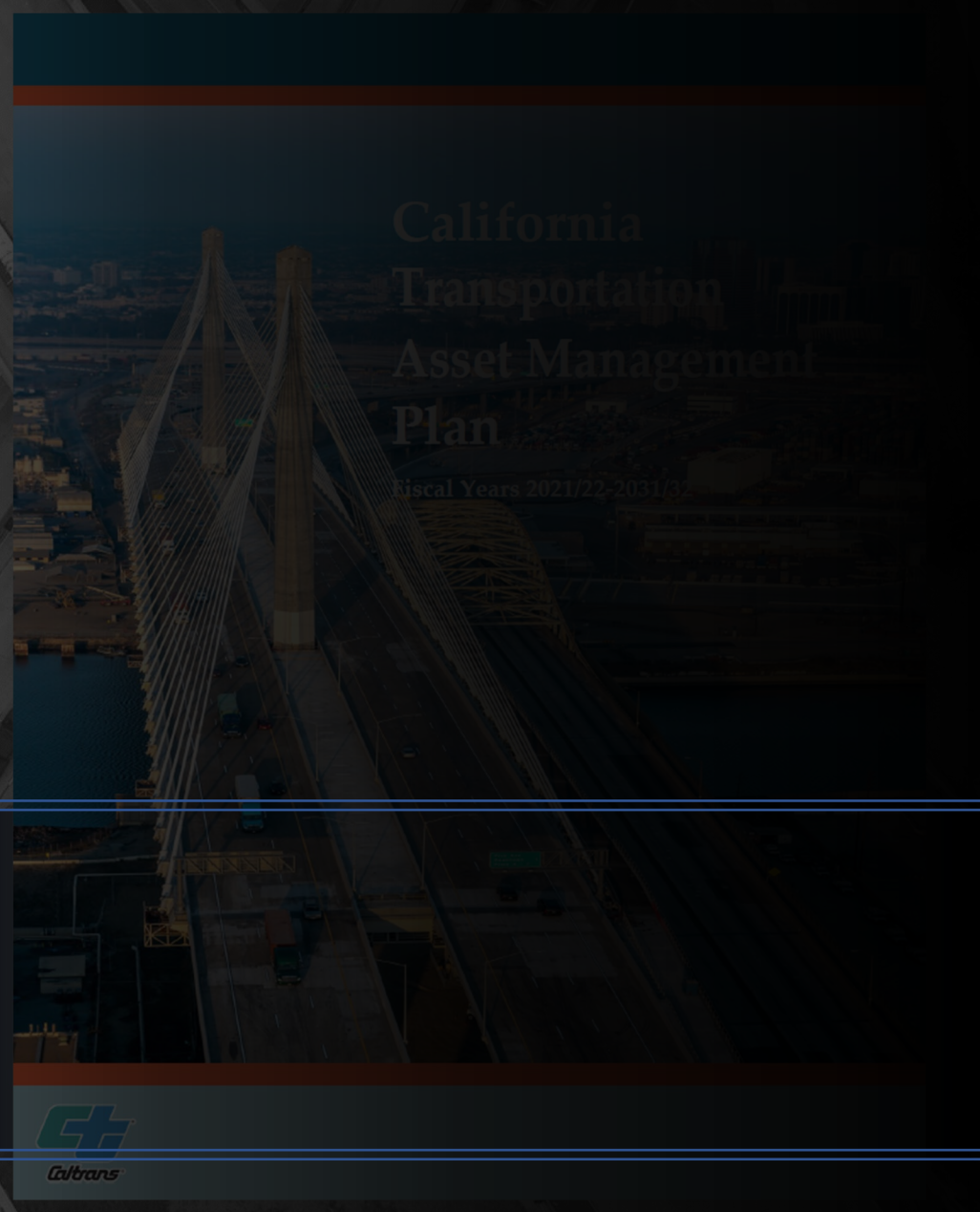California Transportation Asset Management Plan

2026 TAMP Kick-Off

March 26, 2025

Welcome

California Transportation Asset Management Plan

Fiscal Years 2021/22-2031/32

2026 TAMP Kick-Off Agenda

- TAMP Fundamentals

- Asset Inventory and Condition

- Financial Planning
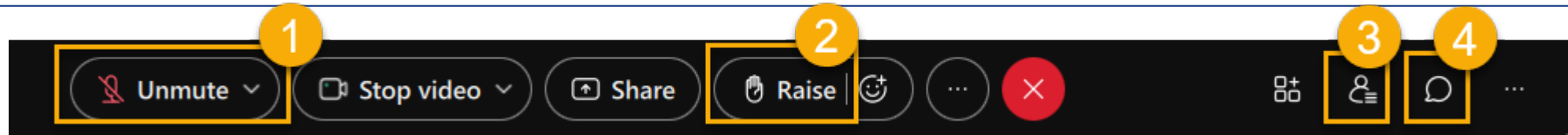
- Target Setting

- Closing Remarks for Workshop

Workshop will be recorded and posted to:

https://dot.ca.gov/programs/asset-management/california-transportation-asset-management-plan

Webex Quick-Guide

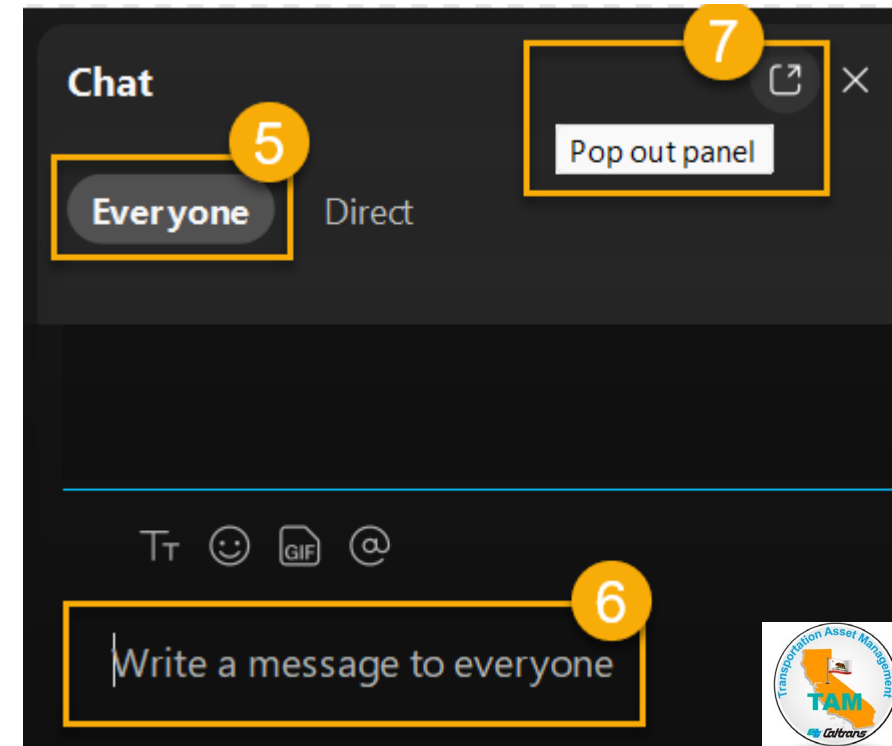- Function Bar

    1 = Audio Settings

    2 = Raise Hand

    3 = Participant Panel

    4 = Chat

- Chat – Use Chat to Everyone (5 and 6)

- Pop out option for Chat Panel and Participant Panel (7)

- If you need technical assistance or have questions, please email: CT-TAM@dot.ca.gov

TAMP Background

Michael B. Johnson

Statewide Asset Management Engineer

HQ Asset Management, Caltrans

TAMP Purpose

- Maximize investments by managing the life-cycle of transportation assets strategically to minimize costs

- Meet state and federal TAMP Requirements
  - State: (California Government Code section (14526) modified by Senate Bill 486)
  - Federal: (23 U.S.C. 119(e)(1), MAP-21 § 1106)

Background (Federal Law – MAP-21 - IIJA)

- Federal Regulation (MAP-21-IIJA) requires the development of a Transportation Asset Management Plan (TAMP) with National Performance Measures for pavement and bridges.

- The TAMP shall include the entire National Highway System (NHS).

- The TAMP Requires the implementation of Performance Management which requires performance targets to be set using the National Measures.

Background (California Government Code SB 486)

- Government Code requires a "robust asset management plan" to guide the selection of projects in the SHOPP.

- The Asset Management Plan shall be consistent with Federal Law.

- Performance measures and targets are approved by the CTC.

- Projects shall be limited to maintenance, safety, operation, and rehabilitation of state highways and bridges that do not add a new traffic lane to the system.

MPO/City/County Role in the TAMP

- Sets performance targets for condition of NHS pavement and bridges over a 10-Year time period.

- Targets are set for the entire NHS regardless of owner.

- NHS is owned by both Caltrans and local cities and counties.

- MPOs are recognized in federal asset management law.
  - Cities and counties are responsible for implementing asset management
  - Cities and counties are encouraged to work through the MPO to ensure their assets, funding, and targets are reflected in the MPO submittal.

