000 Annual Average Daily Traffic (AADT) to 260,000 AADT.

While there is substantial transit use in the corridor, especially on El Camino Real and Caltrain, relatively few bus services utilize Route 101 with no public transit services on Route 101 south of SR 92. However, Route 101 is increasingly being used by privately hired vehicles known colloquially as "Google Buses." These are luxury coaches, used to transport technology workers not only from San Francisco, but also from the East and North Bay to Silicon Valley jobs.

**5B. State Planning**

This project meets the State's goals in the California Transportation Plan of "Preserving the Transportation System" and "Supporting a Vibrant Economy." This section of US 101 is covered by the 2010 CSMP (Congestion System Management Plan), which proposes traffic management strategies and capital improvements for the freeway.

The Caltrans SHOPP program (State Transportation Improvement Program Projects) includes other significant projects on Route 101 (See Section 5C).

### 5C. Regional Planning

The following projects are included in the Regional Transportation Plan for 2040, called Plan Bay Area. It is an integrated long-range transportation and land-use/housing plan that will support a growing economy, provide more housing and transportation choices, and reduce transportation-related pollution in the nine counties of the San Francisco Bay Area.

1J5601	SM 101 HOV Project	02/2023
3G680	SM 101 Auxiliary Lane Project	11/2021

### 5D. Local Planning

The City/County Association of Governments (C/CAG) of San Mateo County is the county's Congestion Management Agency (CMA), and is responsible for the coordination, planning, and programming of transportation, land-use, and air-quality-related programs and projects. C/CAG released the 2015 San Mateo County Congestion Management Plan (CMP), which identifies the county's congestion relief plan, and includes elements that are intended to be a comprehensive package of policies and actions that together will make a measurable impact on current congestion and slow the pace of future congestion. As with Caltrans' CSMP, the CMP focuses on an operational improvement strategy that emphasizes Intelligent Transportation System (ITS) elements such as the Smart Corridor and a ramp metering program. This segment of US 101 is within the 2015 San Mateo County CMP.

The San Mateo County Transportation Authority (SMCTA) was formed in 1988 with the passage of the voter-approved half-cent sales tax for countywide transportation projects and programs, known as Measure A. The original Measure A expired in 2008. In 2004, the county voters overwhelmingly approved a reauthorization of Measure A through 2033. The SMCTA's role is to administer the proceeds from Measure A to fund a broad spectrum of transportation-related projects and programs.

### 5E. Multimodal

Route 101 is designated as a Surface Transportation Assistance Act (STAA) truck route, allowing large trucks to operate on this route. The truck AADT varies from 7,000 to 11,500.

## 6. ALTERNATIVES

### 6A. CAPM strategy

This CAPM project proposes to rehabilitate the existing pavement surface, by removing and replacing all existing asphalt concrete with 0.10 foot of Rubberized Hot Mix Asphalt-Open Graded (RHMA-O)/0.15 foot of Rubberized Hot Mix Asphalt- Gap Graded (RHMA-G) using Performance Graded (PG) 64-16 asphalt binder overlay on the mainline and 0.15 foot of RHMA-G on the ramps, extending to the entire width of the pavement (see attachment E). During the design phase, a more detailed field review will be conducted to locate specific areas and determine the amount of digouts required for the project.

This CAPM project will also upgrade existing ADA curb ramps to current standards and perform drainage work improvements, which will be included as part of the incidental work. In addition, pavement delineation re-striping to current standards within the entire project limits will be performed within the existing pavement width.

#### Life-Cycle Cost analysis

Since 2013, CAPM projects no longer require a Life-Cycle Cost Analysis (LCCA) per the LCCA Procedures Manual.

#### Non-Standard Design Features

The scope of this project is limited to the preservation and extension of the life of the existing pavement, ADA curb ramp upgrades, and incidental work, as identified in Section 1 of this report. Therefore, any nonstandard features that exist on the current roadway itself will remain. A Fact Sheet, Exceptions to Mandatory Design Standards, was approved on November 16, 2017 by Robert Effinger. This was prepared for EA 1J5600 and includes this portion of Route 101 in San Mateo County.

