



Caltrans System Investment Strategy (CSIS)

PUBLIC WORKSHOP

MAY 21, 2024

Opening Remarks



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Chief, Division of Transportation Planning

Agenda

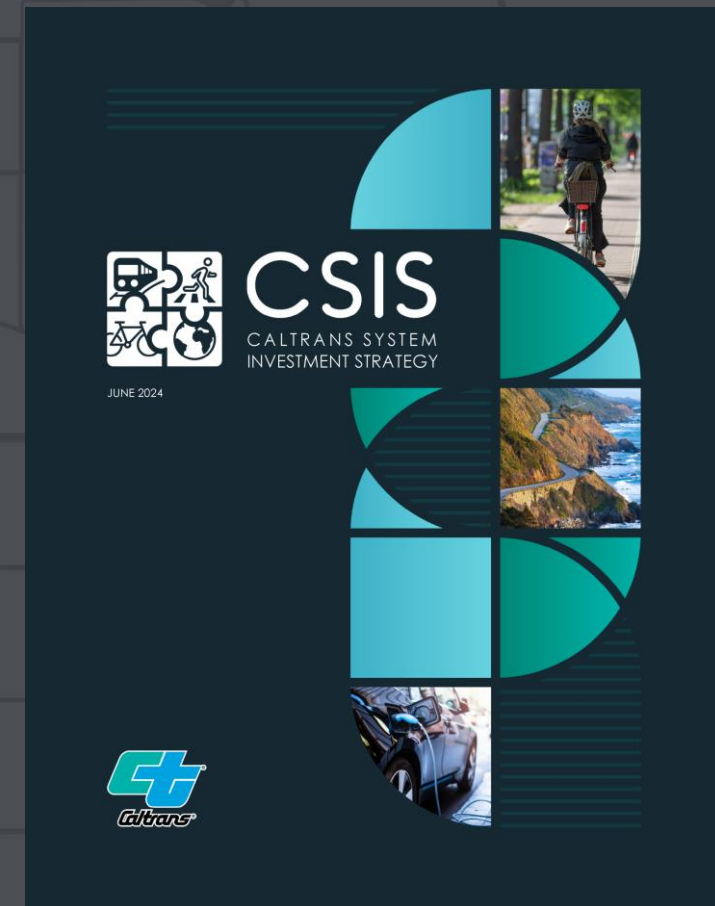
1 – CSIS Overview

2 – Feedback on Draft CSIS

3 – Feedback on Draft CAPTI Alignment Metrics

4 – Next Steps

5 – Q & A



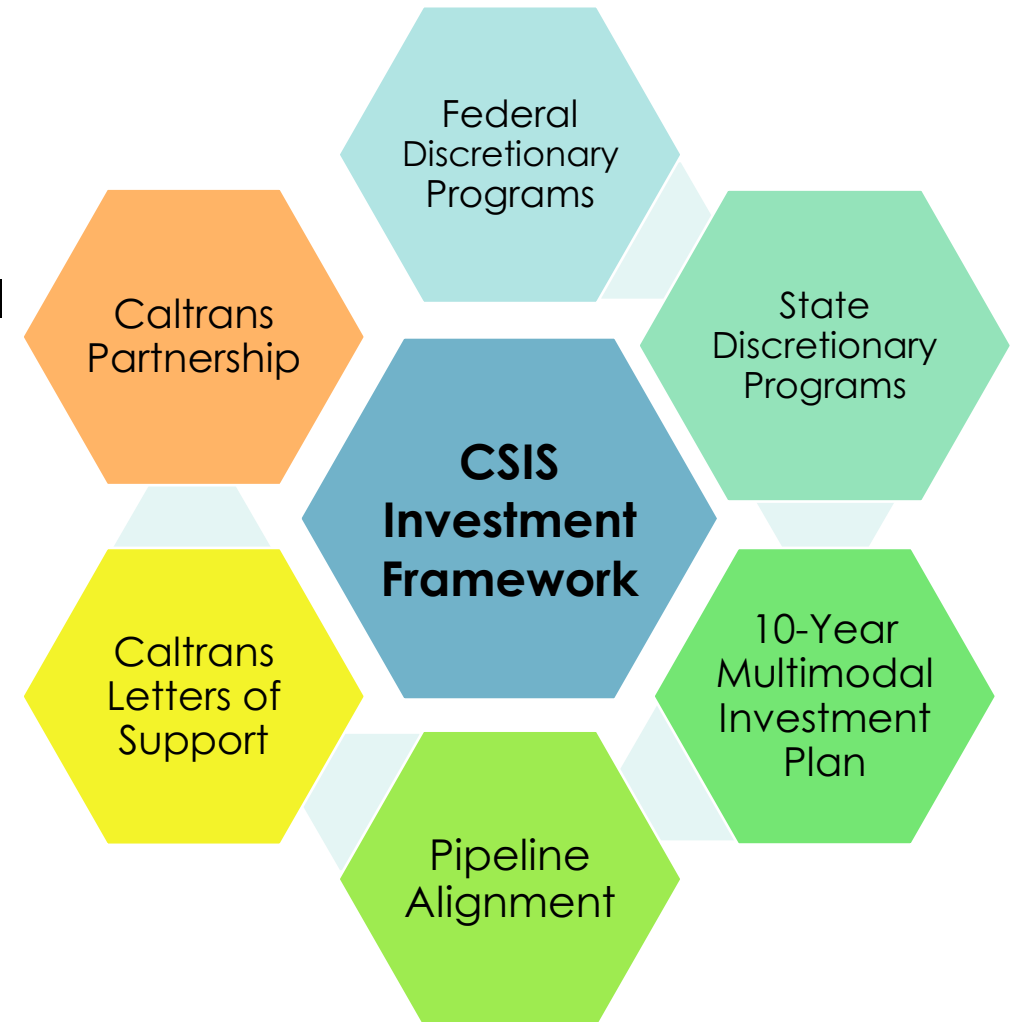
Caltrans System Investment Strategy (CSIS) Overview

