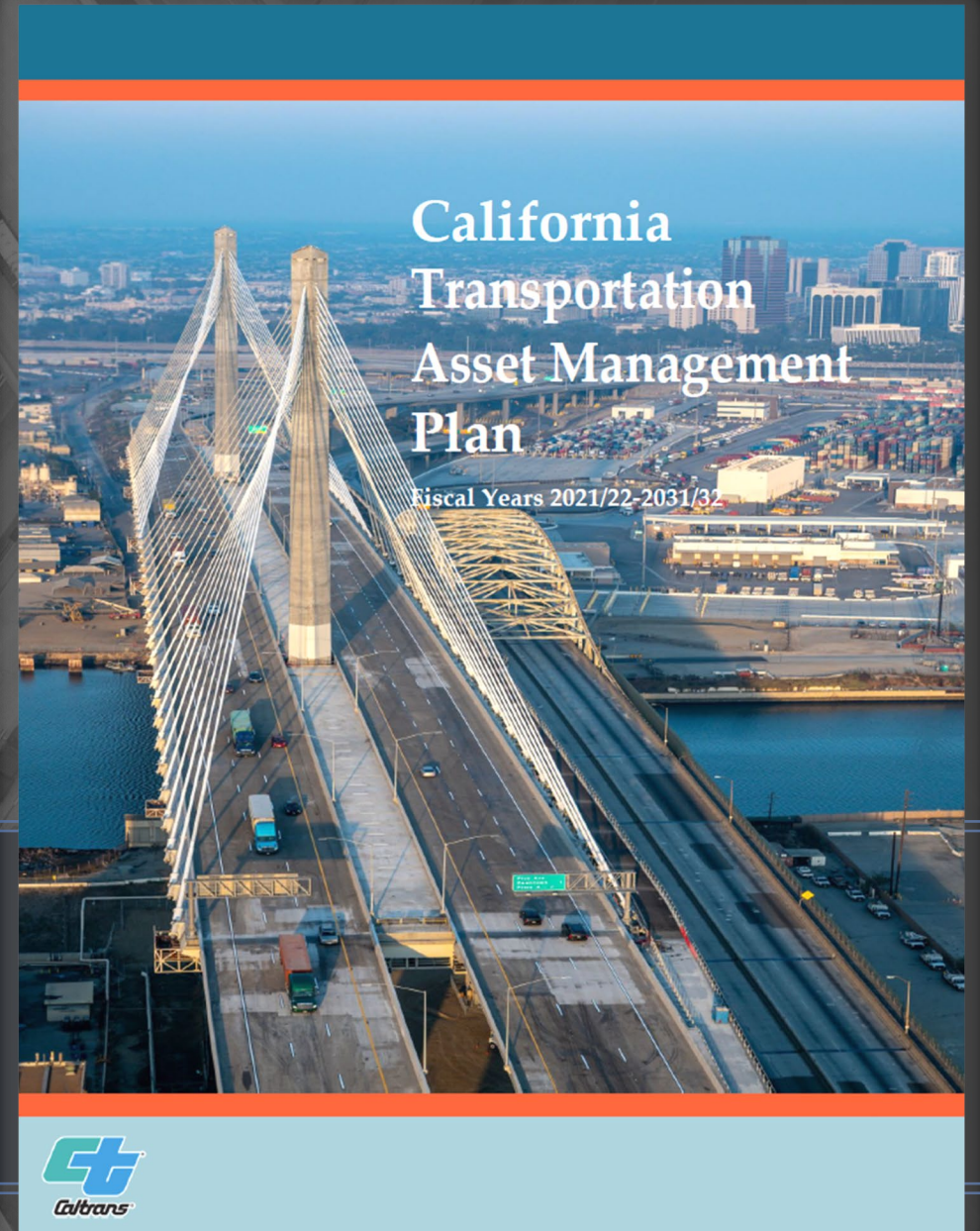




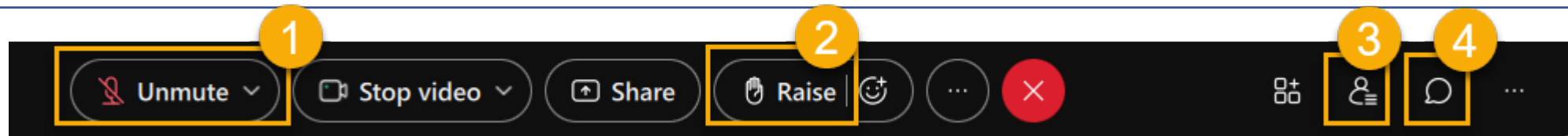
# 2026 California Transportation Asset Management Plan **Investment Strategies & Targets**

June 25, 2025



# Webex Quick-Guide

- Function Bar



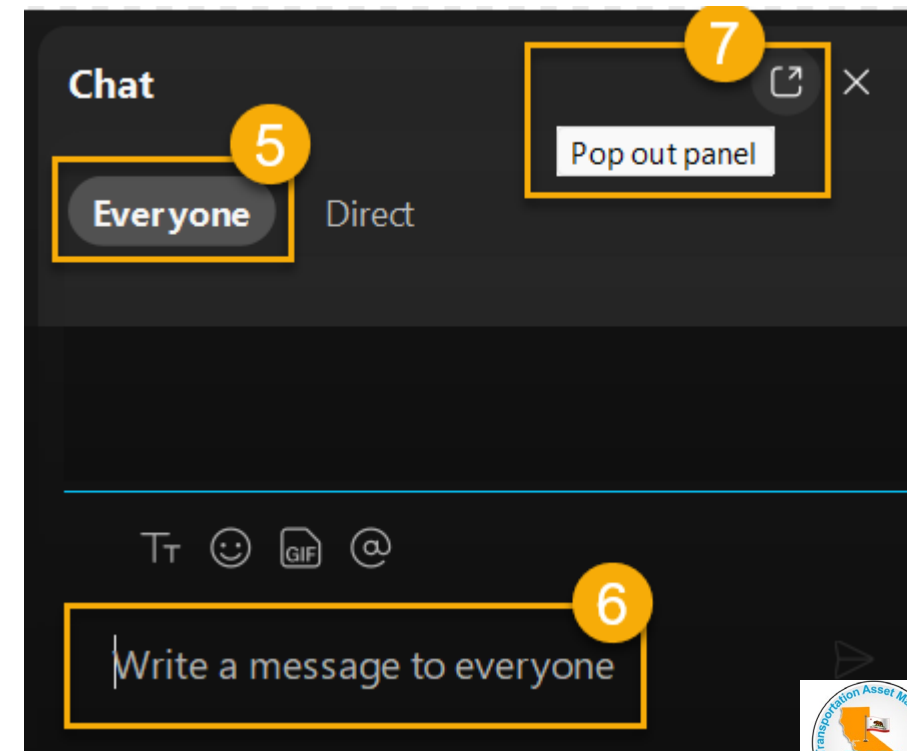
1 = Audio Settings

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](mailto:CT-TAM@dot.ca.gov)