#### Enhancements

##### Loop Detectors

Existing loop detectors will be replaced within the project limits where impacted by cold planing and AC overlay work.

##### Roadside Signs

This project will restripe pedestrian crossings at several intersections within the project limits that will be impacted by cold planing and AC overlay construction.



### Midwest Guardrail System

This project will replace existing MBGR with MGS and upgrade crash cushions as needed at various locations. However, given the proximity of specific bridge railings to the adjacent street, a concrete barrier with crash cushions might be a feasible alternative. A final determination will be performed in the PS&E phase.

### ADA Curb Ramps

In accordance with Design Information Bulletins DIB 81-01 (dated March 16, 2011) and DIB 82-06 (dated November 16, 2017), it is required of CAPM projects to include the upgrade of existing ADA curb ramps to current standards or to install new curb ramps where they are missing. This project will upgrade 32 ADA curb ramps to current standards within the project limits (see attachment G).

### Dikes/Curbs

Dikes and curbs will be repaired, replaced, or upgraded where needed to meet current standards in the Highway Design Manual.

### Pullouts

Existing maintenance and other vehicle pullouts will be resurfaced consistent with the strategies proposed for shoulders in this project report.

### Gore Cleanup

None.

### Drainage Inlets

Existing drainage grates will be upgraded with bicycle-friendly grates at appropriate locations.

### Traffic Delineation

All the existing striping, pavement markers, and pavement markings removed due to pavement resurfacing will be replaced in kind to current standards. The following conditions shall also apply:

- All thermoplastic traffic stripes and pavement markings shall have enhanced wet night visibility features and contain high-performance retroreflective glass beads.

- All lane line Details 13M and 14M on the freeway mainline with flexible AC pavement shall be modified with a 6-inch thermoplastic traffic stripe.
- All lane line Details 13M and 14M on the freeway mainline with rigid concrete pavement shall be modified with a 6-inch thermoplastic traffic stripe and a 6-inch black colored stripe in between the retroreflective markers.
- The Detail 37 lane drop markings at the exit ramps on the freeway mainline with rigid concrete pavement shall be modified with an 8-inch black colored stripe in between the 8-inch white thermoplastic markings.
- The Details 13M and 14M striping for use on freeway mainline with flexible AC pavement is the same as the ones for the rigid concrete pavement without the black colored stripe.

In addition, roadside delineators, guardrail delineators, concrete barrier markers/delineators, median barrier markers, bridge rail delineators, wall delineators, and object markers will be installed per the California Manual of Uniform Traffic Control Devices (MUTCD), Chapter 3F, and the Traffic Safety Systems Guidance (a stand-alone document that supersedes, Chapter 7 of the 1996 Traffic Manual).

#### **6B. Hazardous waste disposal site**

Asphalt pavement grindings mixed with thermoplastic paint may contain soluble lead in excess of its hazardous threshold limit, which would require the use of a hazardous waste disposal site. A full evaluation of potential hazardous waste or contamination issues will be addressed during the PS&E phase of the project.

#### **6C. Material and/or disposal site**

The need for a disposal site will be determined in the PS&E phase.

#### **6D. Roadside design and management**

The purpose of a CAPM project is to preserve and extend the life of existing pavement and roadway. Existing roadway geometric features will remain.

##### **6D.1 Pavement strategy:**

###### **6D.1.1 Flexible Pavement**

This CAPM project proposes to resurface the existing (AC) pavement and repair localized failed AC pavement. The on- and off-ramps will also be resurfaced.

### Traveled Way

- **Mainline and Shoulder:**

Removing and replacing all existing AC with 0.10 foot of RHMA-O/0.15 foot of RHMA-G using PG 64-16 asphalt binder. Also, include safety edges where required.

- **Ramps:**

Remove and replace all existing Open Graded Asphalt Concrete (OGAC) and DGAC with 0.15-foot RHMA-G using PG 64-16 asphalt binder.