What is CSIS

- Caltrans investment framework for state & federal discretionary funding programs
- Prioritize projects based on Program Fit & CAPTI Alignment
- Enhances transparency and collaboration

Why Develop CSIS

- Implement the CAPTI Key Action S4.1
- Align Caltrans project nominations with CAPTI through a data- and performance-driven approach

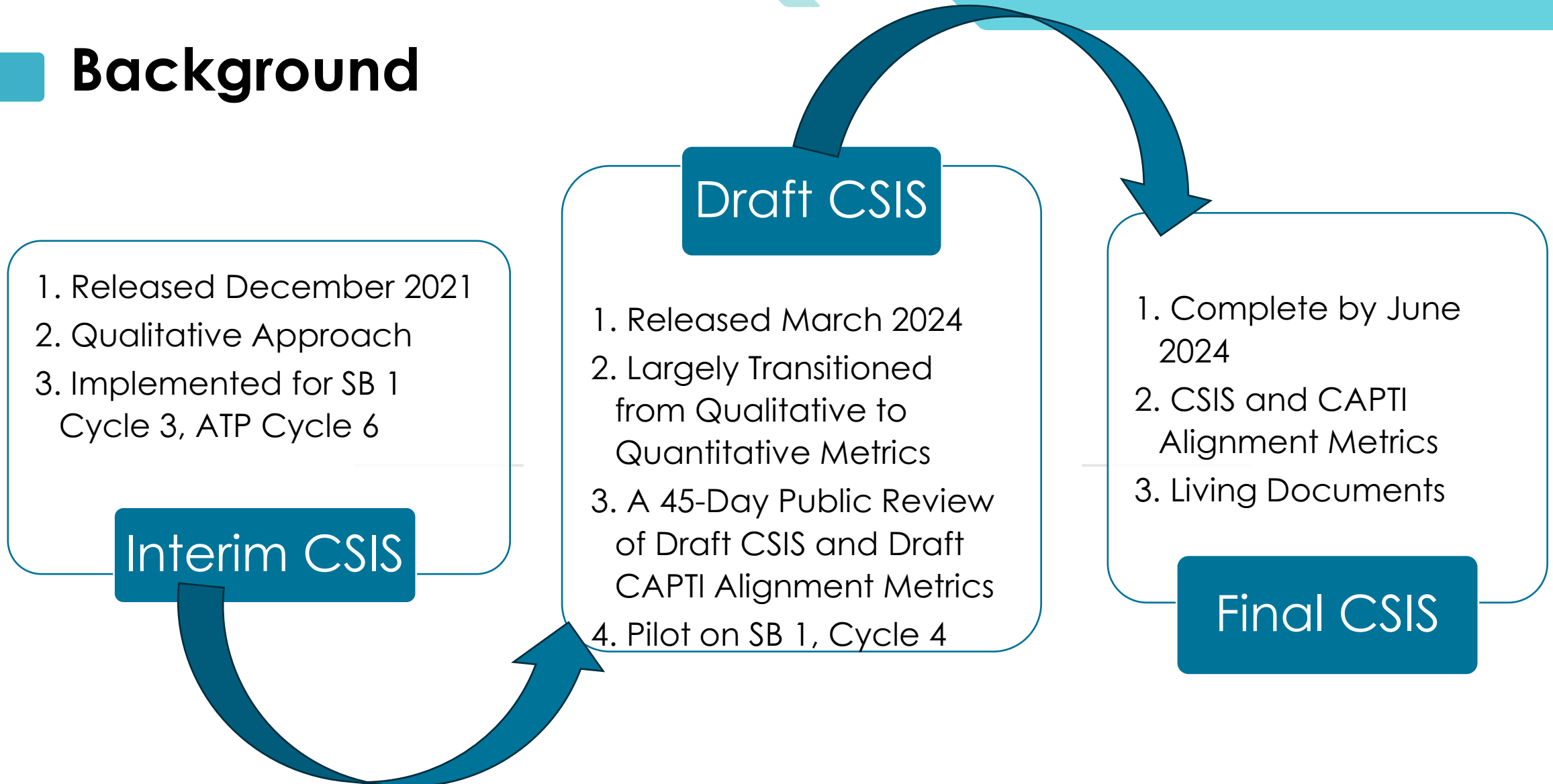




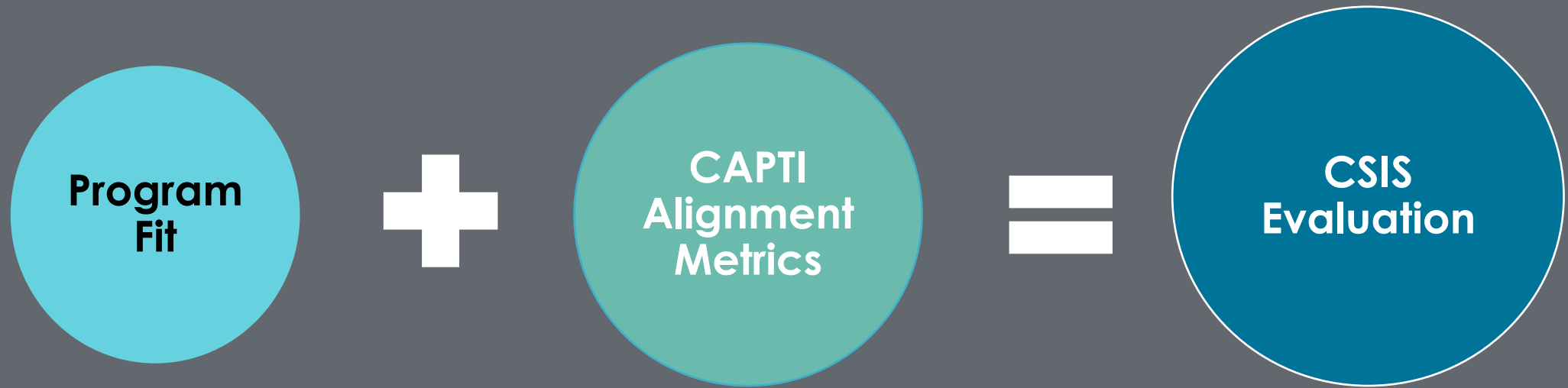
What CSIS Does NOT Do

- Does not prevent local partners from proceeding in project development and applying for state and federal discretionary programs
- Does not affect SHOPP-funded projects
- Does not impact PID initiations