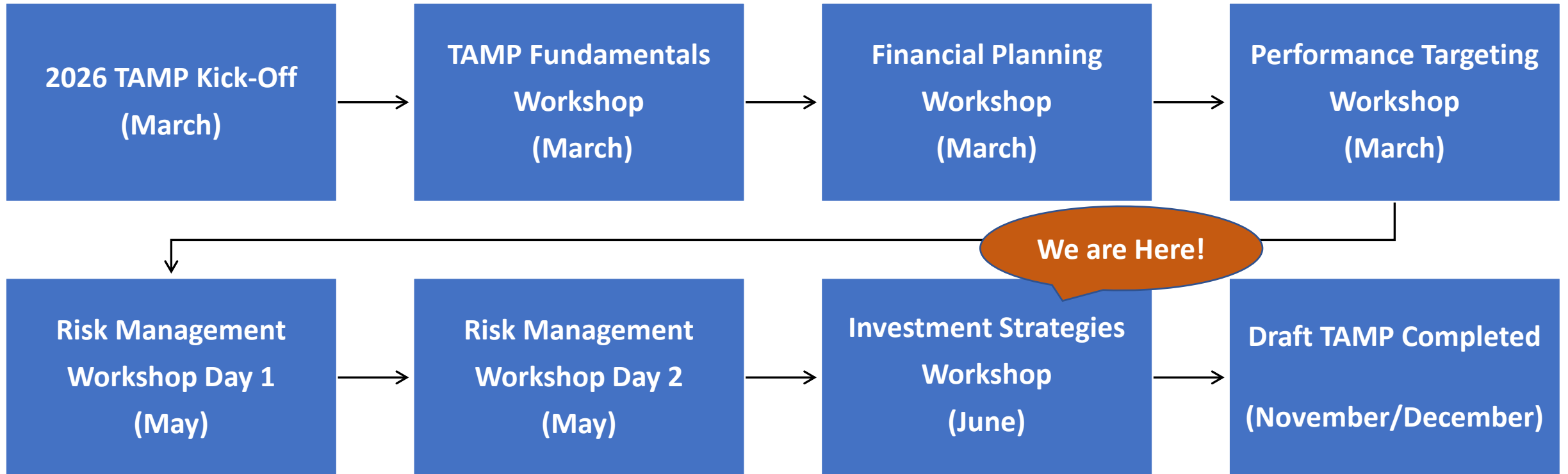
# Agenda – Investment Strategies Workshop

- Welcome, Review of Agenda and Introductions
- Overview of Investment Strategies Requirements
- Establish the Strategies to be used in the 2026 TAMP
- Discuss Life Cycle Planning Strategies
- Next Steps to develop the Draft 2026 TAMP

