

DRAFT

Tab 26

2021 State Highway System Management Plan (SHSMP)

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What is the State Highway System Management Plan?

The SHSMP presents a performance-based framework that guides decision-making and priorities for maintenance, operations and rehabilitation investments

Updated every 2 years (in odd number years)

- **Federal and State Requirements:**

- California Streets and Highway Code (SHC), Section 164.6
- Assembly Bill 515 - combine 10-Year SHOPP and 5-Year Maintenance Plans
- MAP-21 and FAST Act

- **Departmental Requirements:**

Aligns the Highway Maintenance (HM) program and the State Highway Operation and Protection Program (SHOPP) with the Strategic Management Plan.



The 2021 SHSMP Spans 10 Years



Performance-Based Asset Management Approach

Needs Assessment

- Conduct a performance management analysis to determine the total needs, unconstrained by funding.
- Estimate the costs necessary to close all condition and performance gaps.
- *Goal constrained* analysis.

Revenue and Financial Projections

- Determine funding and resources available over the 10-year SHSMP period.

Investment Plan

- Define how available funding is recommended to be allocated.
- Prioritize where available resources should be focused to keep highways functioning with constrained funding.
- Estimate the performance metrics anticipated to be achieved.
- Fiscally constrained analysis.

Needs Assessment Approach

STEP 1 – Asset Inventory

- Establish an asset inventory or deficiency level.

STEP 2 – Baseline & Projected Condition

- Establish the baseline and projected future condition of each objective.

STEP 3 – Target Condition

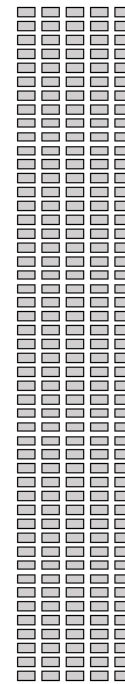
- Establish targets to achieve desired state of repair.

STEP 4 – Performance Gaps

- Perform a gap analysis between the projected condition in 10 years, considering pipelined projects, and the performance targets.

STEP 5 – Cost to Close Performance Gaps

- Estimate the cost to close the performance gaps.



Inventory



Baseline Condition



Projected Do-Nothing Condition



Projected Condition with Pipelined Projects



Target Condition (Desired State of Repair)

Poor Gap

Fair Gap

Needs Assessment Summary

- Total 10 Year SHOPP Needs is \$116 Billion over the 10 year period
- Increase from previous plan largely due to the maturation of our Asset Management program, completion of planning efforts and better data.
- An initial needs assessment of complete streets and sea level rise mitigation is included in the plan.



Fiscally Constrained Investment Plan

- State regulations require that we produce an unconstrained needs assessment and a fiscally constrained investment plan.
- Funds available for the investment plan is approximately \$46 billion over the 10 year period.
- This investment plan continues our commitment to “Fix it First” with almost \$27 billion of the investment in four core asset classes
- This plan also proposes almost \$1.6 billion in bicycle and pedestrian investments over the next 10 years.