- Caltrans and MPOs have established agreements specific to asset management in support of federal requirements.
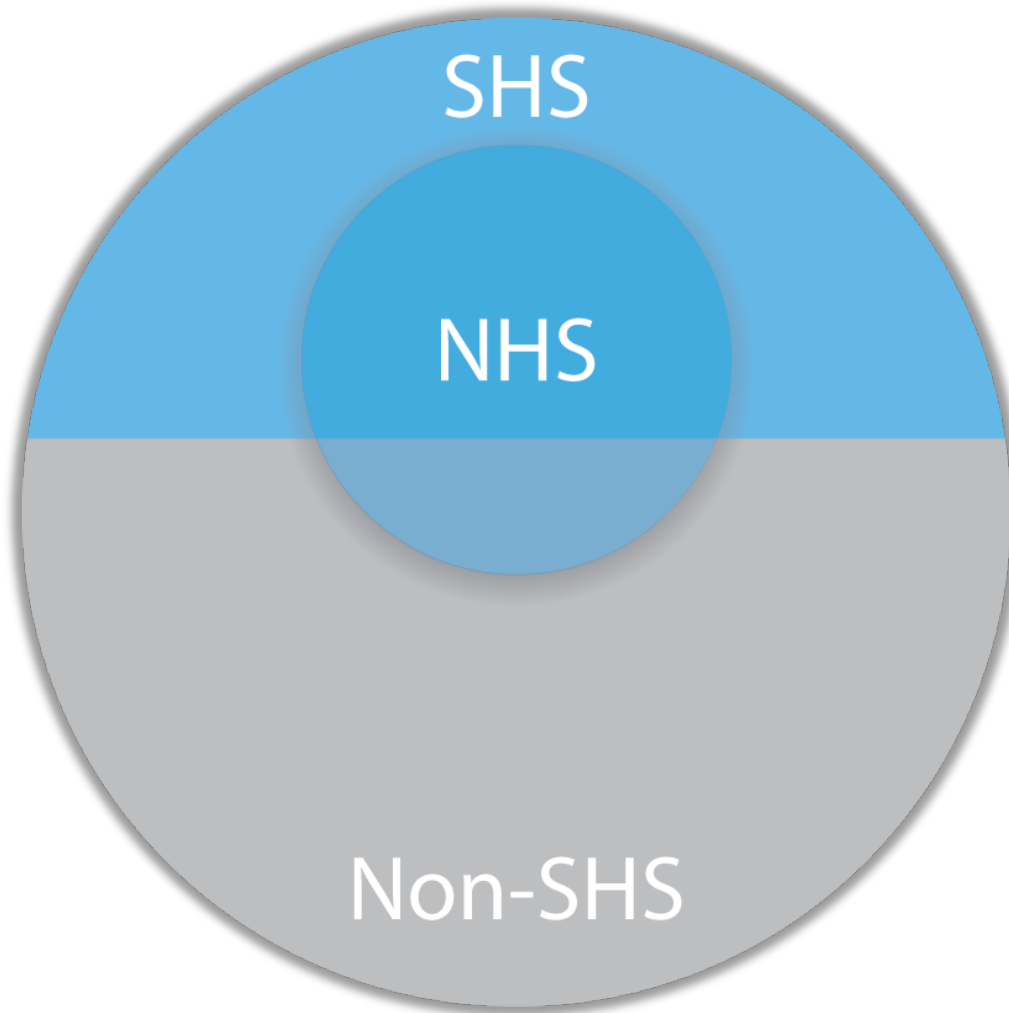
MPO Contacts
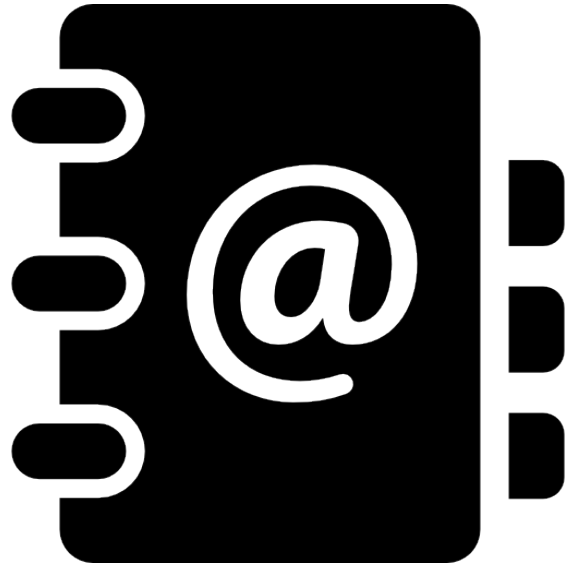
Please identify the designated point of contact for your MPO and enter this in the chat.

Assets in the California TAMP

SHS

NHS

Non-SHS

SHS - State owned and managed
NHS - Federally designated and State and locally owned and managed
Non-SHS - Locally owned and managed (off the SHS)
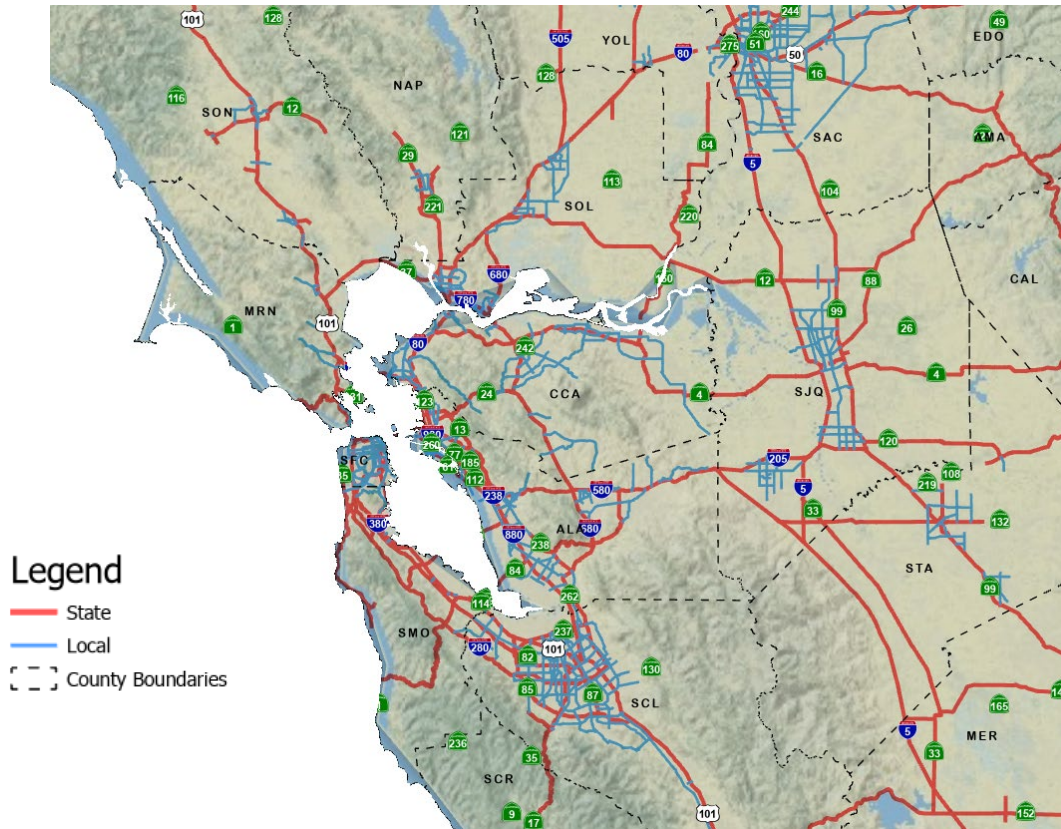
California NHS

National Highway System

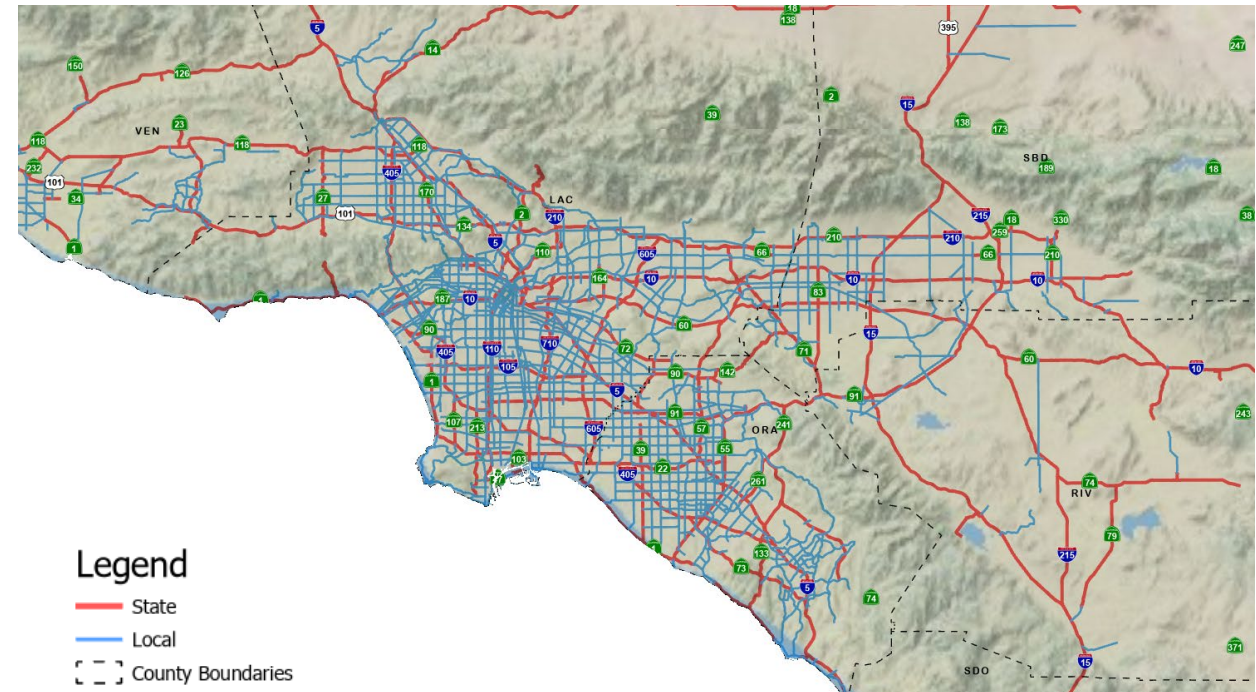Legend
— State
— Local
⌐ ⌐ County Boundaries