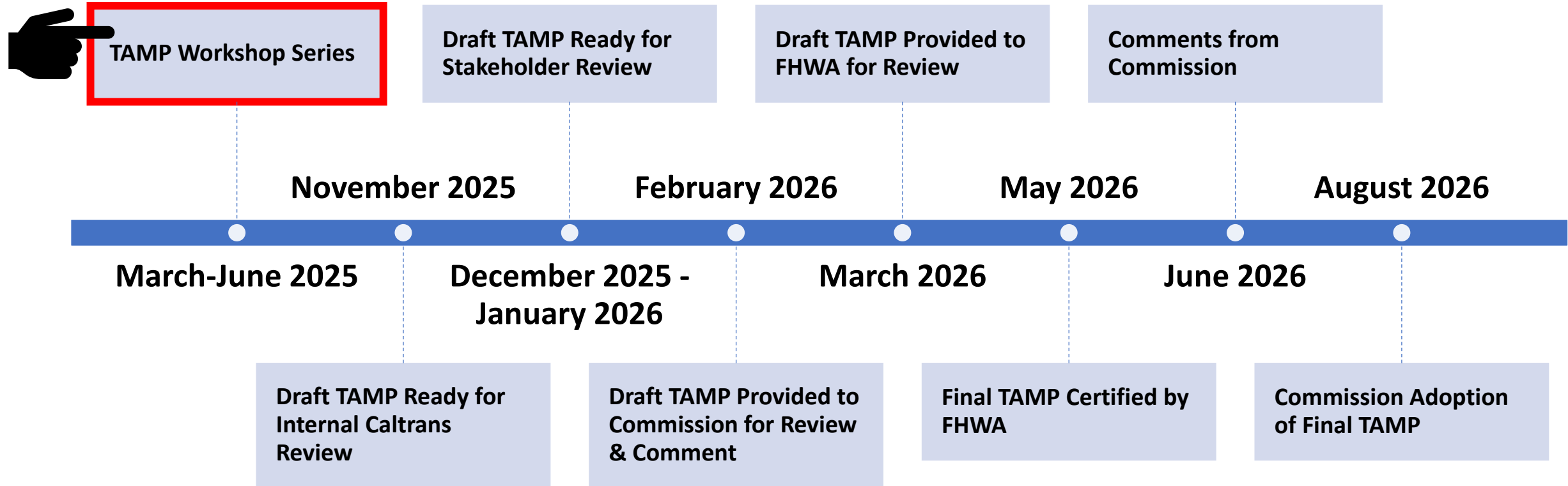




# 2026 TAMP Workshop Series



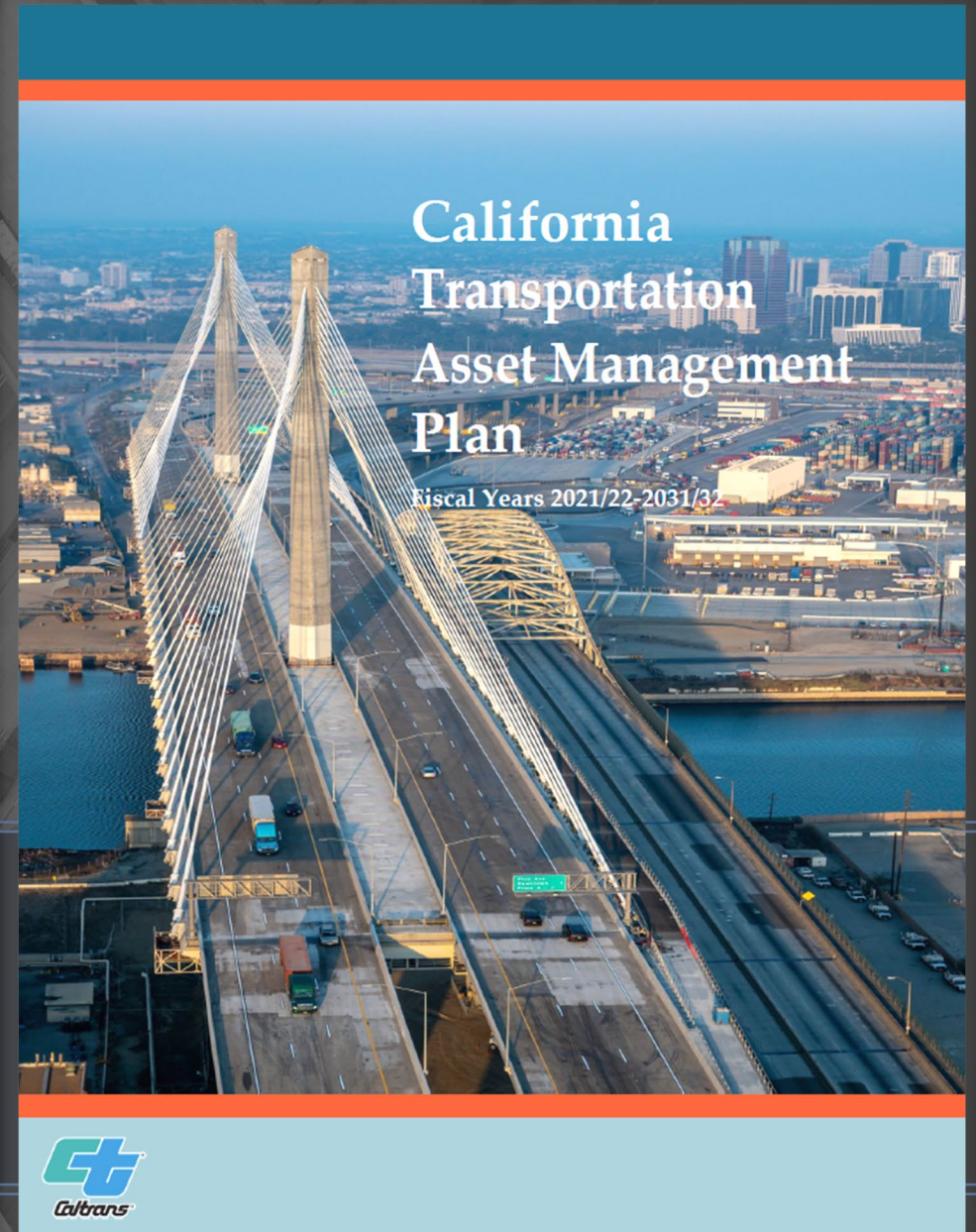
# Timeline for the 2026 TAMP



# TAMP Investment Strategies

**Michael B. Johnson**

Statewide Asset Management Engineer  
Caltrans, HQ Asset Management



# What are TAM Investment Strategies?

- Asset management investment strategies are the policies for resource allocation that will deliver the best asset performance given available funds and the goals and objectives of state and local agencies
- Generating an asset management investment strategy involves assessing various funding scenarios designed to achieve and sustain a desired state of repair (DSOR) and deliver the program efficiently

*23 CFR 515.5*





# Conceptual Investment Strategy

Work Type	Y1	Y2	Y3	Y4	Y5	Y6	Y7	Y8	Y9	Y10
Initial construction	\$\$\$\$		\$\$\$\$\$\$\$				\$\$\$\$\$\$\$\$\$			
Maintenance	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$	\$\$
Preservation	\$\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$\$	\$\$\$
Rehabilitation	\$\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$	\$\$\$\$
Reconstruction	\$\$	\$\$\$\$\$			\$\$\$\$\$		\$\$		\$\$\$\$\$	





# TAMP Investment Strategies & Federal Requirements

- An asset management plan shall discuss how the plan's investment strategies collectively would make or support progress toward:
- Achieving and sustaining a desired state of good repair over the life cycle of the assets,
- Improving or preserving the condition of the assets and the performance of the NHS relating to physical assets,
- Achieving the State DOT targets for asset condition and performance of the NHS in accordance with 23 U.S.C. 150(d), and
- Achieving the national goals identified in 23 U.S.C. 150(b).