Before overlaying the existing pavement, we recommend the preparatory work for failed AC pavement to be as follows:

- Conduct a field review and locate specific areas of severe distress identified by rutting greater than ¼ inch and/or loose and settled pavement.
- Dig out and repair the AC at distressed localized areas to no more than 0.50-foot max depth. A 0.75-inch maximum grading Hot mixed asphalt type-A (HMA-A) mix with PG 64-10 binder should be used.
- Tack coat shall be applied to all vertical surfaces of existing AC pavement before backfilling with the HMA-A.
- Reconstruct loop detectors.

### **6D.1.2 Rigid Pavement**

Rigid concrete pavement repair should include the following:

- The replacement of the 0.67-foot thick PCC slabs should only remove the existing cracked slab, while allowing the underlying cement treated base (CTB) layer to stay in place. We recommend using Rapid Strength Concrete (RSC) for the slab replacement in anticipation of limited hours for night construction windows. The replaced slabs should include dowel bars as shown in the 2015 Standard Plan, P8. Spalled transverse joints should be properly repaired using polyester grout.
- Remove and replace any failed 3<sup>rd</sup> stage cracked slabs.
- Continuous diamond profile grinding to remove step faulting.

- Cold plane and resurface AC pavement shoulders.
- Reconstruct loop detectors.

## **6E. Right-of-way and utility**

### General

A right of way data sheet has been prepared for the preferred alternative based on the scope of work described and maps provided by Design (see attachment D). Right of Way Capital Costs used in this report are shown in attachment K.

Most of the construction work currently in the project scope will be within the existing State Right-of-Way. Permits to enter and construct (PTE&C) will be needed to allow access for the construction of the curb ramp upgrades.

### Utilities

The scope of this project has minimal impacts on existing utilities. No utility relocations are anticipated. Verification of utilities will be completed during the PS&E phase. The need for potholing will also be determined during the PS&E phase.

### Railroad

Railroad involvement is not anticipated for this project.

## **6F. Water Quality**

The project has a disturbed soil area (DSA) less than 1 acre.

To comply with the conditions of the Caltrans National Pollutant Discharge Elimination System (NPDES) Permit (NPDES No. CAS000003) and to address the temporary water quality impacts resulting from the construction activities in this project, the construction activities need to comply with Standard Specification 13-2 "Water Pollution Control Program." This Standard Specification addresses the preparation of the Water Pollution Control Program (WPCP) document and the implementation of the WPCP during construction.

Best Management Practices (BMPs) need to be implemented to address the temporary water quality impacts resulting from the construction activities for the project. The implemented BMPs will include the following measures: soil stabilization, sediment control, wind erosion control, tracking control, non-storm-



water management, and water management/materials pollution control. Appropriate BMPs and their quantities need to be developed during the PS&E phase.

A Storm Water Data Report (SWDR) has been prepared to summarize the proposed measures for this project. The approved SWDR is attached (see attachment I).

#### **6G. Recycled materials**

The recycling of materials is not anticipated.

#### **6H. Local and Regional Input**

Not applicable

#### **6I. Title VI Considerations**

In accordance with Title VI of the Civil Rights Act of 1964, this project does not adversely affect low mobility and minority groups. As such, the project will not reduce or limit locations of and access to businesses or residences, such as shopping areas, schools, hospitals, and recreation areas. In addition, existing bicycle facilities within the project limits will remain.

#### **6J. Consequences of not doing this entire project**

If the project is not implemented, the existing pavement will continue to deteriorate and the existing curb ramps will not be upgraded.

### **7. TRANSPORTATION MANAGEMENT**

#### **7A. Transportation Management Plan**

A Transportation Management Plan (TMP) will be required as part of this project. It is a specialized plan that will be implemented during construction to minimize and prevent delay and inconvenience to the traveling public. The proposed work will require lane and shoulder closures.

The TMP will be developed during PS&E and final design phases and will be supported by detailed traffic studies to evaluate traffic operations. The need for necessary lane and shoulder closures during off-peak hours or at night, or short-term detour routes will be identified as required. The TMP will include press releases to notify and inform motorists, businesses, community groups, local entities, emergency services, and politicians of upcoming closures or detours. Various TMP elements such as portable changeable message signs and the California Highway Patrol Construction Zone Enhanced Enforcement Program

(COZEEP) may be utilized to alleviate and minimize delay to the traveling public and enhance safety for construction personnel.