NHS – Bay Area & Los Angeles Area

Bay Area NHS

Los Angeles Area NHS

Asset Classes

NHS
Federal Requirements

SHS
State Requirements

Inventory & Condition

HQ Asset Management, Caltrans

TAMP Fundamentals - Required Elements

NHS Pavement and Bridge Inventory & Condition

Financial Planning

Performance Targets & Gaps

Risk Management

Life Cycle Planning

Investment Strategies

Process Improvements

- Good/fair/poor measure determined based on 4 metrics
  - If all are good the combined measure is good
  - If $\geq$2 metrics are poor the combined measure is poor
- Need to report conditions and targets for % good and poor for Interstate and non-Interstate NHS
- Rule sets an additional goal of $\leq$5% poor for Interstates (currently 2.4%)

23 U.S.C. 119(e)(1), MAP-21 § 1106 - Subpart C (490.300s)

HPMS Field Manual:
https://www.fhwa.dot.gov/policyinformation/hpms.cfm

NHS Pavement Condition Thresholds

Condition Thresholds			
Metric	Good	Fair	Poor
IRI (inches/mile)	<95	95-170	>170
Cracking (%)			
- Asphalt	<5	5-20	>20
- Jointed Concrete	<5	5-15	>15
- Continuously Reinforced Concrete	<5	5-10	>10
Rutting (inches)	<0.20	0.20-0.40	>0.40
Faulting (inches)	<0.10	0.10-0.15	>0.15

2024 Performance Measures: Local vs State NHS Pavement

LOCAL LANE MILES (LM) OF PAVEMENT
36% OF TOTAL NHS

Good
750
3.6%

Poor
2,727
13.0%
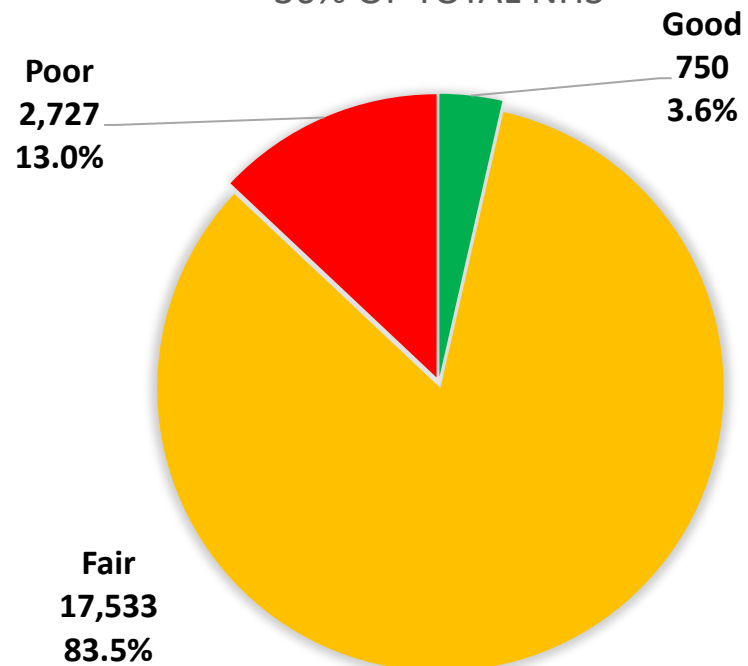
Fair
17,533
83.5%

STATE LANE MILES (LM) OF PAVEMENT
64% OF TOTAL NHS

Poor
870
2.3%

Good
17,006
44.7%
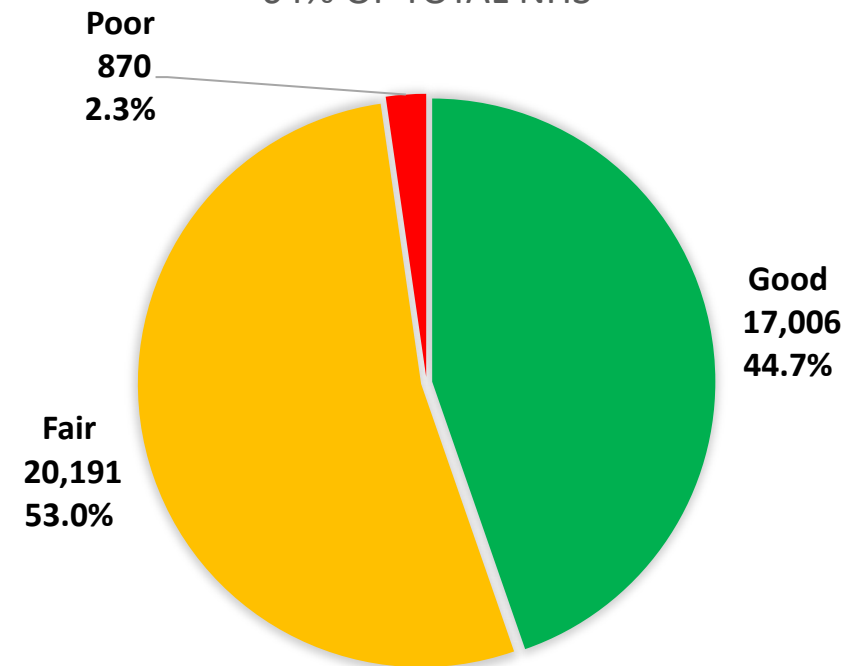
Fair
20,191
53.0%

National Bridge Performance Measures

- Good/Fair/Poor measure based on NBI ratings
  - Use minimum of deck, superstructure, and substructure
  - Report conditions and targets for % good and poor for NHS bridges

- Additional goal of ≤10% of the NHS bridge deck area structurally deficient (currently 6.7%)

*23 U.S.C. 119(e)(1), MAP-21 § 1106 - Subpart D (490.400s)*
NBI Coding Manual: https://www.fhwa.dot.gov/bridge/mtguide.pdf

NBI Rating Scale *(from 0 – 9)*

9 8 7	6 5	4 3 2 1 0
Good	Fair	Poor

Bridge		Good	Fair	Poor
	Deck (Item 58)	≥7	5 or 6	≤4
	Superstructure (Item 59)	≥7	5 or 6	≤4
	Substructure (Item 60)	≥7	5 or 6	≤4
	Culvert (Item 62)	≥7	5 or 6	≤4

2024 Performance Measures: Local vs State NHS Bridges

LOCAL NHS BRIDGE DECK AREA (SQFT)
10% OF TOTAL NHS

Poor
2,971,714
12.3%

Good
9,421,018
38.9%

Fair
11,850,989
48.9%
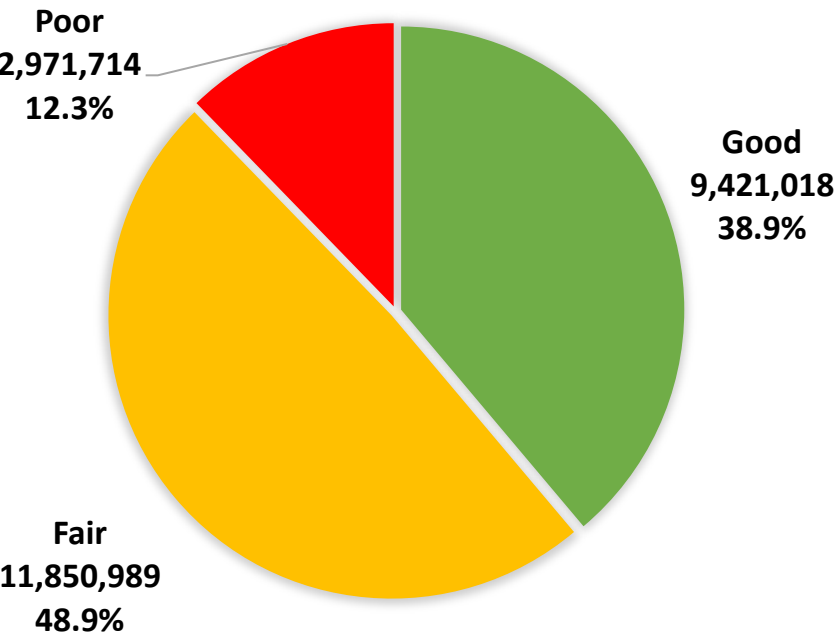
STATE NHS BRIDGE DECK AREA (SQFT)
90% OF TOTAL NHS

Poor
12,514,037
6.0%

Good
89,417,533
42.9%

Fair
106,685,359
51.1%
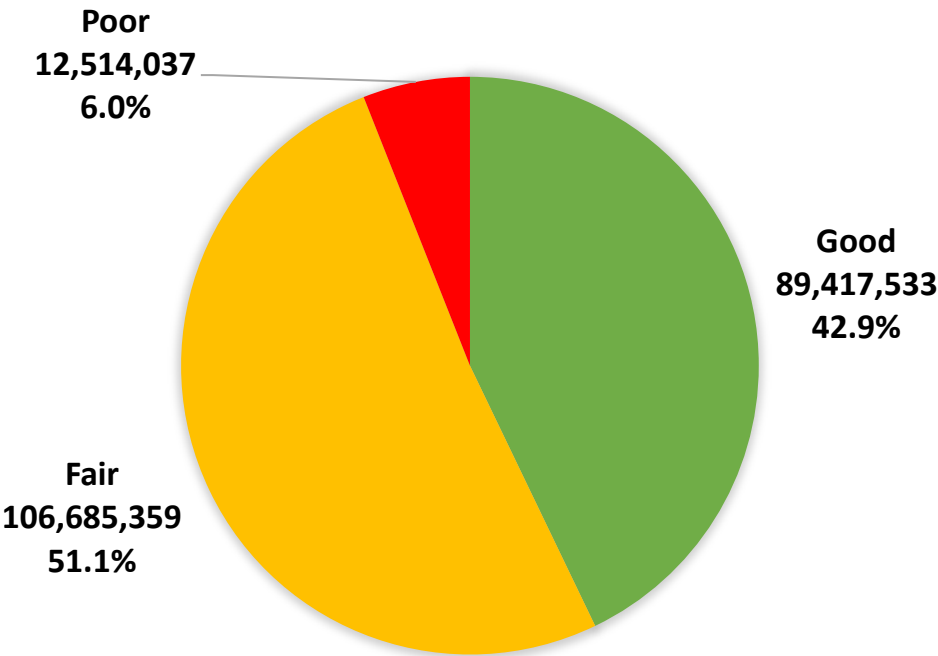
Data Resources for State & Local NHS Assets in California

Loren Turner & Andrew Lozano

HQ Asset Management, Caltrans

Data for Pavement & Bridges on the NHS

- Caltrans collects pavement condition data for the full NHS (state and local owned) based on federal performance metrics and submits this to the FHWA annually through the *Highway Performance Monitoring System (HPMS)*.

  https://www.fhwa.dot.gov/policyinformation/hpms.cfm

- Caltrans collects bridge condition data for all state and most local bridges on the NHS. Data is submitted annually to the FHWA as part of the *National Bridge Inventory (NBI)* process.

 https://www.fhwa.dot.gov/bridge/nbi.cfm

NHS Inventory and Condition Data Files

- To support development of the 2026 TAMP, Caltrans has prepared a suite of mapping and tabular data products for each MPO/RTPA region.