Background

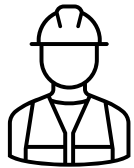


CSIS Investment Framework

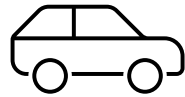


CAPTI ALIGNMENT METRICS

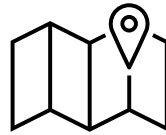
Quantitative Metrics



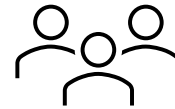
Safety



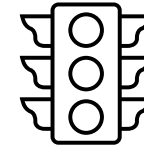
VMT



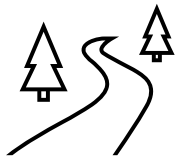
Accessibility



**DAC
Accessibility**



**DAC
Traffic Impact**



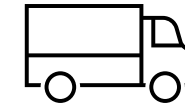
**Land Use &
Natural Lands**



**Passenger
Mode Shift**

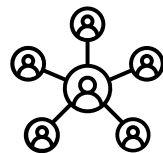


**Zero-Emission
Vehicle Infrastructure**



**Freight Sustainability &
Efficiency**

Qualitative Metrics



Public Engagement



Climate Resilience

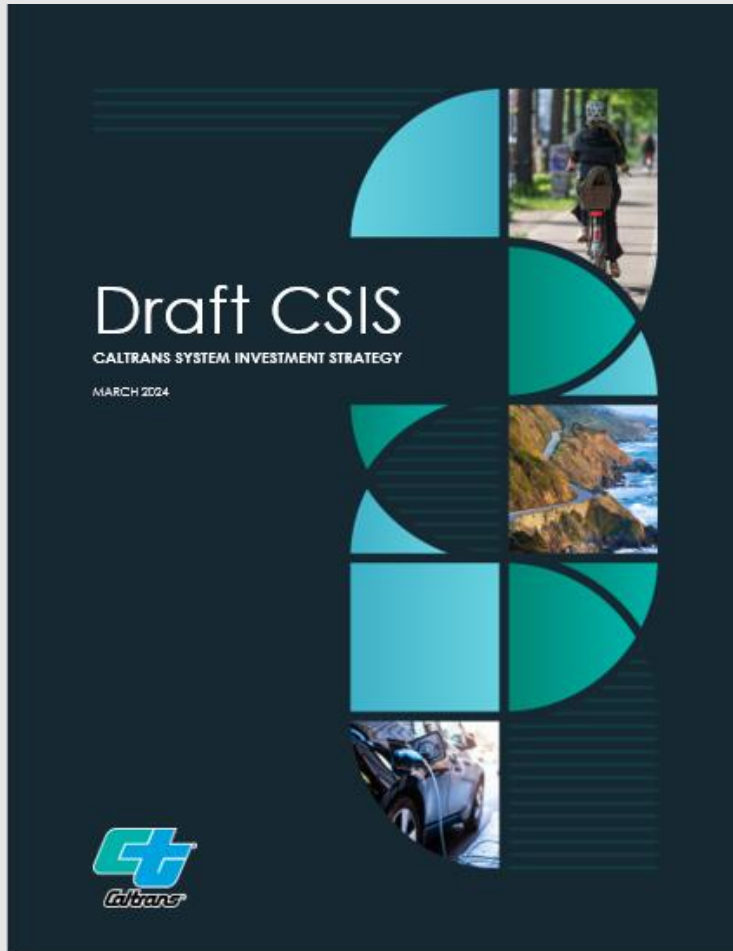
Draft CSIS: Public Review Comments

Public Review

March 1 to April 15, 2024

28 Respondents

Categories	Number of Respondents
Metropolitan Planning Organizations, Council of Governments	6
Transportation Commissions	6
Transportation Authority and Agencies	3
Rail Authority and Agencies	3
Transit Districts and Agencies	3
Cities	3
Advocacy Groups	2
Individuals	2

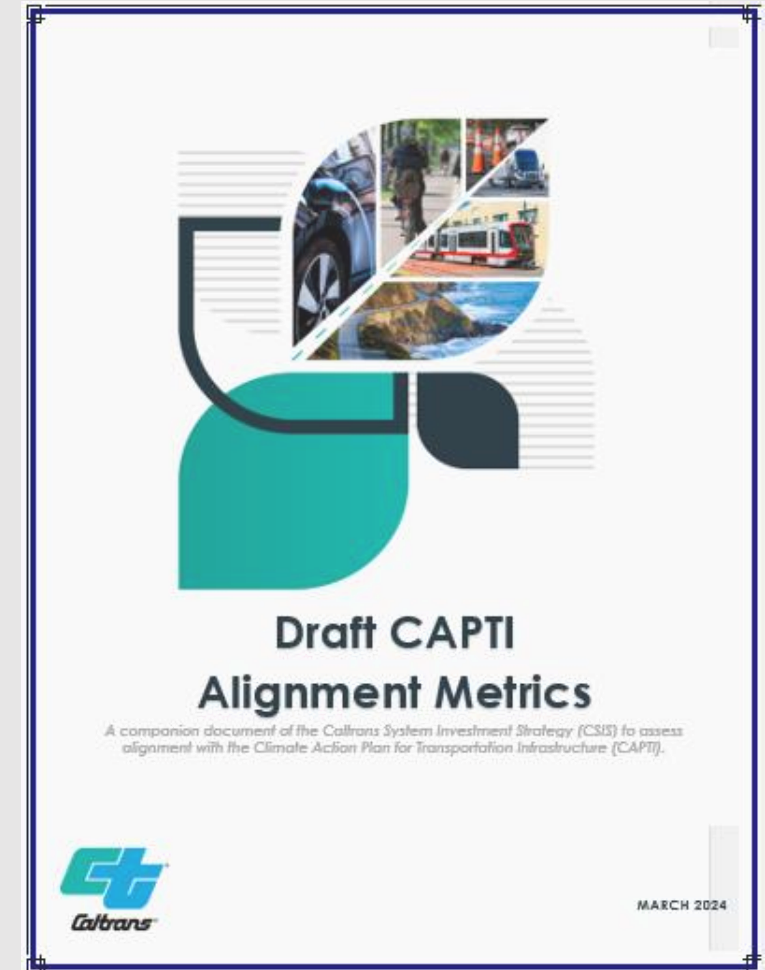


COMMENTS ON DRAFT CSIS DOCUMENTS

CSIS Main Document	Number of Comments
Process Clarifications	35
General Support	11
General Criteria Change/Other	11
Scoring/Public Posting	7