Preliminary TMP elements, public information, and motorist information strategies have been incorporated into the project scope and cost estimate. The TMP checklist is included as attachment H.

#### **7B. Vehicle Detection Systems**

Existing loop detectors within the project limits that will be impacted by cold planing and AC overlay will be replaced.

#### **7C. Stage Construction**

This project will be performed in stages while leaving traveled lanes operational and keeping traffic disruption to a minimum. Partial lane and shoulder closures are expected, and ramp work may require local street detours. To minimize some of the risks associated with traffic management, it is proposed that construction activities occur outside normal commute hours, which will include conducting construction activities during night hours allowed lane closure schedules. Construction will occur in a manner that will provide safe conditions for both the traveling public, and construction personnel.

### **8. ENVIRONMENTAL COMPLIANCE**

The project is Categorical Exempt (CE) under Class 1 of the California Environmental Quality Act (CEQA) Guidelines and Categorical Excluded (CE) under the National Environmental Policy Act (NEPA). The environmental document for this project was approved on April 24, 2018 (see attachment C).

### **9. PROJECT ESTIMATE**

The current capital outlay cost estimate is \$23,710,000, which consists of \$23,610,000 in Construction capital and \$100,000 in Right-of-Way capital (see attachment J).

### **10. FUNDING/PROGRAMMING**

#### Funding

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

### Programming

The Capital Preventive Maintenance Project (CAPM) project initiation document, approved on June 30, 2015, had provided conceptual approval of the proposal and a recommendation to program the project into 2018 SHOPP with the amount of \$16,500,000 (see attachment K).

The original estimate for construction capital outlay is \$19,779,000, including a 3% per year escalation to June 2020. The support cost ratio is 25.2%.

Fund Source	Fiscal Year Estimate								
	Prior	14/15	15/16	16/17	17/18	18/19	19/20	Future	Total
20.XX.201.121									
Component	In thousands of dollars (\$1,000)								
PA&ED Support					1,056				1,056
PS&E Support						800	542		1,342
Right-of-Way Support						80	52		132
Construction Support							628	1,000	1,628
Right-of-Way							100		100
Construction							16,500		16,500
Total									20,758

An updated Project Cost Estimate was performed with the escalated construction capital cost of \$25,050,000 or 52% over the programmed amount. The increase in construction capital cost estimate is due to additional structure section RHMA-O which was not included during the PID phase and the increase cost of unit cost of cold planing.

A Project Change Request (PCR) was District-approved on December 26, 2018 to reflect the above-mentioned changes and the changes to construction support and cost from the PID phase to the PA&ED phase. The updated support cost ratio is 23.7%.

Fund Source	Fiscal Year Estimate								
	Prior	14/15	15/16	16/17	17/18	18/19	19/20	Future	Total
20.XX.201.121									
Component	In thousands of dollars (\$1,000)								
PA&ED Support					1,056				1,056
PS&E Support						800	542		1,342
Right-of-Way Support						80	52		132
Construction Support							1,065	2,000	3,065
Right-of-Way							100		100
Construction							23,610		23,610
Total									29,305

## Estimate

A Preliminary Project Cost Estimate is included as attachment J. The total construction cost for the Build/Preferred Alternative is \$25,050,000 in FY 2019/2020.

## 11. DELIVERY SCHEDULE

Project Milestones		Milestone Date (Month/Day/Year)	Milestone Designation (Target/Actual)
PROGRAM PROJECT	M015	07/01/16	Actual
BEGIN ENVIRONMENTAL	M020	07/01/16	Actual
PA & ED	M200	12/28/18	Actual
PS&E TO DOE	M377	11/01/19	Target
PROJECT PS&E	M380	01/02/20	Target
RIGHT OF WAY CERTIFICATION	M410	02/01/20	Target
READY TO LIST	M460	04/01/20	Target
HEADQUARTERS ADVERTISE	M480	05/01/20	Target
AWARD	M495	07/01/20	Target
APPROVE CONTRACT	M500	08/01/20	Target
CONTRACT ACCEPTANCE	M600	08/01/21	Target
END PROJECT EXPENDITURES	M800	05/01/23	Target
FINAL PROJECT CLOSEOUT	M900	02/01/25	Target

## 12. RISKS

Risks have been assessed and are being managed for critical elements that affect project delivery or costs through the PA&ED, PS&E, and Construction phases.