- The data files include HPMS and NBI condition data for the NHS pavement and bridge assets owned by each agency.

Excel Spreadsheets

Tabular data with inventory and condition data and other key asset attributes.
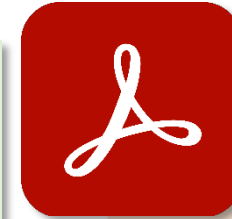
PDF Map Plates

Formatted map plates showing local NHS pavement and bridge assets in the MPO region.

ArcGIS Geodatabase

Data files to support advanced mapping and further geospatial analyses.

Google Earth KMZ

Data files to support map-based visualization of NHS assets in the context of satellite imagery.
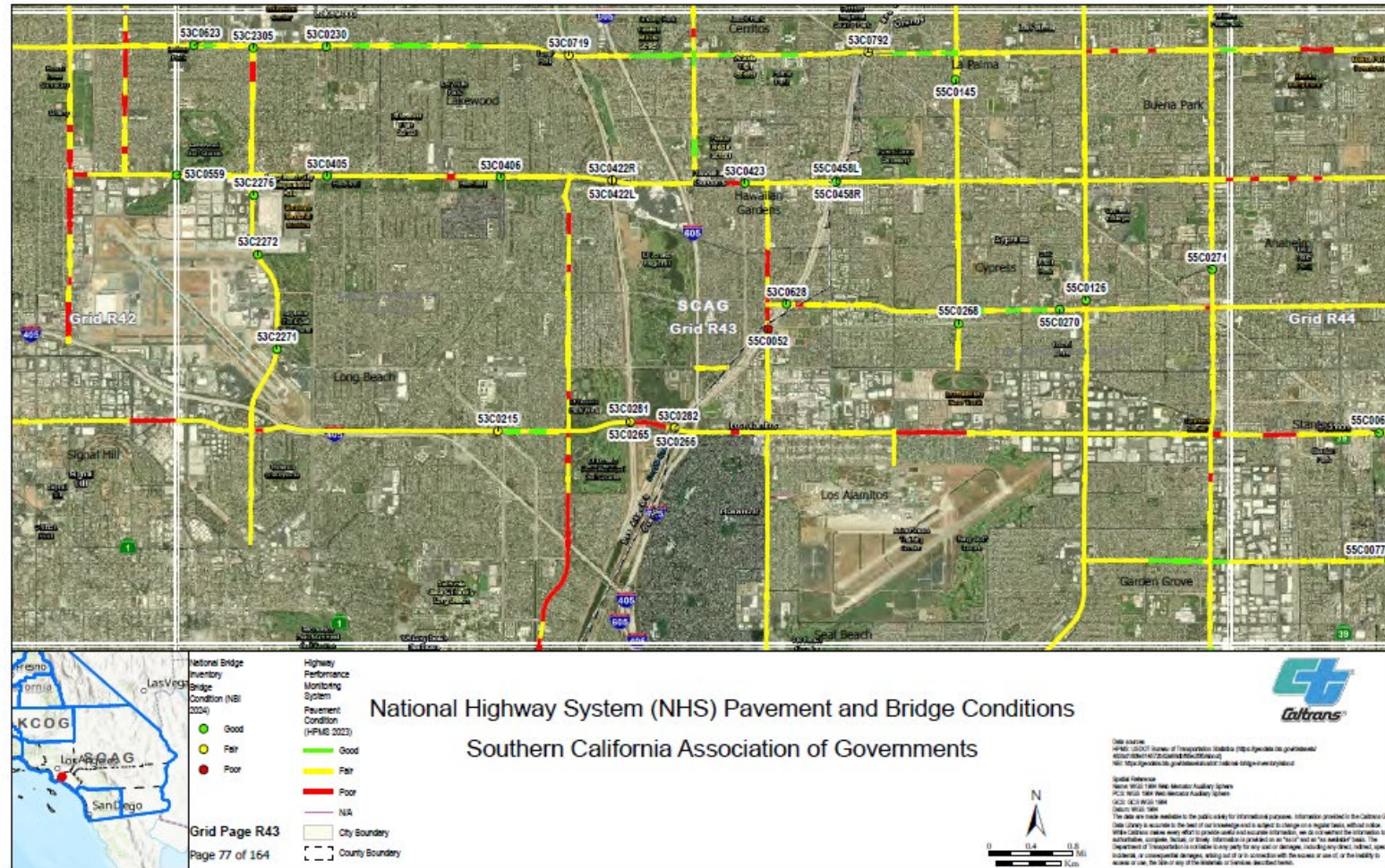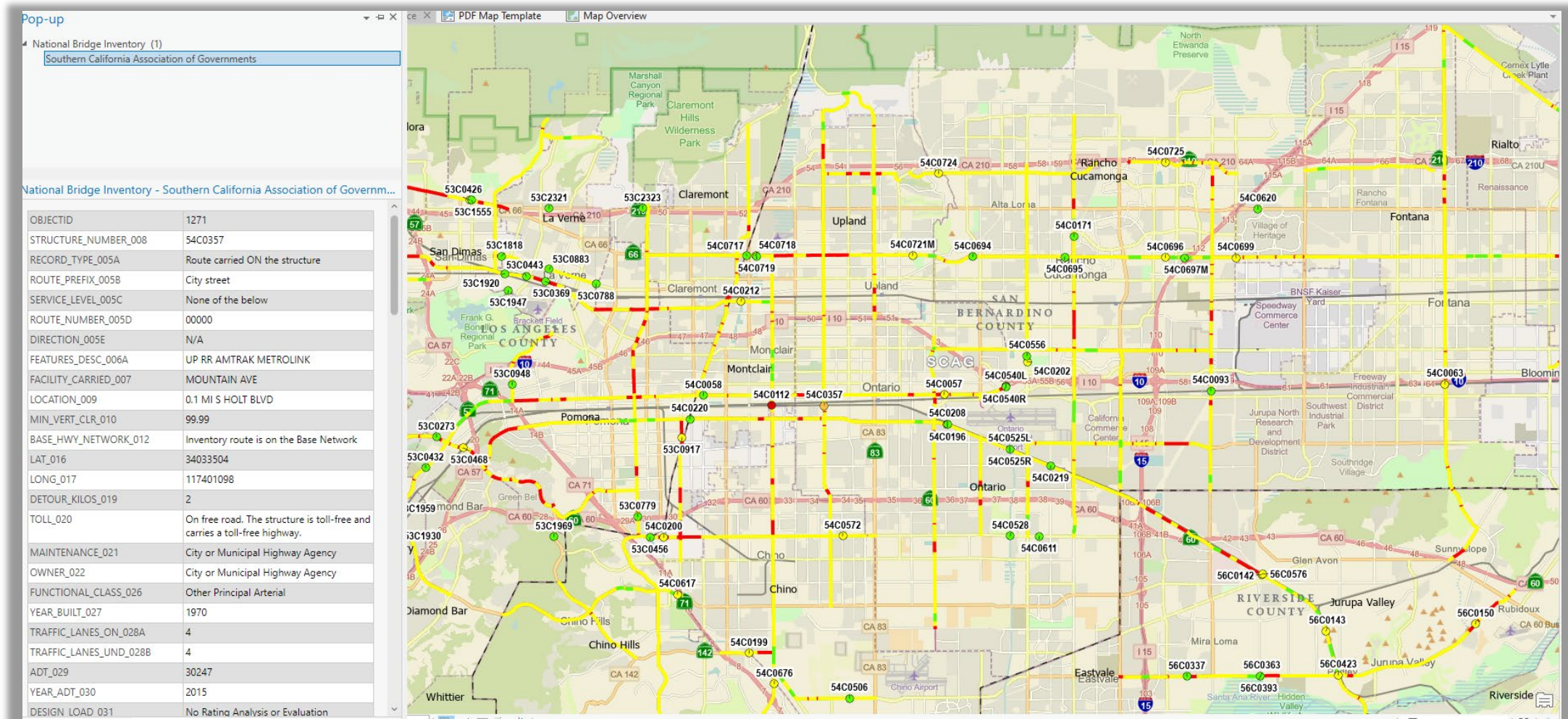
Excel Spreadsheets