*23 CFR 515.9*



# Investment Strategies Process Requirements

## Federal Requirements

The process must describe how investment strategies are influenced, at a minimum, by:

- Performance gap analysis
- Life cycle planning
- Risk management analysis
- Available funding and estimated cost of future work



# Building Blocks for Performance Gap Analysis

Baseline Inventory  
and Condition of  
NHS pavement and  
bridges

Available funding  
for NHS pavement  
and bridges by  
federal work types

Unit cost of work  
to improve  
condition

Type of work to  
improve fair to  
good or poor to  
good

Deterioration rates  
of NHS pavement  
and bridges

Desired State of  
Repair (DSOR)  
Targets



# Performance Gap Analysis – What We Have?

## From Prior Workshops:

- Inventory and Condition of NHS pavement and bridges
- Financial Information from controller (or MPO)
- Existing performance targets for review
- Unit costs for various work types
- Performance Targeting Analysis Tool (PTAT) for MPO's to communicate targets, budget, risk mitigation costs for their NHS assets





# Performance Gap Analysis – Work Types

## Mapping Federal Work Types to Condition Improvement

Improve Asset Condition	Initial Construction	Maintenance	Preservation/Rehab	Reconstruction
Poor to Good	No Impact	No Impact	Include	Include
Fair to Good	No Impact	No Impact	Include	No Impact

Notes: Initial Construction is assumed to add new inventory over the TAMP 10-Year period  
Maintenance Work is assumed to maintain condition over the TAMP 10-Year period



# Performance Target Analysis Tool (PTAT)

- Purpose of PTAT
  - Target Setting
  - Gap Analysis and Needs
  - Evaluation of Investment Strategies

**2026 California TAMP Performance Target Assessment Tool**

Revision 00 03-XX-2025 Developed by Caltrans HQ TAM Office

**A. Legend**

Cells for data entry

**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	% Spending on Fair to Good	6.8%
Override	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 1,000,000	\$ 4,000,000	% 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**

Treatment	Use Default or Override Parameters?		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%	

**C. Analysis Results**

Annual Deterioration if do nothing			Annual Improvements from Investment			Projected Inventory	
Condition Change	Lane Miles	% Current Total	Improvement	Lane Miles	% Current Total		
Good to Fair	1.8	0.6%	Fix Fair to Good	0.1	0.0%	312.9	Lane Miles
Fair to Poor	3.5	1.1%	Fix Poor to Good	1.1	0.4%		
			Add New Inventory	0.2	0.0%		

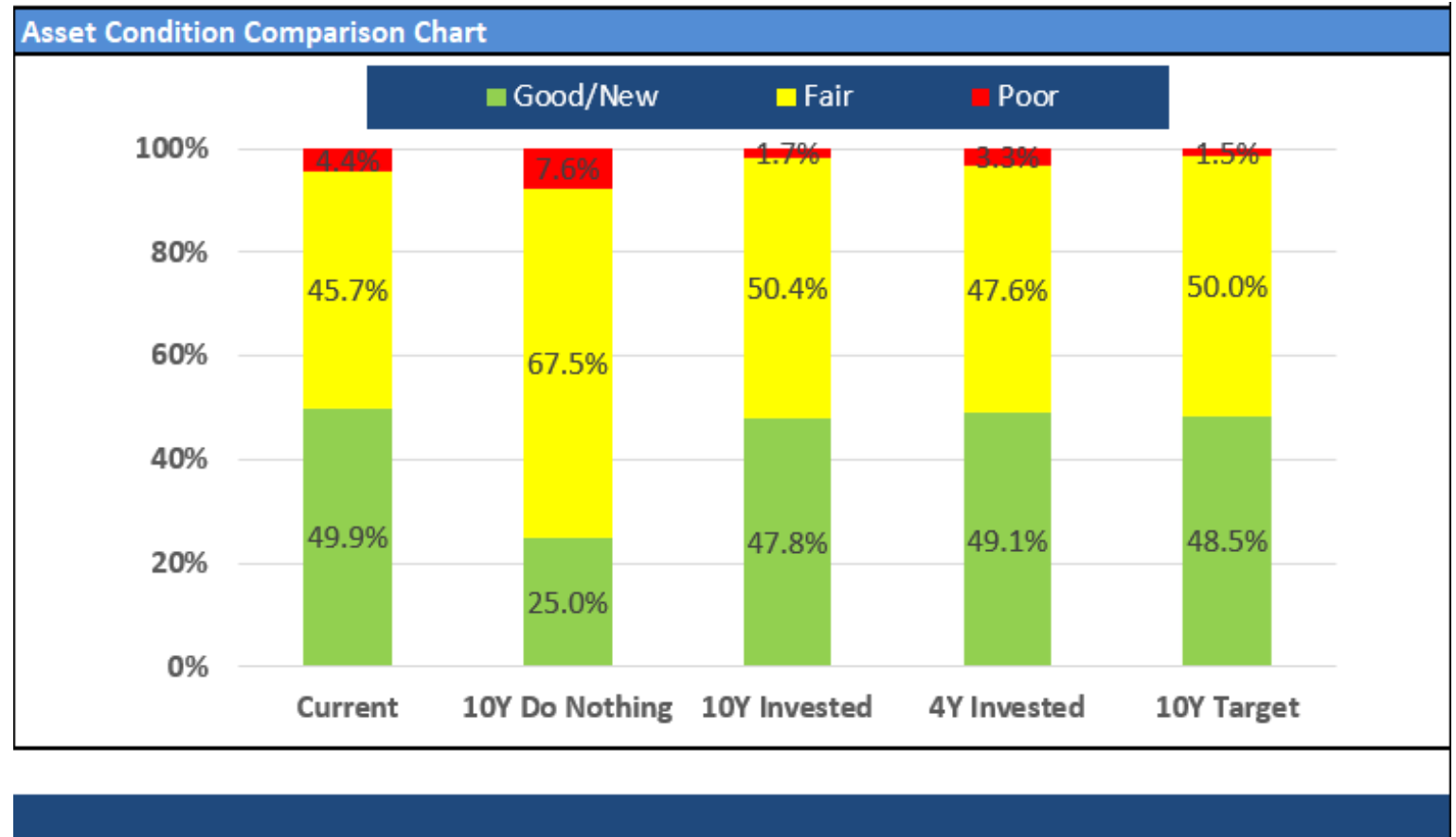
**Asset Condition**

Condition	Current	Do Nothing: 10Y End	Invested: 10Y End	Invested: 4Y End	10Y TAMP Target