Major risks for this project include unforeseen underground utilities, right-of-way acquisition, extra dig-outs and repaving of asphalt concrete, extra concrete slab replacements, unanticipated utility relocations, staging loop detector work, traffic device conflicts, inadequate traffic management, noise levels, unidentified facility conflicts, asphalt price index fluctuations, tight weather windows for paving, permits to enter and construct and coordination issues with concurrent projects during construction, bird nesting season, and potential scope creep. Funds for supplemental work and contingencies for the identified risks have been incorporated into the project estimate.

The Risk Register will be maintained and updated for subsequent project development phases. The Risk Register, which summarizes the identified risks, is included in attachment L.



**13. EXTERNAL AGENCY COORDINATION**Federal Highway Administration (FHWA)

Per "Moving Ahead for Progress in the 21st Century" (MAP-21) Act, this project is eligible for Federal-aid funding and is State authorized under current FHWA-Caltrans Stewardship Agreements. No FHWA action is required for this project.

Regional Water Quality Control Board

Clean Water Act Section 401

Water Quality Certification (see SWDR attachment I)

**14. PROJECT REVIEWS**

Scoping team field review	PDT	Date May 7, 2018
District Program Advisor	Robert Camargo	Date January 12, 2018
District Maintenance	Chung Y Chung	Date May 21, 2018
Project Manager	Joon Kang	Date May 17, 2018
District Safety Review	Erwin Madlangbayan	Date May 21, 2018
Constructability Review	Mohinder Chahal	Date May 10, 2018
Other		Date

**15. PROJECT PERSONNEL**

Program Manager	Robert Camargo	(510) 286-4450
Project Manager	Mohammad Suleiman	(510) 622-5943
Design South, Office Chief	Lawrence Jones	(510) 286-5080
Design Special Projects Senior	Gordon Jeong	(510) 286-4739
Project Engineer	Gordon Jeong	(510) 286-4739
Environmental Senior Planner	Eric Denardo	(510) 286-5645
Environmental Planner	Natalie Escoffier	(510) 587-7663
Hydraulics Senior Engineer	Kathleen Reilly	(510) 286-4860
Hydraulics Engineer	Khai Leong	(510) 286-5550
Traffic Safety, Senior Engineer	Katie Yim	(510) 286-4578
Traffic Management, Senior Engineer	Cesar Pujol	(510) 286-4594
Transportation Management Unit	Louis Wong	(510) 286-5524
Engineering Services, Materials	Rick D'Onofrio	(510) 622-1776
Hazardous Waste Branch Chief	Hardeep Takhar	(510) 286-7182
Water Poll. Control, Senior Engineer	Kamran Nakhjiri	(510) 286-5664
Water Pollution Control Engineer	Ridder Alvarez	(510) 286-5256
Water Pollution Control Engineer	Ade Fagorala	(510) 286-5666
Storm Water Treatment Senior	Norman Gonsalves	(510) 286-5930
Senior Right of Way Agent	Sunnie Stanton	(510) 286-5476
Right of Way Coordinator	David Mars	(510) 286-5497
Utility Engineering, Senior Engineer	Hanna Khoury	(510) 622-5456
Utility Engineering	Roger Duan	(510) 286-7194
HQ Pavement Program Advisor	William Farnbach	(916) 275-2924
HQ Program Advisor	Bobby Dosanjh	(916) 274-6078

**16. ATTACHMENTS (Number of Pages)**

- A. Title Sheet (1)
- B. Typical Cross Sections (5)
- C. Categorical Exemption / Categorical Exclusion Determination Form (9)
- D. Right of Way Data Sheet (8)
- E. Materials Recommendation (2)
- F. Pavement Condition Survey Inventory (12)
- G. List of Curb Ramp Locations (8)
- H. TMP Data Sheet (2)
- I. Storm Water Data Report (4)
- J. Preliminary Cost Estimate (10)
- K. SHOPP Programming (1)
- L. Risk Management Plan (5)