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
1	ROUTE ID	BEGIN POINT	ENDPOINT	FACILITY_TYPE	AADT	IRI (inches/mile)	RUTTING (inches)	FAULTING (inches)	CRACKING (%)	OWNERSHIP (LOCAL or STATE)	OWNERSHIP (INTERSTATE or NON-INTERSTATE)	F_SYSTEM	PAVEMENT OVERALL CONDITION	IRI CONDITION	RUTTING CONDITION	FAULTING CONDITION	CRACKING CONDITION	LANES
2	CC_ECR_SAN PABL	2.634	2.7	Two-Way Roa	14195	230	0.19	<Null>	7	Local	Non-Interstate	Principal Arterial-Ot	Fair	Poor	Good	<Null>	Fair	4
3	SHS_078._P	0.066	0.1	Two-Way Roa	91500	153	0.16	<Null>	32	State	Non-Interstate	Principal Arterial-Ot	Fair	Fair	Good	<Null>	Poor	6
4	SHS_036._P	125.1	125.179	Two-Way Roa	1040	59	0.09	<Null>	0	State	Non-Interstate	Minor Arterial	Good	Good	Good	<Null>	Good	2
5	SD_SMCS_N TWIN	2.994	3	Two-Way Roa	10559	164	0.19	<Null>	5	Local	Non-Interstate	Principal Arterial-Ot	Fair	Fair	Good	<Null>	Fair	4
6	SHS_082._P	40.103	40.182	Two-Way Roa	28750	316	<Null>	0.03	3	State	Non-Interstate	Principal Arterial-Ot	Fair	Poor	<Null>	Good	Good	6
7	KER_BKD_S MOUN	1.94	1.964	Two-Way Roa	14004	122	0.17	<Null>	1	Local	Non-Interstate	Principal Arterial-Ot	Fair	Fair	Good	<Null>	Good	4
8	SHS_395._P	444.9	445	Two-Way Roa	905	72	0.19	<Null>	1	State	Non-Interstate	Principal Arterial-Ot	Good	Good	Good	<Null>	Good	2
9	ORA_ANA_S EUCL	4.386	4.4	Two-Way Roa	41851	130	0.08	<Null>	0	Local	Non-Interstate	Principal Arterial-Ot	Fair	Fair	Good	<Null>	Good	4
10	LA_VER_E 37TH ST	1.1	1.127	Two-Way Roa	21683	112	<Null>	0.08	10	Local	Non-Interstate	Principal Arterial-Ot	Fair	Fair	Good	<Null>	Good	Fair	4
11	SHS_088._P	120.8	120.9	Two-Way Roa	3325	71	0.19	<Null>	4	State	Non-Interstate	Principal Arterial-Ot	Good	Good	Good	<Null>	Good	2
12	SHS_198._P	96.6	96.605	Two-Way Roa	34000	108	<Null>	0.02	0	State	Non-Interstate	Principal Arterial-Ot	Fair	Fair	<Null>	Good	Good	4
13	SHS_199._P	15.8	15.9	Two-Way Roa	5050	67	0.14	<Null>	0	State	Non-Interstate	Principal Arterial-Ot	Good	Good	Good	<Null>	Good	4
14	LA_CO_PECK RD_F	0.588	0.6	Two-Way Roa	17779	224	0.16	<Null>	24	Local	Non-Interstate	Principal Arterial-Ot	Poor	Poor	Good	<Null>	Poor	4
15	SHS_273._P	11.2	11.205	Two-Way Roa	14750	104	0.14	<Null>	13	State	Non-Interstate	Principal Arterial-Ot	Fair	Fair	Good	<Null>	Fair	4
16	SHS_040._P	38.9	39	Two-Way Roa	16000	72	0.19	<Null>	16	State	Interstate	Interstate	Fair	Good	Good	<Null>	Fair	4
17	SHS_395._P	199.9	200	Two-Way Roa	7000	49	0.12	<Null>	7	State	Non-Interstate	Principal Arterial-Ot	Fair	Good	Good	<Null>	Fair	4
18	ORA_STT_KNOTT /	0.923	0.998	Two-Way Roa	36592	199	0.2	<Null>	10	Local	Non-Interstate	Principal Arterial-Ot	Fair	Poor	Fair	<Null>	Fair	4
19	SHS_001._P	117.6	117.7	Two-Way Roa	7650	71	0.11	<Null>	0	State	Non-Interstate	Principal Arterial-Ot	Good	Good	Good	<Null>	Good	2
20	SHS_089._P	208.104	208.115	Two-Way Roa	1375	109	0.2	<Null>	8	State	Non-Interstate	Principal Arterial-Ot	Fair	Fair	Fair	<Null>	Fair	2
21	LA_VER_S ATLANT	1.8	1.804	Two-Way Roa	22055	411	<Null>	0.1	0	Local	Non-Interstate	Principal Arterial-Ot	Fair	Poor	<Null>	Fair	Good	4
22	SHS_273._P	0.261	0.3	Two-Way Roa	8150	71	0.09	<Null>	0	State	Non-Interstate	Principal Arterial-Ot	Good	Good	Good	<Null>	Good	4
23	SHS_140._P	83.6	83.7	Two-Way Roa	1950	181	0.11	<Null>	5	State	Non-Interstate	Principal Arterial-Ot	Fair	Poor	Good	<Null>	Fair	2
24	ORA_SLB_BOLSA /	6.305	6.323	Two-Way Roa	21551	174	0.07	<Null>	0	Local	Non-Interstate	Principal Arterial-Ot	Fair	Poor	Good	<Null>	Good	4
25	SCL_SCL_E ARQUE	0.3	0.4	Two-Way Roa	12670	159	0.2	<Null>	3	Local	Non-Interstate	Principal Arterial-Ot	Fair	Fair	Fair	<Null>	Good	4
26	SB_GLTA_N PATTE	0.6	0.7	Two-Way Roa	8421	148	0.1	<Null>	2	Local	Non-Interstate	Principal Arterial-Ot	Fair	Fair	Good	<Null>	Good	4
27	SHS_004._P	60.076	60.095	Two-Way Roa	17900	91	0.1	<Null>	1	State	Non-Interstate	Principal Arterial-Ot	Good	Good	Good	<Null>	Good	4
28	ORA_MSNV_MUIR	2.702	2.8	Two-Way Roa	10659	146	0.1	<Null>	6	Local	Non-Interstate	Principal Arterial-Ot	Fair	Fair	Good	<Null>	Fair	4
29	SHS_680._P	42.2	42.3	Two-Way Roa	156000	69	0.13	<Null>	0	State	Interstate	Interstate	Good	Good	Good	<Null>	Good	8
30	SHS_072._P	6.234	6.263	Two-Way Roa	27000	269	0.26	<Null>	0	State	Non-Interstate	Principal Arterial-Ot	Fair	Poor	Fair	<Null>	Good	4

PDF Map Plates

National Highway System (NHS) Pavement and Bridge Conditions
Southern California Association of Governments

ArcGIS Geodatabase

Google Earth KMZ (Demonstration)

Using the NHS Pavement & Bridge Data

- The set of mapping and tabular data products for each MPO/RTPA region will be provided to each agency following the workshop.

- Additional resources on how to use the data products will be available on the Caltrans website for the 2026 TAMP at:

    https://dot.ca.gov/programs/asset-management/california-transportation-asset-management-plan

- An optional virtual session will be set up for next week to provide guidance on using the NHS Pavement & Bridge data products.

Break
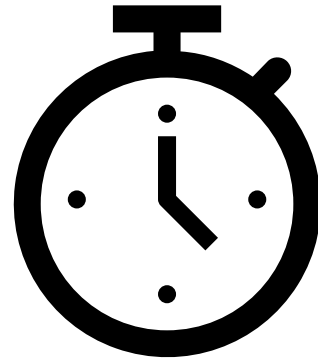
(Please return in 10 minutes)

TAMP Financial Planning

Loren Turner

HQ Asset Management, Caltrans

NHS Pavement and Bridge Inventory & Condition

Financial Planning

Performance Targets & Gaps

Risk Management

Life Cycle Planning

Investment Strategies

Process Improvements

Financial Planning in the TAMP

TAMP Requirements:

- Estimated cost of expected future work to implement the investment strategies of the asset management plan, by fiscal year and work type.

- Estimated funding levels to address the costs of future work types by fiscal year.

- Identification of anticipated funding sources and magnitude of available resources for asset management.

- Asset valuation estimate for NHS pavements and bridges assets and the needed annual investment to maintain asset value.

U.S. Department of Transportation
Federal Highway Administration

The Five Federal Work Types

- ☐ Initial Construction
- ☐ Maintenance
- ☐ Preservation
- ☐ Rehabilitation
- ☐ Reconstruction

Additional information available:
https://dot.ca.gov/-/media/dot-media/programs/asset-management/documents/asset-management-fact-sheet-a11y.pdf

Projecting Local NHS 10-year Investments

STEP 1:

Obtain statewide expenditure data from the State Controller's Office (SCO) *By the Numbers* website. (https://bythenumbers.sco.ca.gov/)

STEP 2:

Assign project level expenditures to pavement or bridge work (based on "Expenditure Description" attribute) and FHWA work type (based on "Expenditure Class" attribute).

STEP 3:

Include other project related expenses such as right of way and administration and engineering support.

STEP 4:

Expenditures by Federal Work Type for each MPO are multiplied by proportion of NHS inventory to total local inventory within the region.

STEP 5:

Develop initial estimate of projected NHS investments based on past 2-year expenditures.

Financial Data To Be Provided

- Caltrans will provide an estimate of expected annual investments in NHS pavements and bridges for each MPO.

- Provide breakdown by Federal Work Type.

- Based on a 2-year annual average of SCO expenditure data as reported by local agencies.