Instructions Bridge Pavement



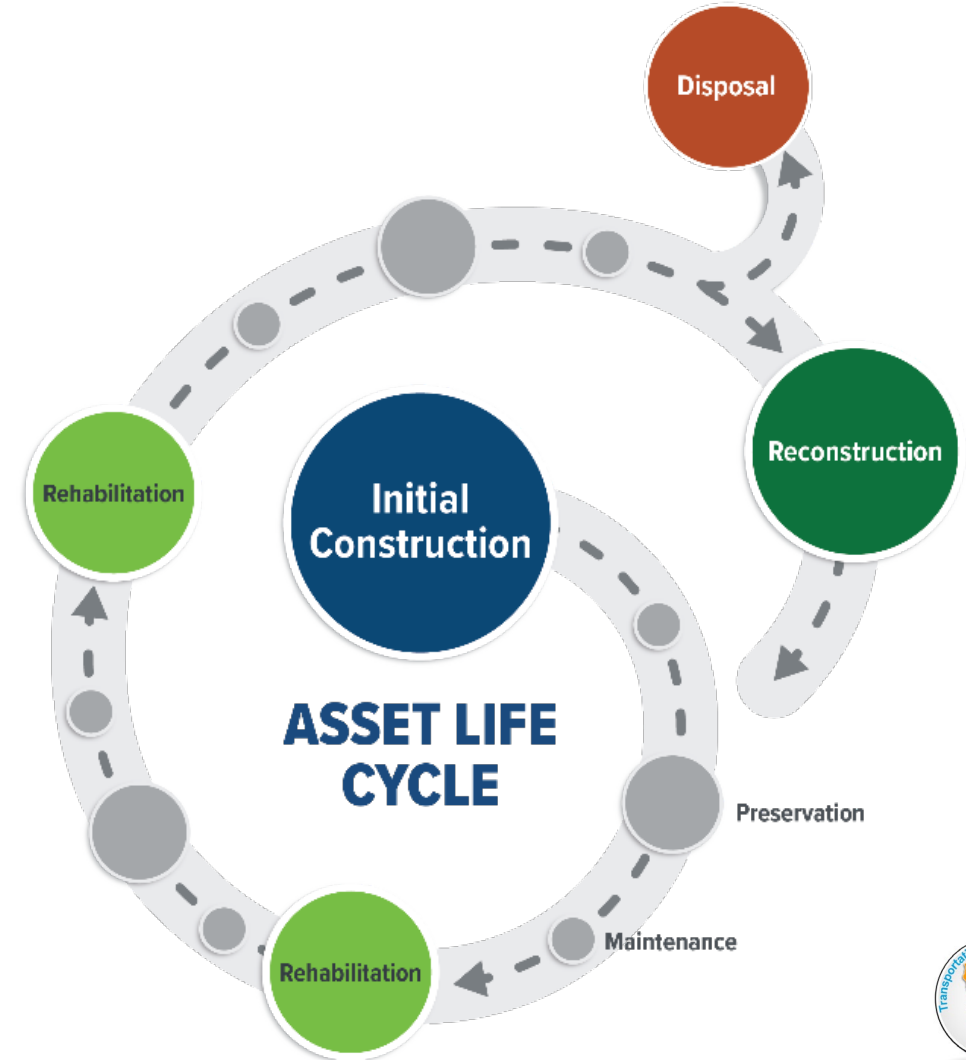
# Aspects of Performance Gap Analysis



Targets and state of good repair

# Life Cycle Planning Inputs

- Current conditions
- Annual funding / budgets
- Analysis timeframe
- Deterioration Models
- Treatments
- Treatment costs
- Strategy details and rules

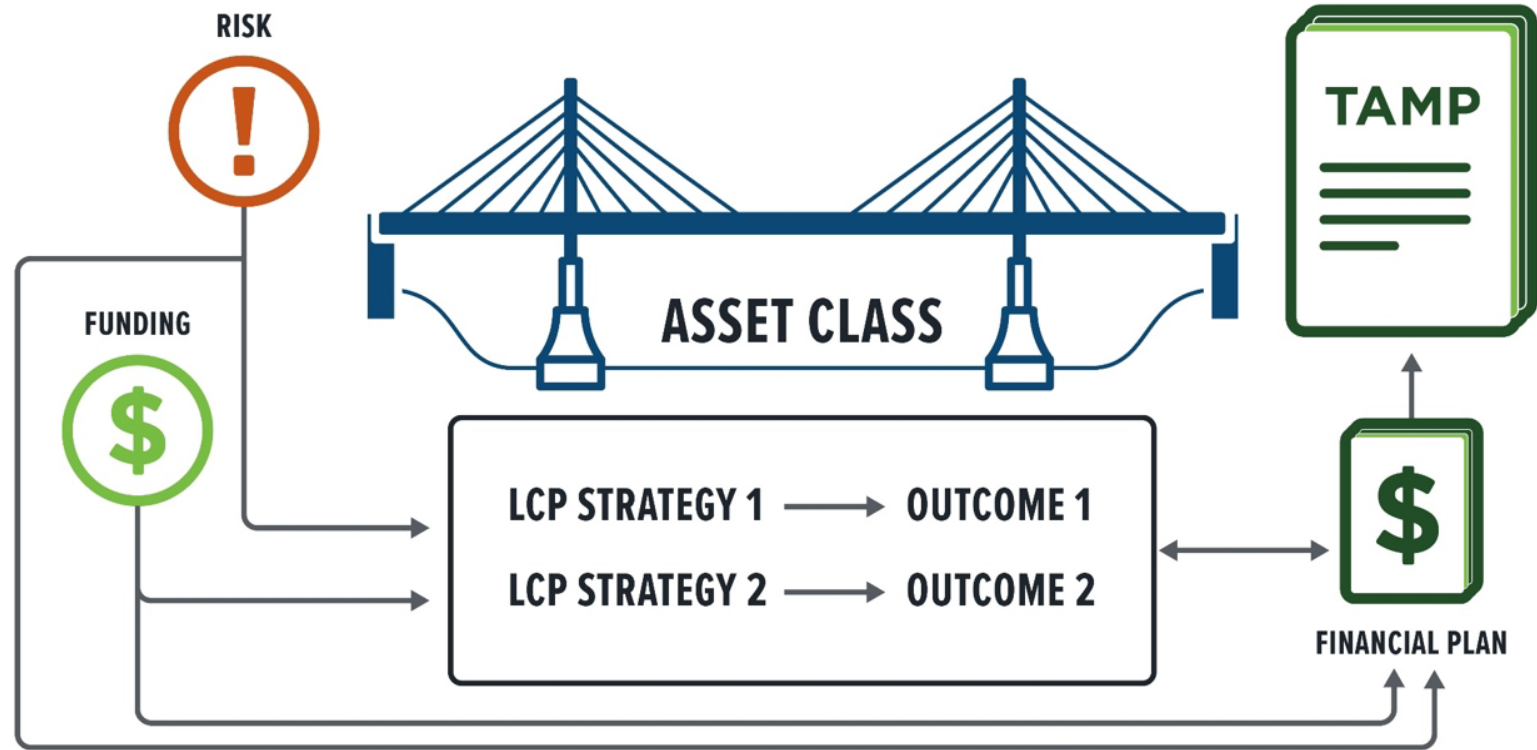




# Life Cycle Planning

Understand how different investments impact asset conditions:

- In the short term?
- Over the asset life cycle?

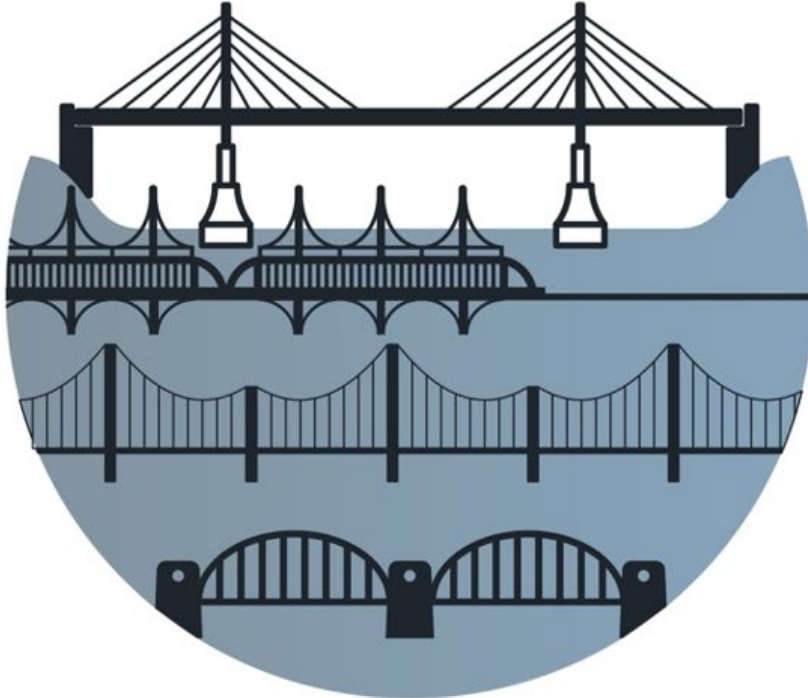


© 2017 Applied Pavement Technology, Inc.



# Life Cycle Planning vs Life Cycle Cost Analysis

## NETWORK LEVEL



© 2017 Applied Pavement Technology, Inc.

## PROJECT LEVEL



# Examples of Risks from June Caltrans Workshop

- Sea level rise / coastal flooding
- Available Funding
- Wildfires
- Resource constraints or uncertainties
- Legislation or regulations
- Changes in system use, expectations, or loading







# Investment Strategy Development – A Balancing Act

- Available finances
- Performance gap analysis
  - Condition predictions
  - Targets and SOGR
  - Needs from other plans
- Preferred LCP strategy
- Risk Mitigation