COMMENTS ON DRAFT CAPTI ALIGNMENT METRICS

CAPTI Alignment Metrics	Number of Comments
General Metrics Clarifications	23
Safety	22
VMT	19
Accessibility	19
DAC Accessibility	
DAC Traffic Impacts	19
Mode Shift	15
Land Use/Natural Resources	10
Freight	9
ZEV	14
Public Engagement	5
Climate Adaptation/Resiliency	11



High-level Summary of Comments

1. Clarity on the Nomination Process: Intake Forms, Evaluation, and Nomination
2. Clarity on CSIS Evaluation Process for other State and Federal Discretionary Funding Programs
3. Clarity on CSIS and interaction with the 10-Year Multimodal Investment Plan and existing Project Lists (MONSTER List, AT Project database, Pipeline, etc.)
4. Score: Use of scoring and public release of scores
5. Concerns that larger projects (\$\$\$) will score better than smaller projects (\$) and would result in unfair scoring
6. Rural Interregional Areas Challenges: concerns about how evaluation and metrics:
 - Work in rural areas where census tracts are larger; potential to skew the numbers,
 - Rural projects would likely score low overall, and
 - Unable to be competitive as metrics potentially favor densely populated urban areas over rural regions

CSIS: Responses and Actions

CSIS AND CAPTI METRICS

- Clarifications on project nomination process and evaluation added in the CSIS Document
- Regulatory context added in the CSIS Document
- Metrics: Refinements and Clarifications

CSIS WEBSITE

- List of State and Federal Discretionary Funding Programs
- Nomination and Evaluation Flow-charts

CSIS: POST-JUNE UPDATES

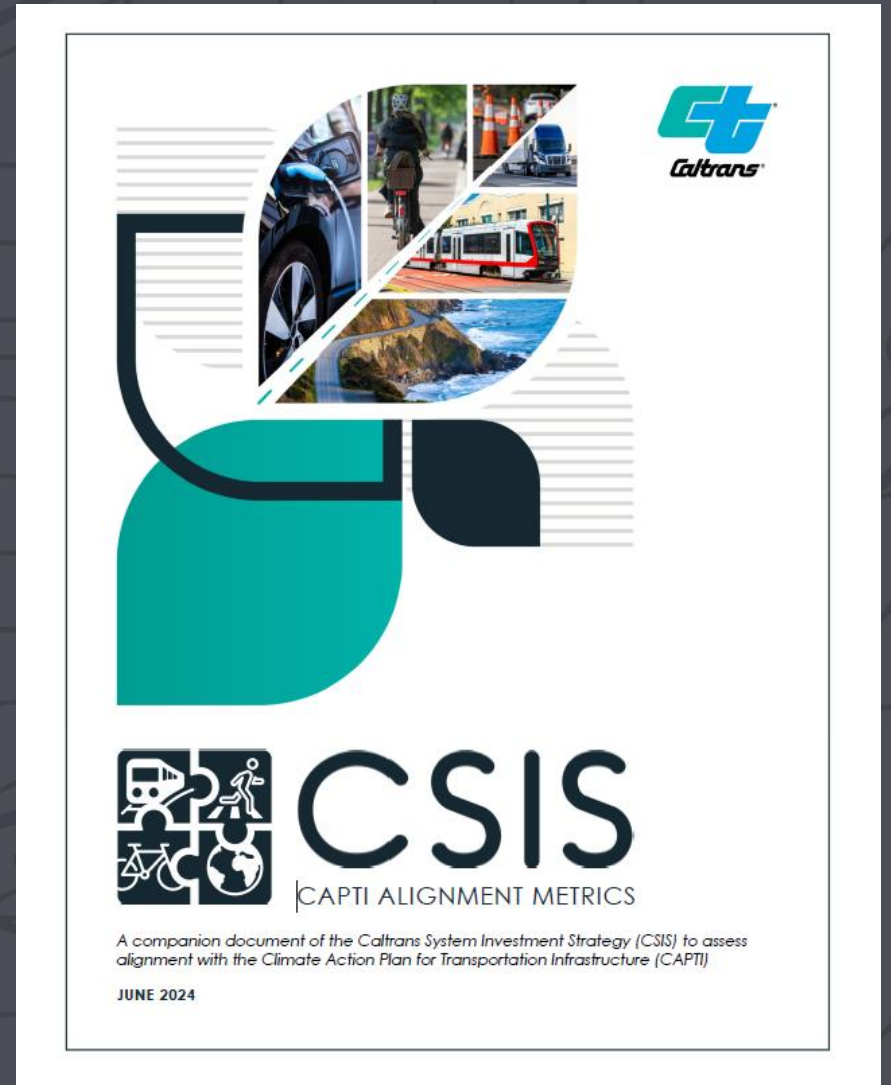
- Project Intake Form Update
- Program Fit
- 10-Year Multimodal Investment Plan