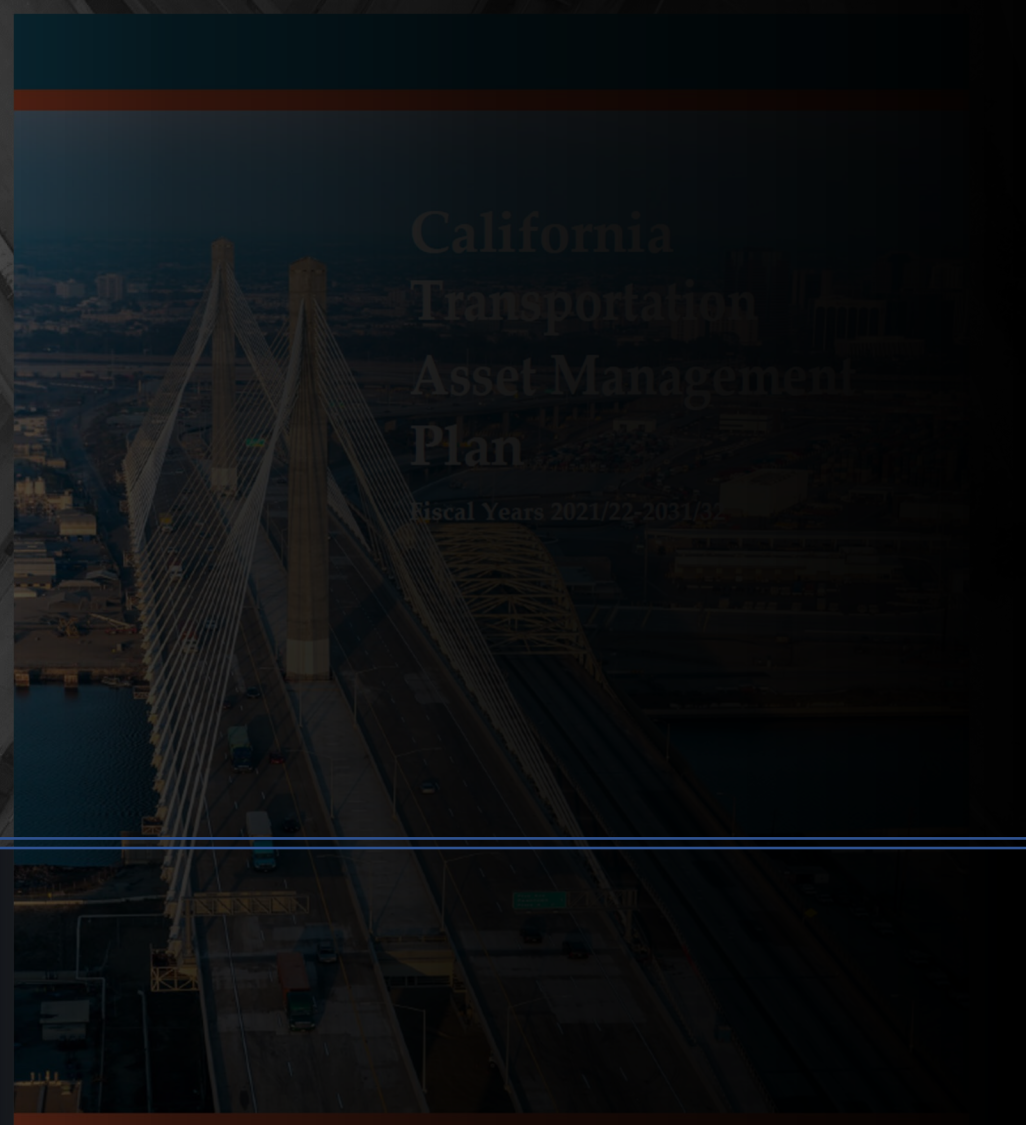- Projection assumes cities and counties will invest in NHS assets in proportion to the local inventory.

Asset Management Target Setting

Michael B. Johnson & Youwei Zhou

HQ Asset Management, Caltrans

NHS Pavement and Bridge Inventory & Condition

Financial Planning

Performance Targets & Gaps

Risk Management

Life Cycle Planning

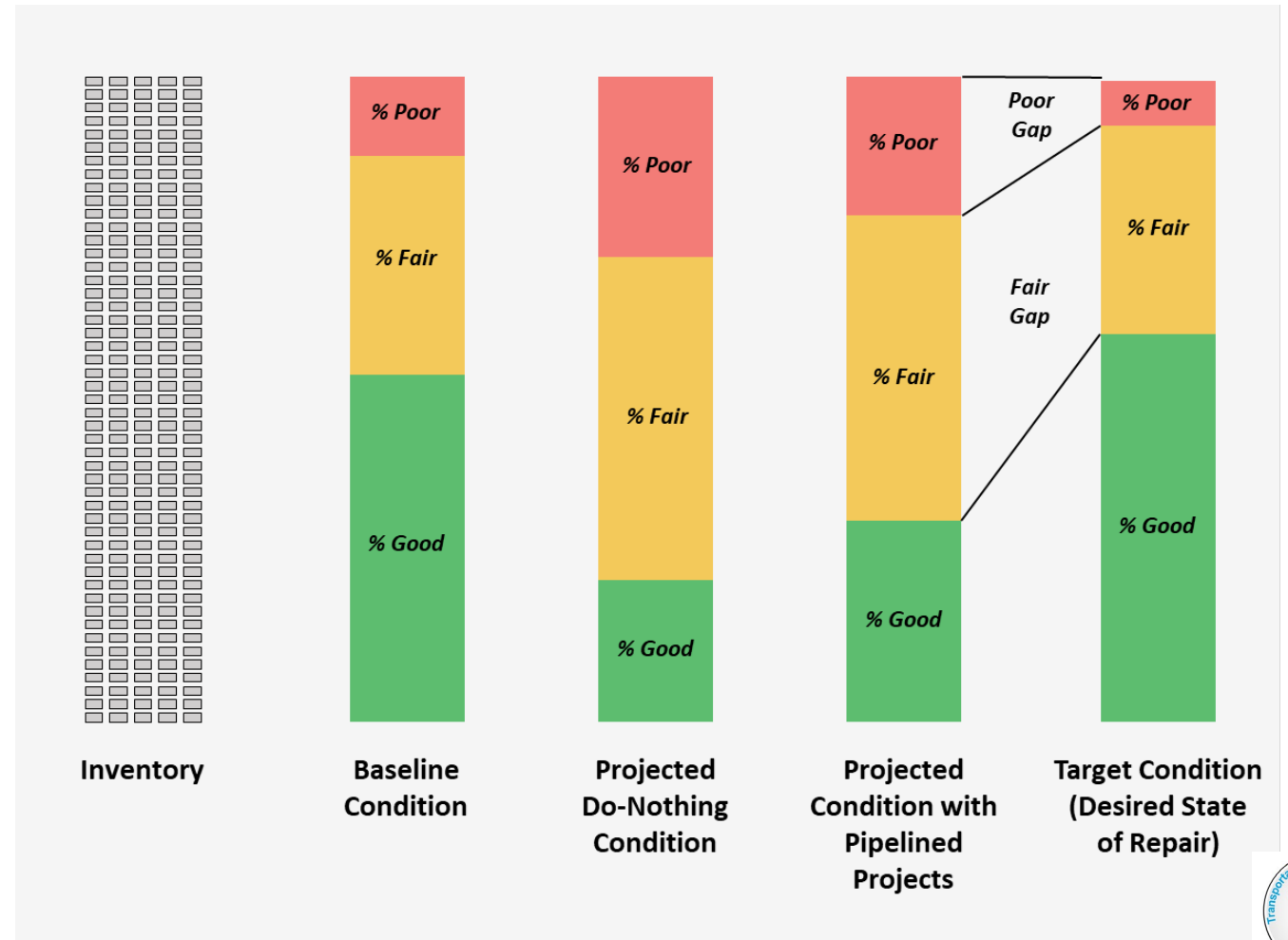Investment Strategies

Process Improvements

TAMP Performance Targets

- Asset performance targets specify conditions California seeks to achieve and sustain over a 10-year period and will be used to guide strategic planning decisions.

- The FHWA also require 2 & 4 year targets to measure progress.

- The California TAMP targets will need to reflect the varied starting condition levels and funding availability of NHS asset owners.

- Desired State of Repair (DSOR) Targets may be updated in the 2026 TAMP.

- If progress isn't made, investment strategies in TAMP are reviewed to determine what adjustments are needed.

Performance Gap Analysis

- Baseline Condition is from latest Caltrans submittal to FHWA

- Project Do-Nothing Condition is from asset deterioration

- Projected Condition with Pipeline Projects is from all the construction work in the 5 federal work types programmed in the STIP/SHOPP/Local CIP/Maintenance Programs

- Target Condition is the Desired State of Repair (DSOR) at end of 10-year period

- Performance Gaps is the difference between Projected Condition and DSOR Target

Performance Target Analysis Tool (PTAT)

- Purpose
  - Target Setting
  - Gap Analysis and Needs
  - Evaluation of Investment Strategies
- Excel Tool
  - Instructions
  - Tool
    - Bridge Tab
    - Pavement Tab

2026 California TAMP Performance Target Assessment Tool

Instructions

- Detailed instructions on how to use the tool (Bridge and Pavement Tabs)

Instructions

1. Overview

This tool is developed for the 2026 TAMP to establish agency-specific long-term 10-Year and short-term 4-Year TAMP Targets for pavement and bridge assets on the NHS.

The tool is organized into four parts: A, B, C and D. Analysis inputs and summary of results are included in Part B ("Analysis Parameters") and Part C ("Analysis Results"). The user may input key assumptions in Part B of the Tool, including funding, unit costs and deterioration rates. Part C projects the asset conditions and estimates performance and cost gaps to achieve assumed targets.

The instructions below explain each part of the Tool in more detail.

2. Instructions

A. Legend

Cells for data entry

Only the cells highlighted in green are editable. Other cells are either pre-set or calculated and not allowed for edits.

B. Analysis Parameters

General

Agency

The short or abbreviated name of your agency.