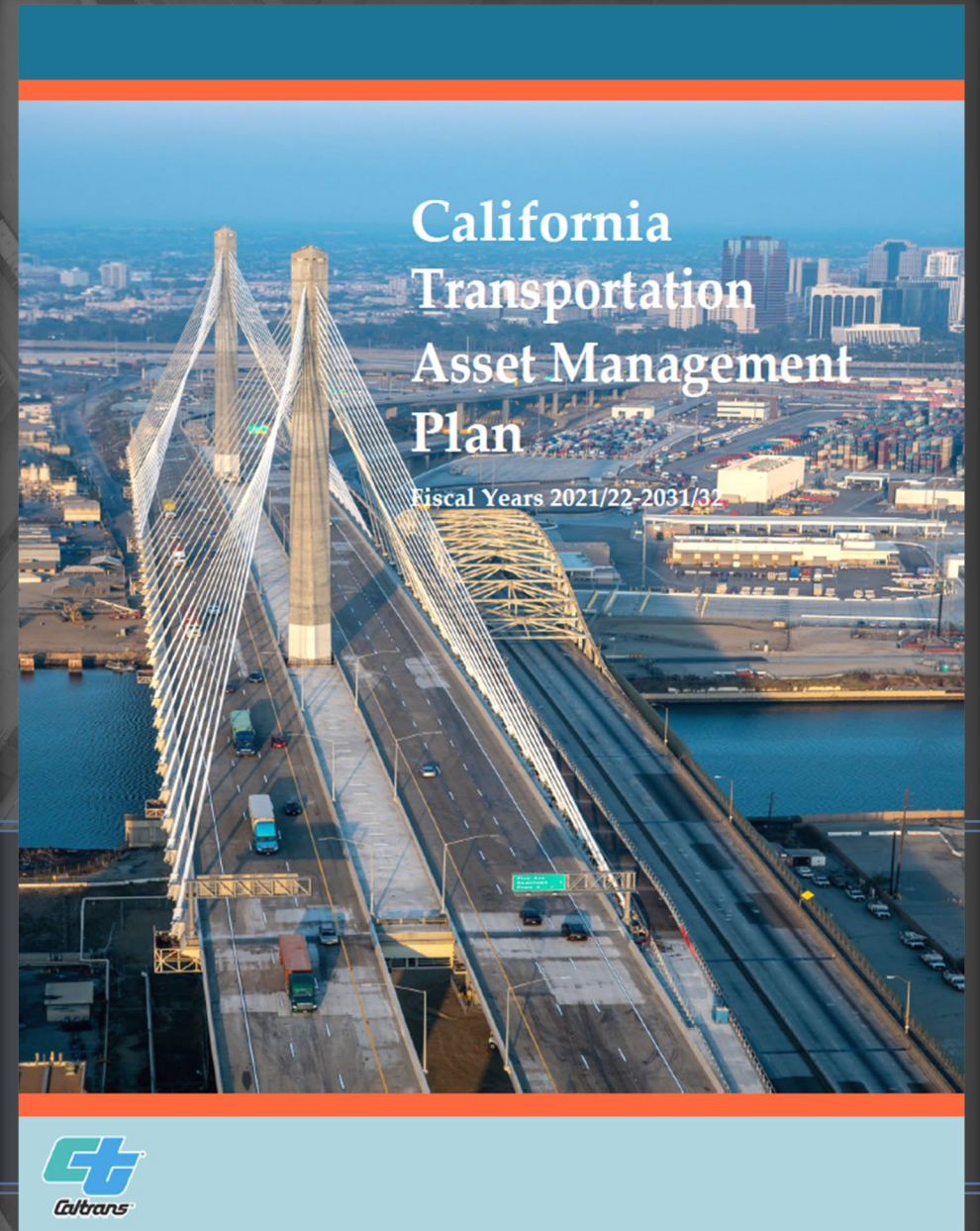




# Workshop Participant Input

**Loren Turner**

Caltrans, HQ Asset Management



# 2026 TAMP Investment Strategies

## **TAMP required investment strategies:**

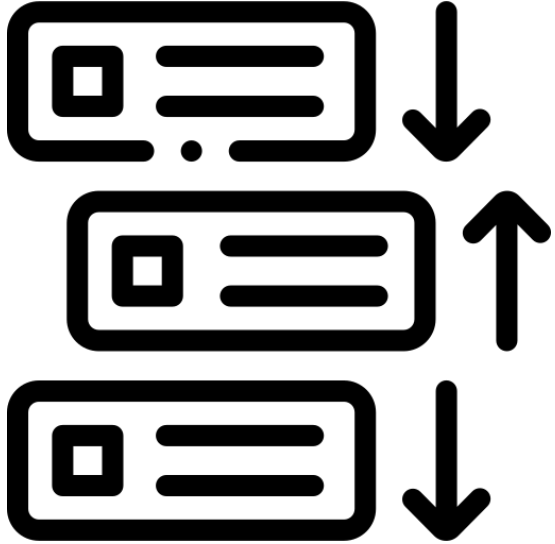
- Maintain Asset Condition for NHS Pavement and Bridges
- 10-Year DSOR Target Performance for NHS Pavement and Bridges

## **Additional investment strategies to consider:**

- Inclusion of risk mitigation funding
- Greater preservation focus
- Funding system expansion
- Others?



# Prioritizing Investment Strategies



**Please rank the investment strategies from most important to least**

- ☐ Inclusion of risk mitigation funding
- ☐ Greater preservation focus
- ☐ Funding system expansion
- ☐ Other #1
- ☐ Other #2

