

2016

#### Asset Management Performance Report (Asset Management Plan – Phase 1)



Prepared by the California

Department of Transportation
In Accordance with Government Code

Section 14526.5

# Asset Management Performance Report

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## Implementation Progress

- Inventory And Condition Assessment
  - Commission adopted the four core asset classes (Pavement, Bridges, Culverts and ITS elements)
  - Completion of an automated pavement condition survey of state highway pavement.
  - Continued new condition assessment of bridges
  - Continued to build the culvert inventory
- CTC Adoption of performance measures for all four asset classes
- External outreach to our transportation partners through workshops and the formation of the Transportation Asset Management Advisory Committee (TAMAC)

## Implementation Progress

- Implementation of the SHOPP Management Tool
- Evaluation of several commercially available asset management software programs
- Refinement of SHOPP project prioritization methodology
- Risk management data compilation

# Progress and Schedule -20%

Activity	Status	Target Date
Establishment of the Asset Classes	Adopted by CTC March 2015	Complete
Establishment of the performance measures for the four asset classes	Adopted by CTC March 2015	Complete
Internal/External Stakeholder Engagement	Ongoing	NA
Define inventory for the four asset classes	80% Complete	2016*
Performance Goal Setting (New targets for four asset classes using new measures)	Not Started	2017
Performance Gap Analysis	Not Started	2017
Assess the condition of the four asset classes	60% Complete	2018*
Risk Management	80% Complete	2018
Performance Management	20% Complete	2019
SHOPP Project Prioritization (Multi Objective Decision Analysis)	60% Complete	2020
Deterioration Modelling	25% Complete	2020
Life Cycle Cost Analysis	Not Started	2020
Publish Transportation Asset Management Plan	Not Started	2020
Enterprise Asset Management Software Development	Not Started	2022

<sup>\*-</sup> With the exception of the culvert assets

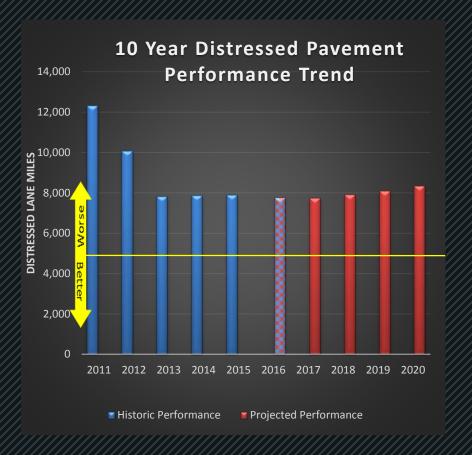
#### **Current Conditions of Four Asset Classes**

Asset Class	Inventory	Distressed Quantity	% Distressed
Pavement	49,720 lane miles of pavement	7,800 Lane Miles	16%
Bridges	12,662 Bridges	620 Bridges	5%

Asset Class	Inventory	% Poor
Culverts	105,000 Culverts (Partial Inventory) 1	14%
Intelligent Transportation System Elements	833 – Changeable Message Signs 42,201 – Freeway Detectors 2,802 - Ramp Meters	13% 36% 21%

<sup>1 –</sup> Culvert inventory is a partial inventory based on inspected culverts. Total inventory is estimated to be 205,000 culverts.

#### Pavement Assets



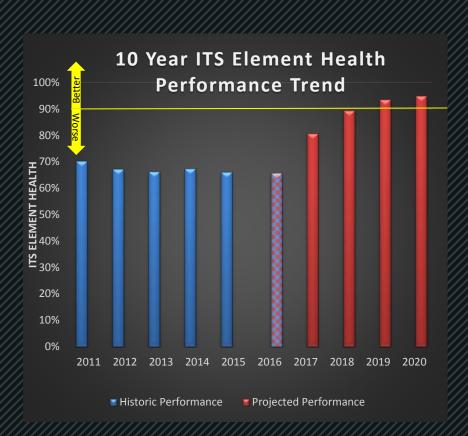
- 142 projects treating a total of 4,876 Lane Miles (LM)
- Rehabilitation of 1,678 LM
- Capital Preventive
   Maintenance of 3,198 LM

## **Bridge Assets**



- 40 bridge replacements
- 138 bridge rehabilitations
- 83,832 feet of bridge rail upgrades
- 19 bridge mobility upgrades (raise/strengthen)
- 26 Preventive Maintenance on 208 bridges

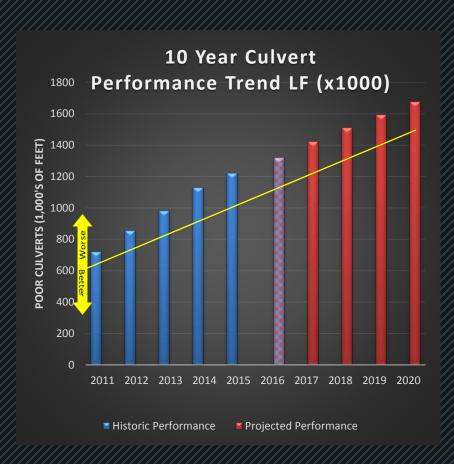
## Traffic Management System Assets



<sup>\*</sup> Performance of CMS, Ramp Meter, and Detection only

- 30 Intelligent Transportation System (ITS) Projects
- Almost 1600 ITS elements replaced
- Over 1100 new ITS elements added

### Culvert Assets



- 37 projects
- 669 Culverts rehabilitated or replaced
- A total length of over 64,000 linear feet

## Summary

- The TAMP work is progressing on schedule for a 2020 implementation
- Phase 1 of the TAMP includes a performance analysis of the four asset classes
- The 2016 SHOPP was influenced by the Asset Management Performance Analysis
- Future SHOPP's will be increasingly influenced by the asset management implementation