Questions: General CSIS

CAPTI ALIGNMENT METRICS



CALTRANS | DIVISION OF TRANSPORTATION PLANNING



Metric Design

- ❑ Designed as a prioritization framework
- ❑ Several other State DOTs are moving towards objective criteria, rather than description-based analysis for project selection
- ❑ Accessibility Analysis is becoming more common as a tool to analyze projects for investment – See this [NHCRP Report](#)



CAPTI Alignment Metrics

10 CAPTI Guiding Principles

- Safety
- Vehicle Miles Traveled
- Active Transportation
- Rail & Transit
- Equity
- Climate Risk
- Natural & Working Lands
- Infill Development
- Zero-Emission Vehicle Infrastructure
- Zero-Emission Vehicle Freight

CAPTI Alignment Metrics

- ★ Safety
- ★ Vehicle Miles Traveled
- ★ Accessibility
- ★ Passenger Mode Shift
- ◆ Public Engagement
- ★ DAC Traffic Impact
- ★ DAC Access to Jobs & Destinations
- ◆ Climate Adaptation & Resiliency
- ★ Land Use & Natural Resources
- ★ Zero-Emission Vehicle Infrastructure
- ★ Freight Sustainability & Efficiency

★ Quantitative ◆ Qualitative

High-level Summary of Comments on the Metrics

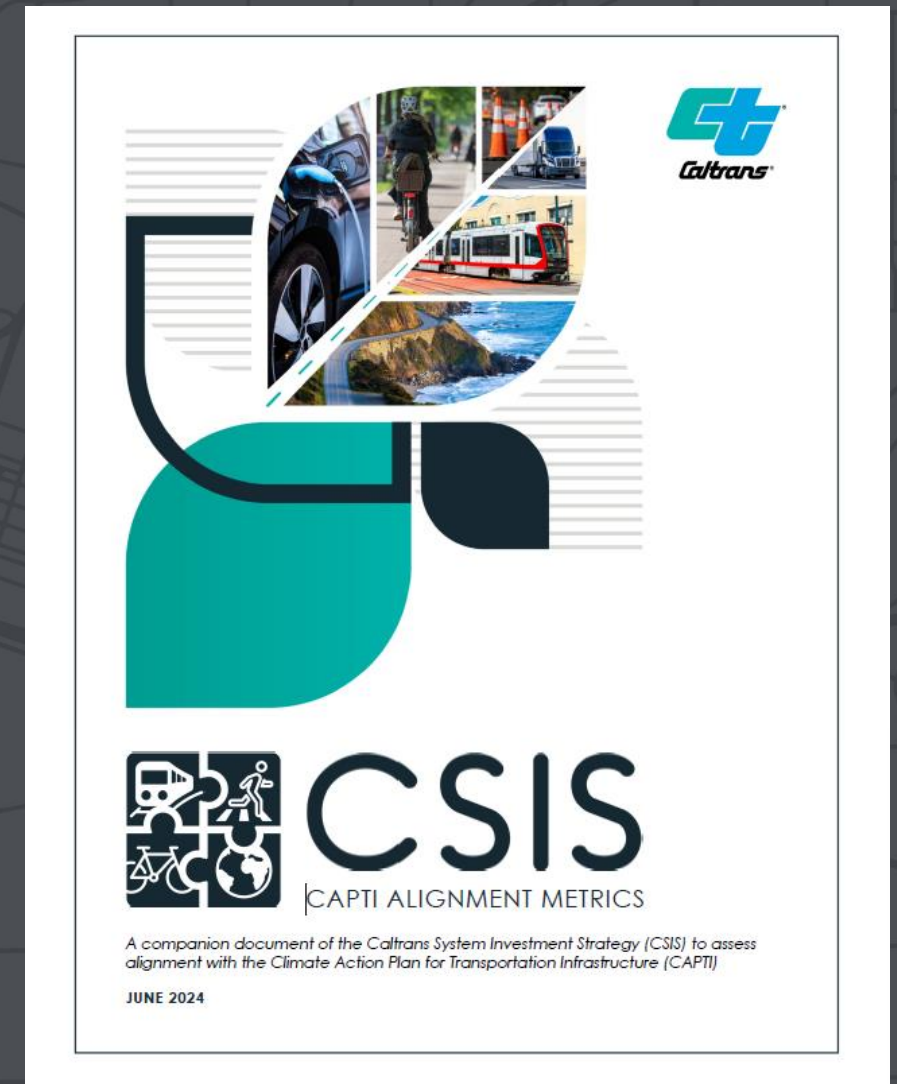
1. **Safety:** metric refinements to account for rail projects and related safety benefits due to less exposure to roadway crashes and fatalities.
2. **VMT:** Need for Transparency for determination of thresholds and maximum scores.
3. **Accessibility and Mode Shift:** may disadvantage rural counties due to the difficulty of making additional destinations reachable within a two-hour timeframe.
4. **Accessibility DAC:** Use of EQI Tool.
5. **Accessibility DAC & DAC Traffic Impacts:** Use of EQI Tool.