Asset

The type of asset analyzed, either Pavement or Bridge can be selected. Most agencies have both pavement and bridge assets. Sep[ ] worksheets created for Pavement and Bridge to run analysis and review results. Once satisfied with results, a final pdf and excel ve[ ]
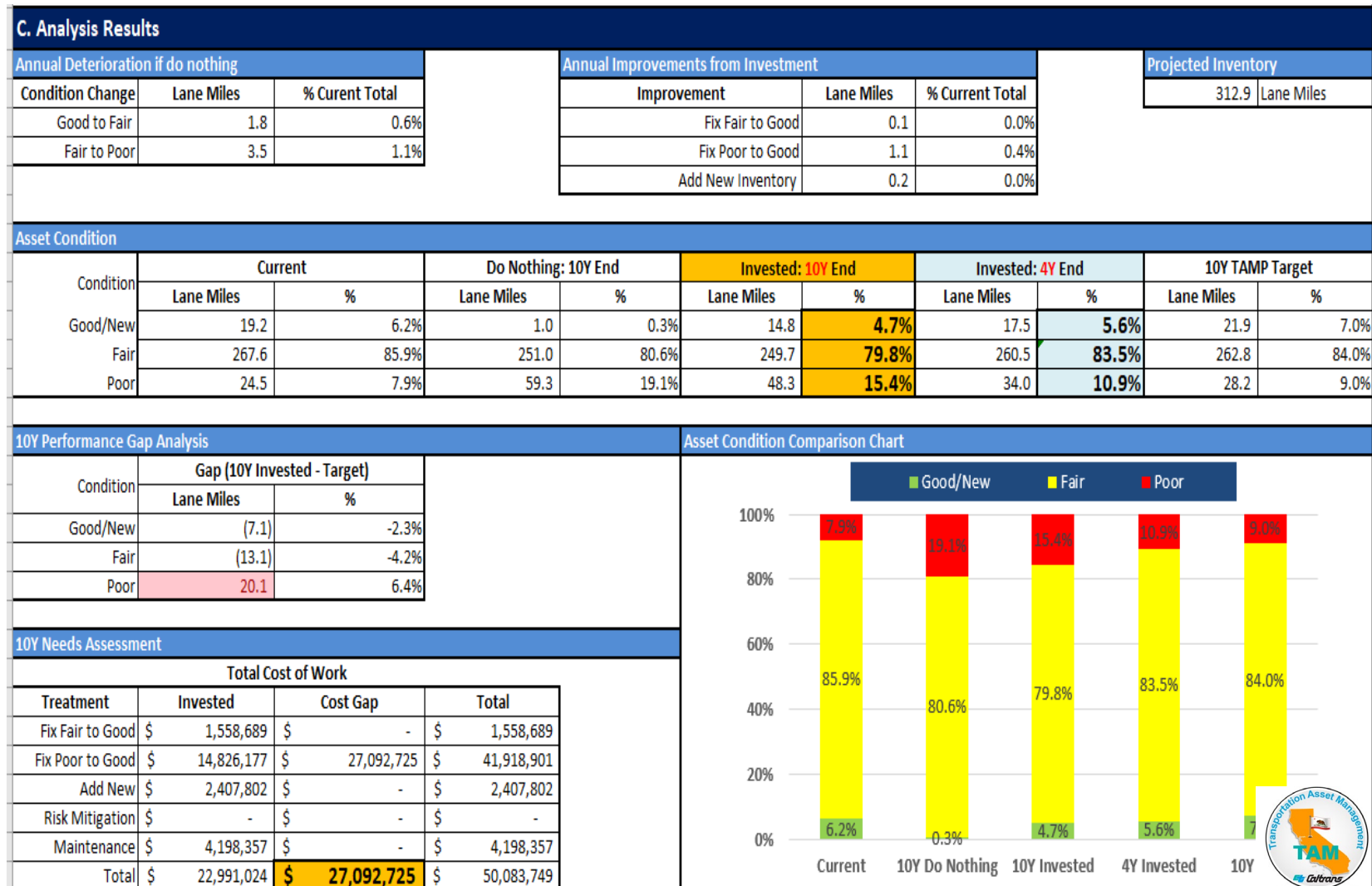
Instructions | Bridge | Pavement

- Parameters
  - Funding
  - Risk mitigation
  - Unit cost
  - Deterioration
  - Targets

- Override the Default values as needed

B. Analysis Parameters

General

Agency	Association of Monterey Bay Area Governments (AMBAG)	Asset	Pavement	Annual Escalation Rate	3.30%
Years of Analysis	10	Current Inventory	311.3 Lane Miles	Escalation Period (Years)	5

Estimated Investment (Expected Annual Funding)

Use Default or Override Parameters? **Default**

Annual Funding by Work Type	Initial Const.	Maint.	Preser/Rehab	Reconstruction	Total
Default	$ 240,780	$ 419,836	$ 311,738	$ 1,326,749	$ 2,299,102
Override	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 4,000,000

	Preser/Rehab	Reconstruction
% on Risk Mitigation	0%	0%
% Dollars Applied to Fair to Good	50%	0%
% Dollars Applied to Poor to Good	50%	100%

% Spending on Fair to Good	6.8%
% Spending on Poor to Good	64.5%
% Spending on Adding New	10.5%
% Spending on Risk Mitigation	0.0%
% Spending on Maint. Investment	18.3%

Average Unit Costs

Use Default or Override Parameters? **Default**

Treatment	Default - Current			Override - Current			Unit Cost Used - Escalated			Improvement Adjustment
	Capital ($/LM)	Support Ratio	Total ($/LM)	Capital ($/LM)	Support Ratio	Total ($/LM)	Capital ($/LM)	Support Ratio	Total ($/LM)	
Fix Fair to Good	$ 698,461	0.24	$ 866,092	$ 698,461	0.24	$ 866,092	$ 821,568	0.24	$ 1,198,304	100%
Fix Poor to Good	$ 922,273	0.24	$ 1,143,619	$ 922,273	0.24	$ 1,143,619	$ 1,084,829	0.24	$ 1,345,187	100%
Add New	$ 1,067,089	0.24	$ 1,323,190	$ 1,067,089	0.24	$ 1,323,190	$ 1,255,169	0.24	$ 1,556,410	-

Annual Deterioration Rate

Use Default or Override Parameters? **Default**

Condition Change	Default	Override
Good to Fair (%/Year)	9.5%	9.5%
Fair to Poor (%/Year)	1.3%	1.3%

TAMP Targets

Use Default or Override Parameters? **Override**

Condition	Default	Override
Good	7.0%	7.0%
Fair	84.0%	84.0%
Poor	9.0%	9.0%

- Projected asset condition
  - If "Do Nothing"
  - at given investment
- Performance gap
- Needs

C. Analysis Results

Annual Deterioration if do nothing

Condition Change	Lane Miles	% Current Total
Good to Fair	1.8	0.6%
Fair to Poor	3.5	1.1%

Annual Improvements from Investment

Improvement	Lane Miles	% Current Total
Fix Fair to Good	0.1	0.0%
Fix Poor to Good	1.1	0.4%
Add New Inventory	0.2	0.0%

Projected Inventory

312.9 Lane Miles

Asset Condition

Condition	Current		Do Nothing: 10Y End		Invested: 10Y End		Invested: 4Y End		10Y TAMP Target	
	Lane Miles	%	Lane Miles	%	Lane Miles	%	Lane Miles	%	Lane Miles	%
Good/New	19.2	6.2%	1.0	0.3%	14.8	4.7%	17.5	5.6%	21.9	7.0%
Fair	267.6	85.9%	251.0	80.6%	249.7	79.8%	260.5	83.5%	262.8	84.0%
Poor	24.5	7.9%	59.3	19.1%	48.3	15.4%	34.0	10.9%	28.2	9.0%

10Y Performance Gap Analysis

Condition	Gap (10Y Invested - Target)	
	Lane Miles	%
Good/New	(7.1)	-2.3%
Fair	(13.1)	-4.2%
Poor	20.1	6.4%

10Y Needs Assessment

Treatment	Invested	Cost Gap	Total
Fix Fair to Good	$ 1,558,689	$ -	$ 1,558,689
Fix Poor to Good	$ 14,826,177	$ 27,092,725	$ 41,918,901
Add New	$ 2,407,802	$ -	$ 2,407,802
Risk Mitigation	$ -	$ -	$ -
Maintenance	$ 4,198,357	$ -	$ 4,198,357
Total	$ 22,991,024	$ 27,092,725	$ 50,083,749

Asset Condition Comparison Chart

Performance Target Setting Form

- Agencies are asked to complete the PTAT and enter performance target outcomes on the *Performance Target Setting Form*.

- Agencies can elect from two options:
  - Method A: Adopt Caltrans Proposed Targets
  - Method B: Use Agency Calculated Targets

- PDF form support digital signature by the agency's Approving Official.

- Targets submitted will be basis for TAMP 2, 4, and 10-year targets.

California NHS Target Setting Method

- Every MPO will submit a signed target setting form and PTAT worksheet.

- This is your opportunity to make adjustments for the 2026 TAMP.

- Caltrans will take the respective targets and weight them relative to the amount of inventory the agency owns.

- Summarize across entire state to come up with a statewide TAMP target.

- With this approach every agencies targets are built into the statewide TAMP targets.

