Caltrans System Investment Strategy (CSIS)

Workshop: CAPTI Alignment Metrics Refinements

SEPTEMBER 2025

House Keeping Items

Please mute your microphone when you are not speaking

Use to emojis during the session to stay engaged

You can utilize the Q&A function to write your questions or comments

Hold live questions until the end and use the 'raise hand' function to speak

This session is recorded

All materials will be provided to the attendees after the workshop

Agenda

1 – CSIS Overview

2 – Context for the Refinements

3 – Changes to the Metrics

4 – Next Steps

5 – Q & A

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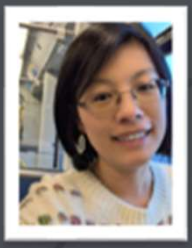

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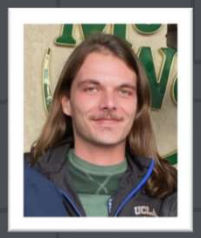

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CSIS Overview

MEENAXI RAVAL, CSIS PROGRAM MANAGER
DIVISION OF TRANSPORTATION PLANNING

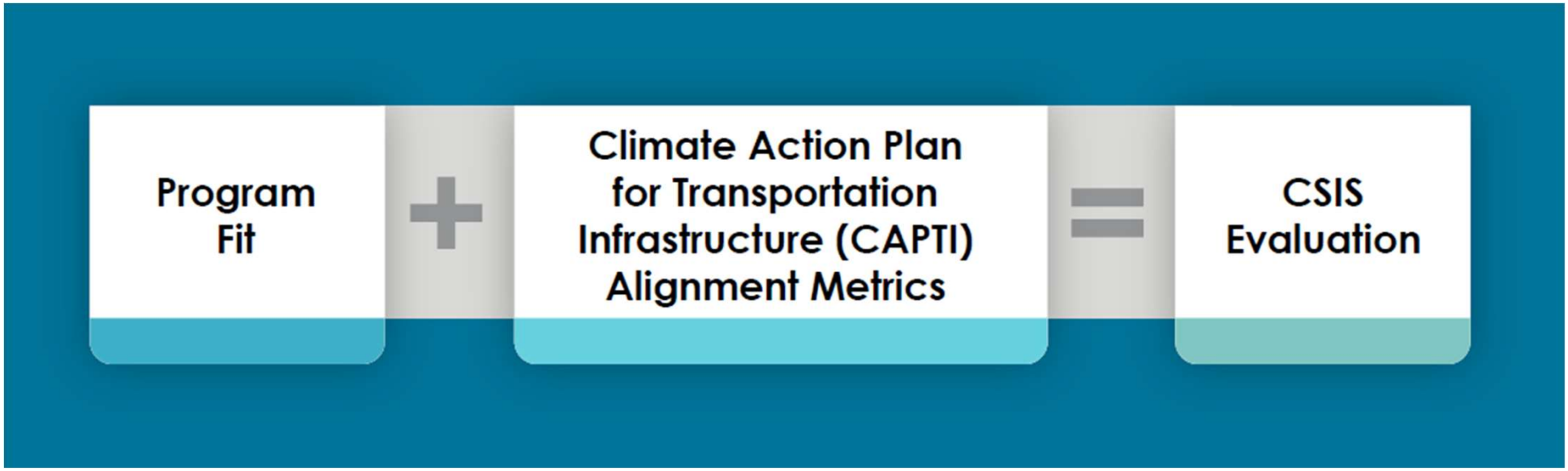
Caltrans System Investment Strategy (CSIS)

- CSIS operationalizes Climate Action Plan for Transportation Infrastructure (CAPTI) Strategy 4.1
- Planning-forward prioritization investment framework
- Guides decision making for nominations and prioritization of state and federal discretionary funding
- Assesses how projects perform across various CAPTI Guiding Principles and CTP Goals.
- Data-and-performance based approach with 11 CAPTI Alignment Metrics