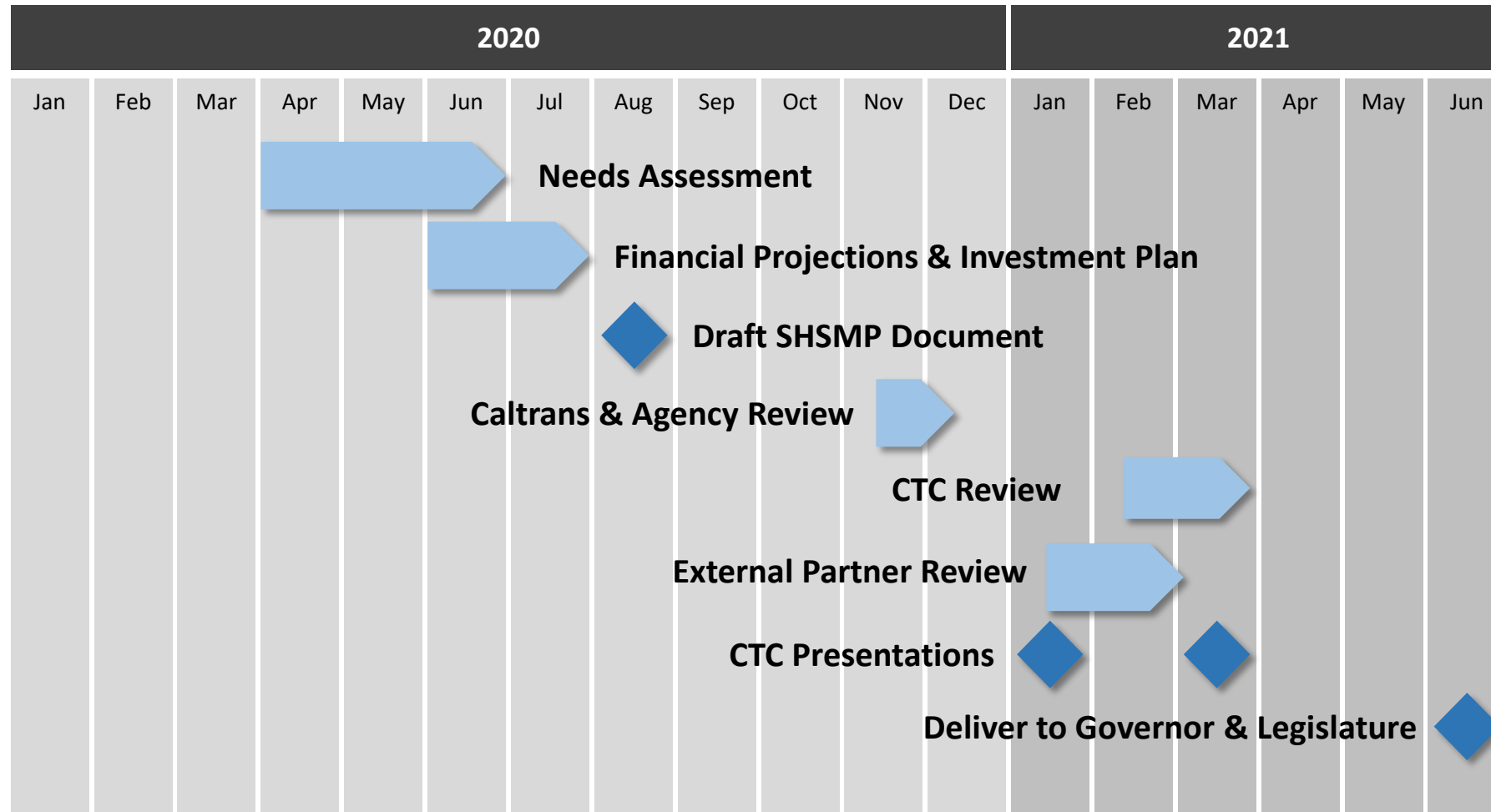


Draft Constrained Investment Plan (Excerpts)

10-Year SHOPP and Maintenance Investment Plan									
Objectives		SHOPP Investment (\$M)			Maintenance (\$M)		Amount of Performance Gap Funded		Strategic Goal
		Pipeline	Gap	Total 10-yr	Major Maintenance	Field Maintenance Crews			
Primary Assets		\$13,335	\$13,460	\$26,795	\$4,903	\$1,515			
Pavement	Class 1	\$4,732	\$5,279	\$10,011	\$3,230	\$181	100%	<div style="width: 100%; height: 15px; background-color: #003366;"></div>	Stewardship
	Class 2	\$3,034	\$3,097	\$6,131			100%	<div style="width: 100%; height: 15px; background-color: #003366;"></div>	Stewardship
	Class 3	\$313	\$308	\$621			100%	<div style="width: 100%; height: 15px; background-color: #003366;"></div>	Stewardship
Bridge and Tunnel Health		\$1,654	\$3,024	\$4,679	\$1,321	\$822	56%	<div style="width: 56%; height: 15px; background-color: #003366;"></div>	Stewardship
Drainage Restoration		\$1,766	\$1,158	\$2,924	\$267	\$249	92%	<div style="width: 92%; height: 15px; background-color: #003366;"></div>	Stewardship
Transportation Management Systems		\$1,835	\$594	\$2,429	\$85	\$263	72%	<div style="width: 72%; height: 15px; background-color: #003366;"></div>	Stewardship
		First 5 Years	Last 5 Years						



2021 SHSMP Timeline



SHSMP Questions?



Virtual Project Book

- Caltrans is pleased to announce the Virtual Project Book dashboard
- Publicly available database of all programmed and planned SHOPP projects for the coming 10 years.
- The Project Book allows projects to be searched by numerous criteria or by map location.
- The project book is intended to improve transparency and provide greater opportunity for public engagement on SHOPP projects
- The dashboard supports mapping and data queries can be downloaded for local use.

Video Demo

- CTC staff to play Virtual Project Book demo video