High-level Summary of Comments on the Metrics

6. **Land Use:** Clarity on Infill supportive transportation infrastructure aspect for land use.
7. **Freight:** Clarity on methodology and components.
8. **ZEV:** Feasibility, effectiveness, and fairness of the ZEV infrastructure metric, particularly in rural areas and in consideration of grid capacity limitations.
9. **Scores:** Add Interpretation of Scores to CAPTI Alignment Metrics.
10. **Rural Interregional Areas Challenges:** concerns about how evaluation and metrics.

CAPTI Alignment Metrics

- Elimination of the Scoring on the Curve
- Interpretation of Scores
- Addition of Crash Exposure Factor to Safety Metric
- Clarifications on VMT, Land Use, Accessibility/DAC/Traffic Impacts, Freight, and ZEV added to the document



Safety Metric

REFINEMENTS

- ❑ Metric rubric was based on the counts/severities of crashes in the project area and the inclusion of FHWA Proven Safety Countermeasures.
- ❑ **NEW Crash Exposure Factor derived from induced VMT**
 - Up to +/- 4 points correspond to 10M reduction/increase in VMT.
- ❑ **Helps transit-only projects or certain rail projects without PSCs**
 - Applied after finding roadway safety score
 - Reflects statistical relationship between Vehicle Miles Traveled (VMT) and Fatal and Serious Injury (FSI) crashes.
 - Rail grade crossing/separation projects still a 10.





Safety Metric: Additional Changes

□ Adjustment of thresholds marking High/Low Safety Need

- "Moderate" Safety Need credits projects without Fatal/Serious Injury crashes that have Injury/Complaint of Pain crashes.
- Rubric now prioritizes projects with High Safety Need (at least 1 FSI crash).

□ Introduced more thresholds for combined Crash Reduction Factor

- You **must** work with a certified traffic/civil engineer to identify Proven Safety Countermeasures and appropriate CRFs.
- Your engineer must combine them into a compound CRF and document how they were combined.
- New intake forms will allow for narrative explanation of the data.

VMT Metric

CLARIFICATIONS ON THE METHODOLOGY

- VMT Score based on induced/reduced VMT, **not regional trends.**
 - VMT score is based on net induced unmitigated VMT.
 - 5 is a neutral score.
- VMT increasing projects with Environmental Documents that predates SB 743 should submit a VMT estimate
 - Non-compliance results in a 0 score.
- CSIS Evaluation does not include VMT modeling or analysis.
 - CSIS Evaluation Team reviews submitted documentation.



Land Use



❑ Infill Development Supportive Transportation Infrastructure

- HQTAs
- State Density Bonus Requirements
- First/Last mile

❑ Transportation Projects that intersect Census-defined “Urbanized Area”/”Developed Area”

❑ Entitled and Construction Residential/Non- Residential Projects

- Population increases around transportation project may get credit in Accessibility
- Practical effect of adding these was small in pilot on SB 1, Cycle 4 projects



Freight Metrics Clarification

- ❑ **2 Freight sub-metrics comprise the CAPTI Freight Metric**
 - Efficiency + Sustainability 5 points each.
 - Freight is a single principle in CAPTI.
 - ❑ **Freight Efficiency measures current freight movement with Truck Travel Time Reliability Index (TTTRI)**
 - Evaluating freight movement improvements is part of Program Fit when applicable.
 - ❑ **Freight Sustainability measures proportion of capital construction spending on sustainable freight components**
-

CSIS and Transportation Equity Index (EQI)

EQI

1. Accessibility Metric, and
2. Accessibility for Disadvantaged Communities.

Why EQI?