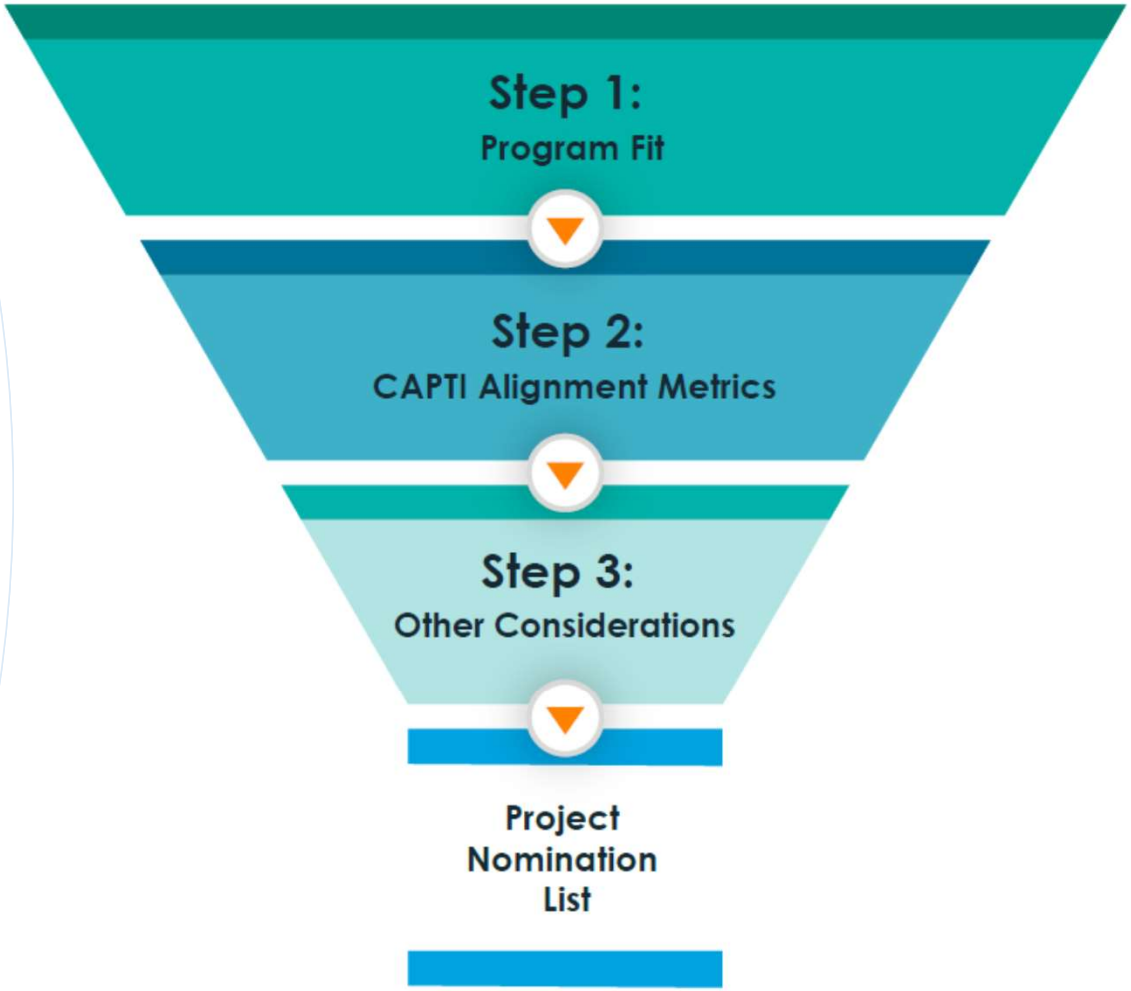
10 CAPTI Guiding Principles

CAPTI Alignment Metrics in CSIS

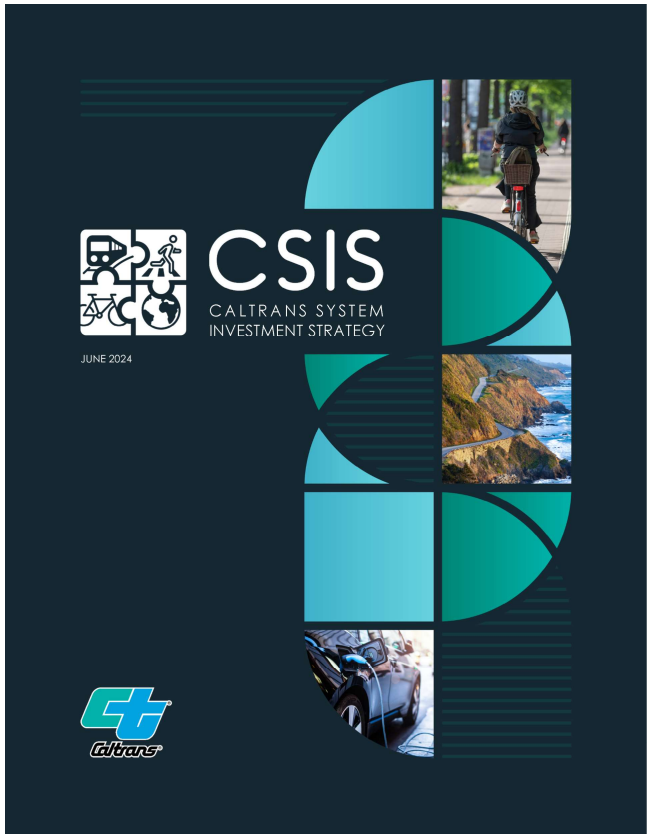
CSIS: Investment Framework



CSIS Prioritization Framework



Program Fit

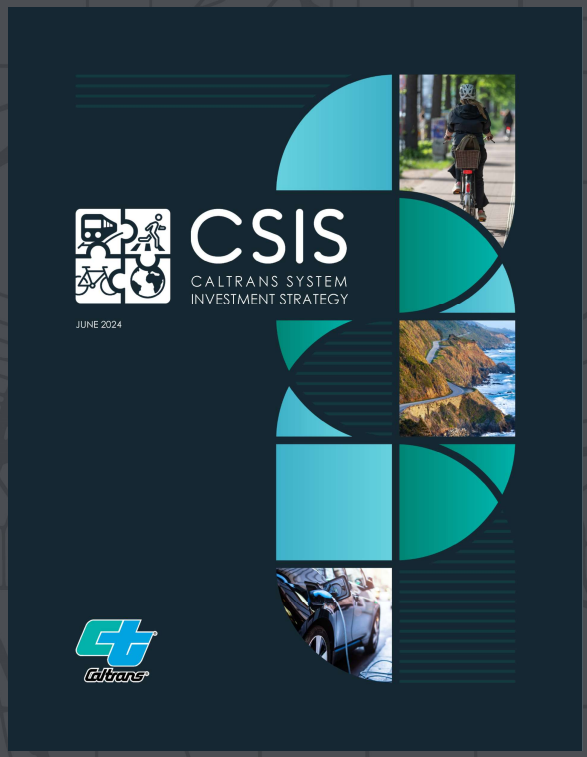


Program Fit Assessment

- Assess competitiveness for various state and federal discretionary programs
- Assessment includes:
  - ✓ Project Screening – confirm eligibility & meeting statutory requirements
  - ✓ Program Competitiveness
    - Program objective
    - Evaluation criteria

Other Considerations

- Project delivery on time and budget
- Funding plan
- Partnerships and leverage of other funds
- Projects' consistency with the statewide plans and priorities
- Geographical setting and distribution
- Completion risks