Example Pavement & Bridge Agency Roll-Up

CA 2016 Pavement Conditions (NHS)
Target Calculator Tool

					Target by 2017/18		
Jurisdiction	2016 Lane Miles (LM)	2016 Current Pavement Condition (%) Good(G)	Fair(F)	Poor(P)	% Target (F)	% Target (P)	% Impact to Statewide Lane Miles
State Interstate - NHS	14,159	47.9%	52.1%	3.1%	52.1%	3.1%	25.2%
Non Interstate - NHS	22,544	45.9%	54.0%	2.5%	54.0%	2.5%	40.2%
Butte (BCAG)	69	20.3%	79.6%	12.6%	79.6%	12.6%	0.1%
Fresno (FCOG)	479	17.5%	82.5%	4.2%	82.5%	4.2%	0.9%
Glenn CTC	6	10.1%	89.9%	0.0%	89.9%	0.0%	0.0%
Humbolt CAG	35	100.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Kern (KCOG)	586	23.3%	76.7%	4.1%	76.7%	4.1%	1.0%
Kings (KCAG)	35	16.2%	83.8%	0.0%	83.8%	0.0%	0.1%
Lassen CTC	8	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Madera (MCTC)	3	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%
Merced (MCAG)	87	17.7%	82.2%	15.2%	82.2%	15.2%	0.2%
Metropolitan (MTC)	2,995	12.7%	87.2%	11.1%	87.2%	11.1%	5.3%
Monterey (AMBAG)	218	16.0%	83.9%	8.1%	83.9%	8.1%	0.4%
Sacramento (SACOG)	1,149	17.5%	82.3%	14.4%	82.3%	14.4%	2.0%
San Diego (SANDAG)	991	10.8%	89.1%	8.8%	89.1%	8.8%	1.8%
San Joaquin (SJCOG)	545	13.9%	86.1%	6.8%	86.1%	6.8%	1.0%
San Luis Obispo (SLOCOG)	43	22.0%	77.9%	11.5%	77.9%	11.5%	0.1%
Santa Barbara (SBCAG)	131	11.8%	88.2%	7.9%	88.2%	7.9%	0.2%
Southern California (SCAG)	11,658	17.9%	82.0%	14.4%	82.0%	14.4%	20.8%
Shasta (SRTA)	9	28.3%	71.5%	15.5%	71.5%	15.5%	0.0%
Stanislaus (StanCOG)	219	26.4%	73.5%	13.2%	73.5%	13.2%	0.4%
Tahoe (TMPO)	5	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Tulare (TCAG)	102	16.9%	83.1%	2.0%	83.1%	2.0%	0.2%
Grand Total	**56,076**	**30.4%**	**63.5%**	**6.1%**	**63.51%**	**6.12%**	**100%**

CA 2017 NBI Bridge Conditions (NHS) as of 8-15-2017
Target Calculator Tool

					Target by 2017/18		
Jurisdiction	Number of Bridges	Deck Area (SF)	2017 Current Bridge Health (%) Good(G)	Fair(F)	Poor(P)	% Target (F)	% Target (P)	% Impact to Statewide Deck Area
State	9,196	210,774,774	69.4%	26.9%	3.7%	26.9%	3.7%	90.0%
Butte (BCAG)	7	40,085	23.3%	76.7%	0.0%	76.7%	0.0%	0.0%
Fresno (FCOG)	33	389,427	31.2%	68.0%	0.8%	68.0%	0.8%	0.2%
Humbolt CAG	2	5,113	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%
Kern (KCOG)	70	859,612	63.2%	31.9%	4.9%	31.9%	4.9%	0.4%
Merced (MCAG)	10	52,958	33.3%	65.0%	1.7%	65.0%	1.7%	0.0%
Metropolitan (MTC)	288	4,641,759	45.6%	33.4%	20.9%	33.4%	20.9%	2.0%
Monterey (AMBAG)	11	121,969	11.1%	88.9%	0.0%	88.9%	0.0%	0.1%
Sacramento (SACOG)	97	1,272,986	51.9%	44.6%	3.5%	44.6%	3.5%	0.5%
San Diego (SANDAG)	68	1,265,363	33.7%	45.7%	20.6%	45.7%	20.6%	0.5%
San Joaquin (SJCOG)	33	539,939	77.8%	12.4%	9.8%	12.4%	9.8%	0.2%
San Luis Obispo (SLOCOG)	5	33,497	0.0%	100.0%	0.0%	100.0%	0.0%	0.0%
Santa Barbara (SBCAG)	27	167,659	48.1%	33.7%	18.2%	33.7%	18.2%	0.1%
Southern California (SCAG)	928	13,229,785	36.4%	49.3%	14.4%	49.3%	14.4%	5.6%
Shasta (SRTA)	3	133,860	94.1%	5.9%	0.0%	5.9%	0.0%	0.1%
Stanislaus (StanCOG)	9	188,185	24.6%	60.7%	14.7%	60.7%	14.7%	0.1%
Tulare (TCAG)	3	32,518	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Grand Total	**10,825**	**234,285,883**	**66.5%**	**28.7%**	**4.8%**	**20.6%**	**3.5%**	**100.0%**

TAMP Fundamentals - Required Elements

NHS Pavement and Bridge Inventory & Condition

Financial Planning

Performance Targets & Gaps

Risk Management

Life Cycle Planning

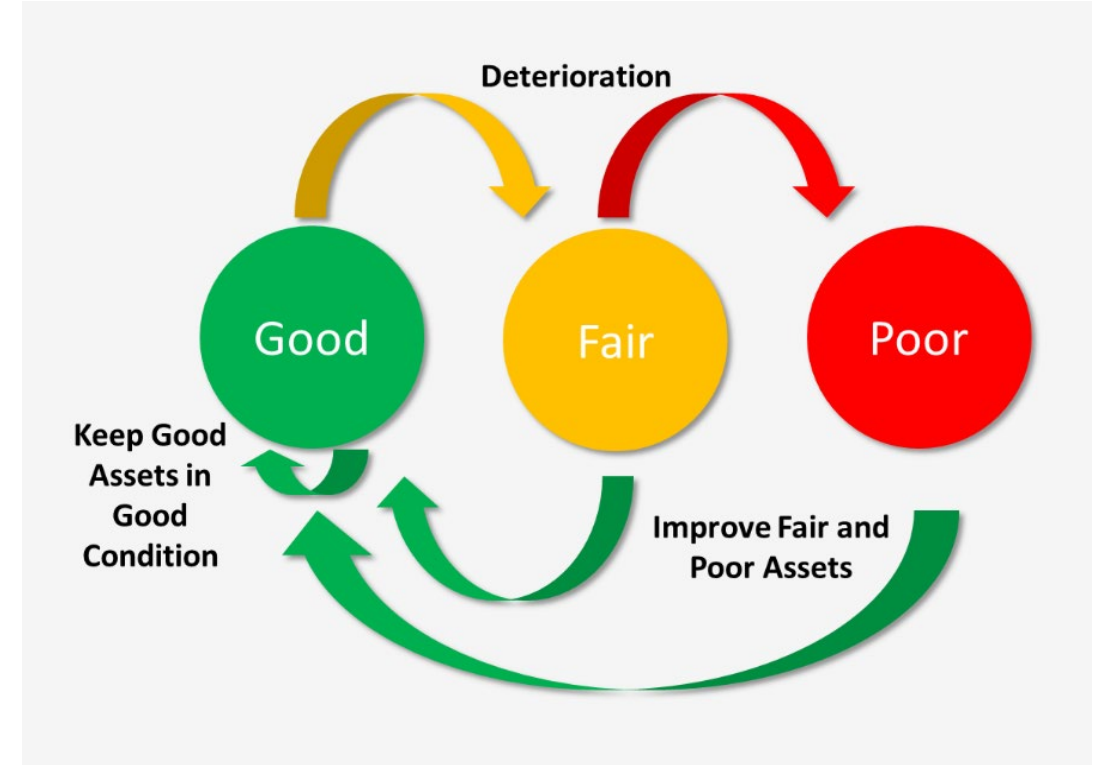Investment Strategies

Process Improvements

TAMP Risk Management

- Identification of risks that can affect condition of NHS pavements and bridges and NHS performance, including risks associated with current and future environmental conditions

- Assessment of the identified risks in terms of the likelihood of their occurrence and their impact and consequence if they do occur

- Evaluation and prioritization of the identified risks

- Mitigation plan for addressing the top priority risks

- Approach for monitoring the top priority risks

- Includes repeatedly damaged infrastructure

Asset Performance

Highway Safety

External Threats

Finances

Information and Decision Making

Business Operations

Project and Program Management

TAMP Life Cycle Planning

- Identification of deterioration models

- Potential work **types (i.e., initial construction, maintenance, preservation, rehabilitation and reconstruction),** including treatment options and unit costs

- A strategy for minimizing life cycle costs and achieving performance targets

- Asset performance targets

Investment Strategies Process Requirements

- The process must describe how investment strategies are influenced, at a minimum, by:
  - Performance gap analysis
  - Life cycle planning
  - Risk management analysis
  - Anticipated available funding and estimated cost of future work

Initial TAMP Investment Strategies

For 2026 TAMP, we will revisit these strategies:

- Fix It First

- Incorporation of Risk Mitigation

- Focus on Selected Asset Classes

- Sustainable Pavement Practices

- Supplementary Asset Class (State Highway System Only)

Closing Remarks

Michael B. Johnson
Statewide Asset Management Engineer
HQ Asset Management, Caltrans

In Summary

- TAMP is required to cover entire NHS

- Must include pavement and bridges

- Must use national condition-based performance metrics

- Must include expected funding available for asset management

- Must set performance targets regardless of ownership

- May be extended beyond minimum Federal requirements
  - California regulations add drainage, TMS, and supplementary assets for SHS only

Next Steps & Action Items

- Please put designated MPO contact in the chat.

- Please review the video on Asset Management, Performance Management, and Planning and Programming on the TAMP website.

- Caltrans will be distributing information to the designated MPO contact to obtain inventory condition files, PTAT, and target setting form.

- Begin to get familiar with the PTAT Tool.

Upcoming Webinar Sessions

- Virtual Help Sessions For Target Setting:
  - Using the NHS Pavement & Bridge data products – April 2, 8:30 – 10:00 AM
  - Using the Performance Target Assessment Tool (PTAT) – April 2, 10:15 – 11:45 AM

- Risk Management
  - Session 1 – May 8, 9:00 – 11:00 AM (tentative)
  - Session 2 – May 15, 10:00 AM – 12:00 PM (tentative)

- Investment Scenarios – June (TBD)

Questions?

Contact: CT-TAM@dot.ca.gov