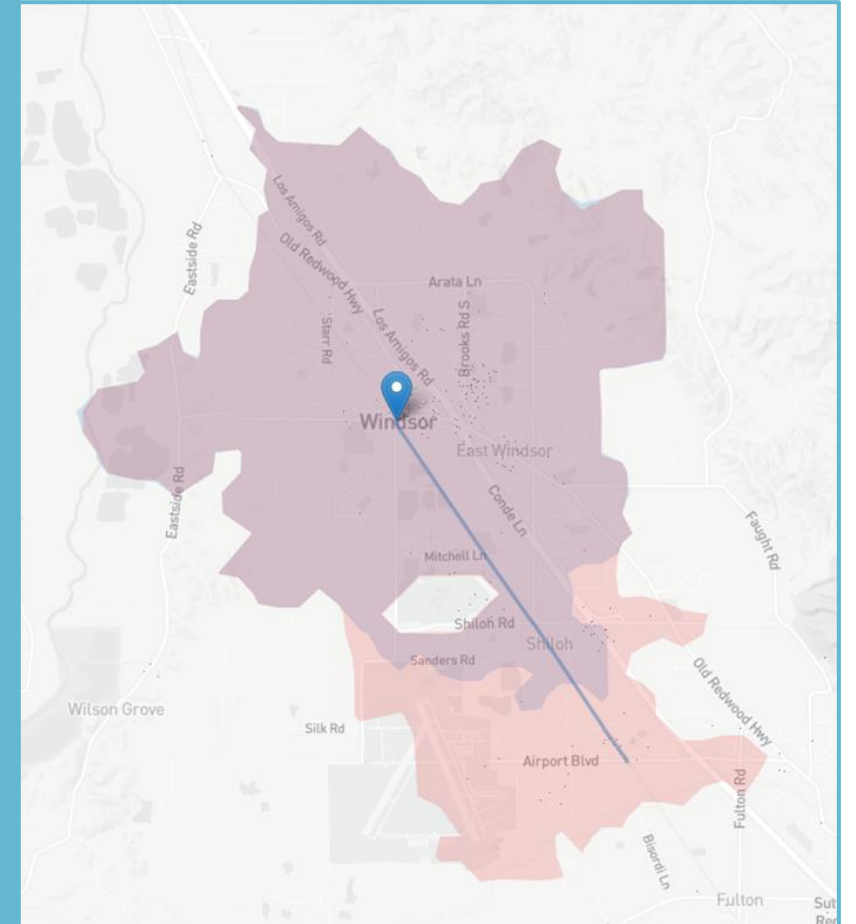
Only transportation-specific to measure specific transportation equity outcomes.

Disadvantaged Communities [DAC]

SB 535, AB 1550, Justice40, and Locally-defined Definitions for Disadvantaged Communities.

Accessibility and Disadvantaged Communities

- ❑ Metric uses AB1550--defined low-income households as a weighting factor for the accessibility analysis.
- ❑ This definition is consistent with AB1550.
- ❑ Metric considers all low-income residents, **even ones** living in non-low-income communities.



Disadvantaged Communities – Traffic Impacts

CLARIFICATIONS ON THE METHODOLOGY AND USE OF DEFINITIONS

❑ Metric uses AB1550 defined low-income households: This definition is consistent with AB1550

❑ Combined with traffic and crash data to screen low-income and tribal land areas with the highest existing traffic burden



❑ Other DAC definitions (SB535 and Justice40) also include traffic burden indicators

❑ EQI uses a similar methodology, but applied with more spatial granularity



DAC - Traffic Impacts Metric Clarification

Uses build/no-build car and truck AADT to measure traffic impacts

- Truck traffic weighted 6x car traffic
- 5 is neutral score
- Transit projects should translate ridership into AADT change estimates, like VMT

Tension with state goods movement goals

- Projects that are not logically consistent will be scrutinized

Report the net changes in AADT throughout the corridor for full credit, not just on the project roadway

- Projects that redirect traffic away from a DAC onto a new/improved facility elsewhere score well
- Add for one set of numbers for the project

Wrap-Up

CSIS

- June 2024: Complete CSIS Main document and CAPTI Alignment Metrics
- Updates on CSIS website

Next Steps

- Post June – July 2024: CSIS Updates

Closing Summary Remarks



CSIS Investment Framework will guide and influence decision making for nominations and prioritization



Iterative Approach



Collaboration and Engagement



Demonstrate progress on our goals and commitments in the CAPTI Annual Report



QUESTIONS

CSIS Feedback & Inquiries: CSIS@dot.ca.gov

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