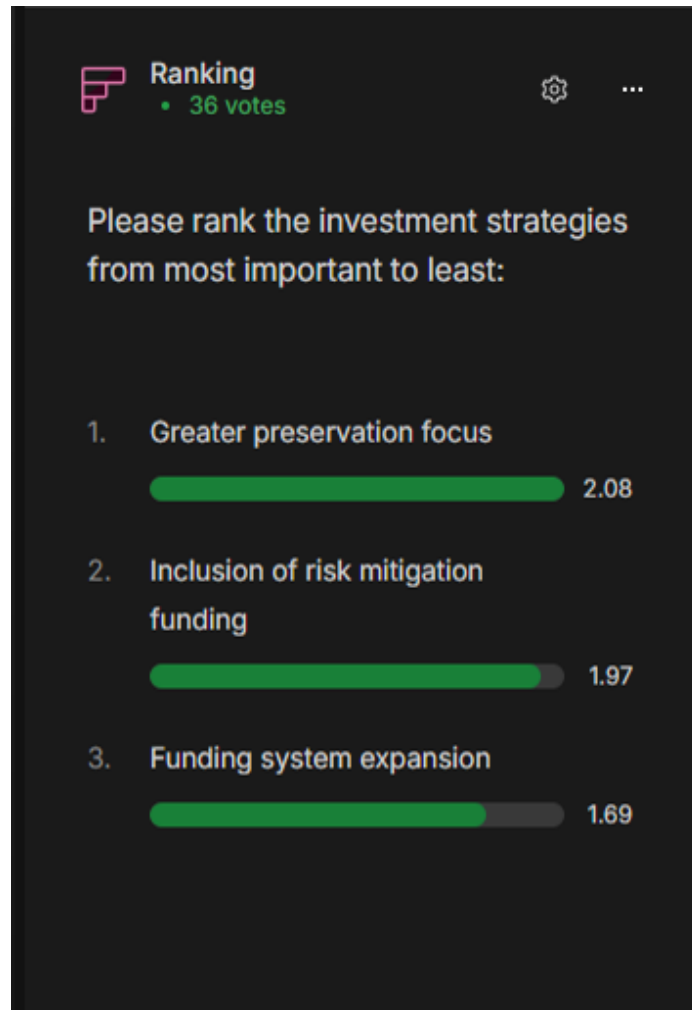




# Polling Results



# Polling Results



# Analyzing Outcomes of Investment Strategies

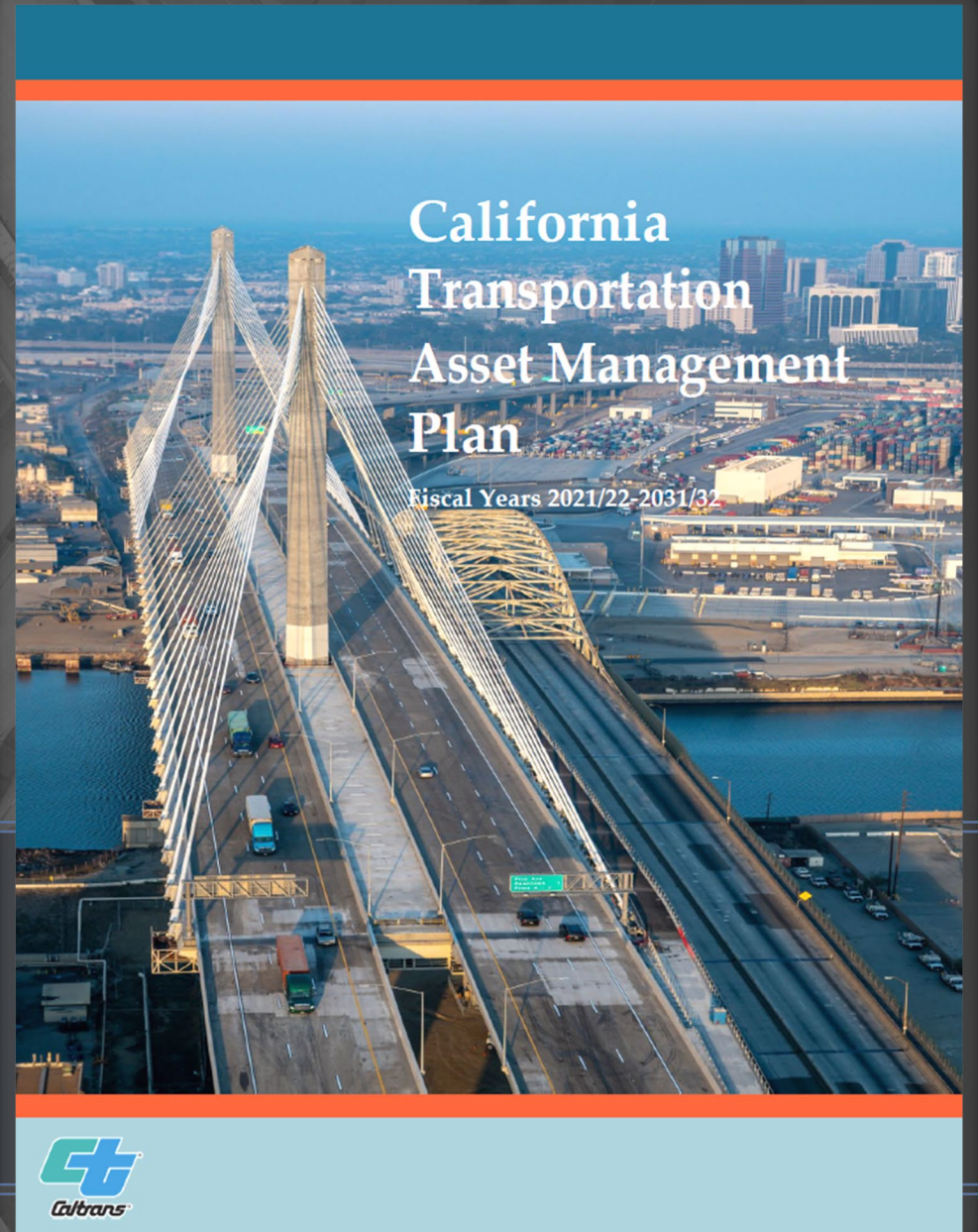
- Investment strategies will be analyzed at a statewide level.
- MPOs are not required to evaluate various strategies.
- Caltrans will use each MPO's PTAT submittals to aggregate statewide investment strategies.



# Closing Remarks

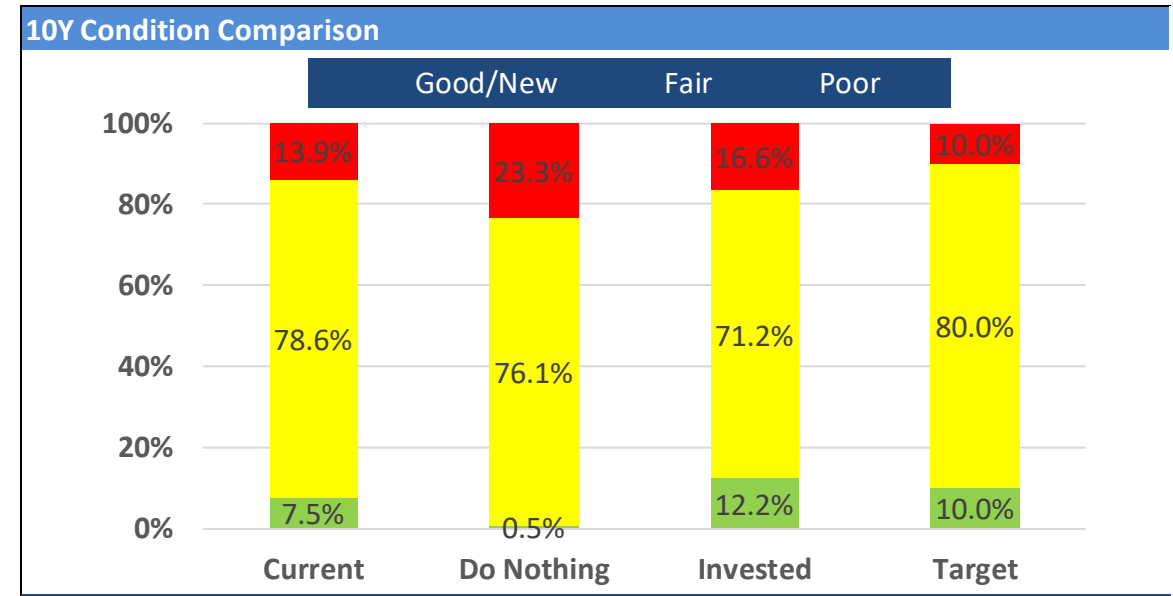
**Loren Turner**

Statewide Asset Management Engineer  
Caltrans, HQ Asset Management



# Workshop Summary

- Agency specific PTAT tool has been provided to all MPO's
- MPO's only need to develop the fiscally constrained scenario.
- Caltrans will develop statewide Investment Strategies from submittals





# Action Items

- Complete all sections of the target setting form and submit this and the accompanying *Performance Target Assessment Tool (PTAT)* spreadsheet by email to [CT-TAM@dot.ca.gov](mailto:CT-TAM@dot.ca.gov) by August 15, 2025



# Questions?



Contact: [CT-TAM@dot.ca.gov](mailto:CT-TAM@dot.ca.gov)

