2019 State Highway System Management Plan (SHSMP)

Director’s Office of Asset Management
What is the SHSMP?

The SHSMP is Caltrans’ plan, integrating the maintenance, rehabilitation, and operation of the State Highway System (SHS).

- **State Requirements:**
  Streets and Highway Code 164.6 (AB515) requires the publication of the SHSMP every two years.

- **Federal Requirements:**
  It implements key federal asset management requirements and is the basis for the SHS portion of the Transportation Asset Management Plan (TAMP).

- **Departmental Requirements:**
  It aligns the Highway Maintenance (HM) program and the State Highway Operation and Protection Program (SHOPP) with the Caltrans Strategic Management Plan.
The 2019 SHSMP Spans 10 Years

- Fiscal years 2019/20 through 2028/29.
- First 5-yrs represents the SHOPP project pipeline.
- Last 5-yrs constitutes the SHOPP performance gap.
- The major maintenance performance gap spans all 10-yrs.
Needs Assessment Approach

STEP 1 – Asset Inventory
• Establish an asset inventory or deficiency level.

STEP 2 – Baseline and 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 and the performance targets.

STEP 5 – Cost to Close Performance Gaps
• Estimate the cost to close the performance gaps.
DRAFT SHOPP Needs Assessment

2017 SHOPP Needs Assessment
Total: $86 B

- Escalation, Other: $16.4 B
- Safety: $13.3 B
- Performance: $9.9 B
- Sustainability: $10.7 B
- Stewardship: $35.5 B

DRAFT 2019 SHOPP Needs Assessment
Total: $90 B

- Escalation, Other: $19.8 B
- Safety: $11.7 B
- Performance: $9.9 B
- Sustainability: $10. B
- Stewardship: $38.4 B
Construction Costs Impact Needs Assessment

- Cost escalation accounts for 75% of the needs growth from 2017 to 2019
Projects are Progressing

2017 Investment Plan

- $24.8 B (66%)
- $12.8 B (34%)

2019 Investment Plan

- $22.2 B (61%)
- $14.4 B (39%)

Pipeline | Non-Pipelined
## Progress Toward Goals

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>SB1 Target</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavement</td>
<td>98% Good or Fair condition</td>
<td>On Track</td>
</tr>
<tr>
<td>Bridges</td>
<td>Fix 500 Bridges</td>
<td>On Track</td>
</tr>
<tr>
<td>Culverts</td>
<td>90% Good or Fair condition</td>
<td>On Track</td>
</tr>
<tr>
<td>TMS Elements</td>
<td>90% Good condition</td>
<td>On Track</td>
</tr>
</tbody>
</table>

### SB1 Goals

<table>
<thead>
<tr>
<th>Asset Class</th>
<th>TAMP Good Targets</th>
<th>TAMP Fair Targets</th>
<th>TAMP Poor Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pavement Class 1</td>
<td>60% Good</td>
<td>39% Fair condition</td>
<td>1% Poor condition</td>
</tr>
<tr>
<td>Pavement Class 2</td>
<td>55% Good</td>
<td>43% Fair condition</td>
<td>2% Poor condition</td>
</tr>
<tr>
<td>Pavement Class 3</td>
<td>45% Good</td>
<td>53% Fair condition</td>
<td>2% Poor condition</td>
</tr>
<tr>
<td>Bridges</td>
<td>83.5% Good</td>
<td>15% Fair area</td>
<td>1.5% Poor area</td>
</tr>
<tr>
<td>Culverts</td>
<td>80% Good</td>
<td>10% fair</td>
<td>10% Poor</td>
</tr>
<tr>
<td>TMS Elements</td>
<td>90% Good</td>
<td>NA</td>
<td>10% Poor</td>
</tr>
</tbody>
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SHSMP Timeline

- SHSMP Kickoff: April 2018
- Draft SHSMP January 2019
- Draft SHSMP CTC Presentation January 2019
- Draft SHSMP to CTC Feb 2019
- CTC Comments March 2019
- Final SHSMP May 2019