Background

Interim CSIS

1. Released December 2021
2. Qualitative Approach
3. Implemented for SB 1 Cycle 3, ATP Cycle 6

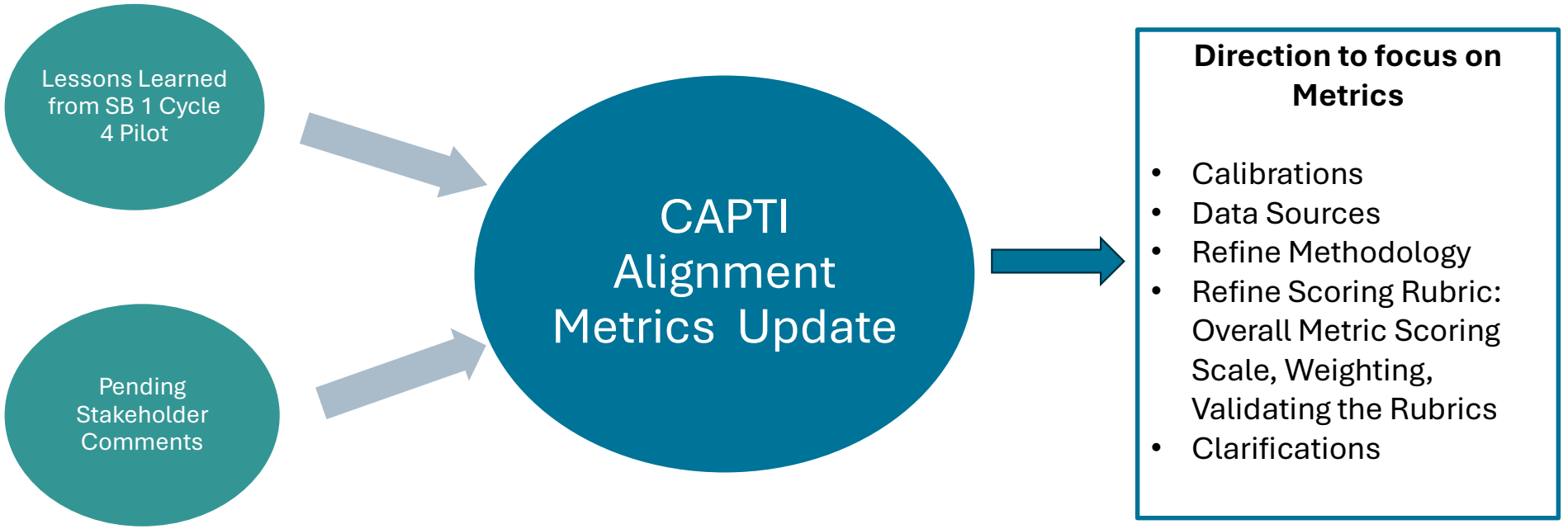
Draft CSIS

1. Released March 2024
2. Largely Transitioned from Qualitative to Quantitative Metrics
3. A 45-Day Public Review of Draft CSIS and Draft CAPTI Alignment Metrics
4. Pilot on SB 1, Cycle 4

Final CSIS

1. Complete by June 2024
2. CSIS and CAPTI Alignment Metrics
3. Living Documents

Context for Refined CAPTI Alignment Metric



Spectrum of Changes to Metrics

Methodological Update	• Safety • Land Use and Natural and Working Lands • Freight Efficiency and Sustainability • ZEV Infrastructure
Calibrations	• Accessibility • DAC-Accessibility • DAC-Traffic Impacts • Passenger Mode Shift
Enhanced Clarity	• Vehicle Miles Traveled (VMT) • Public Engagement • Climate Adaptation and Resiliency

Safety Metric

CAPTI Guiding Principle

Making safety improvements to reduce fatalities and severe injuries of all users towards zero on our roadways, railways and transit systems by focusing on context-appropriate speeds, prioritizing vulnerable user safety to support mode shift, designing roadways to accommodate for potential human error and injury tolerances, and ultimately implementing a safe systems approach

Current Safety Metric

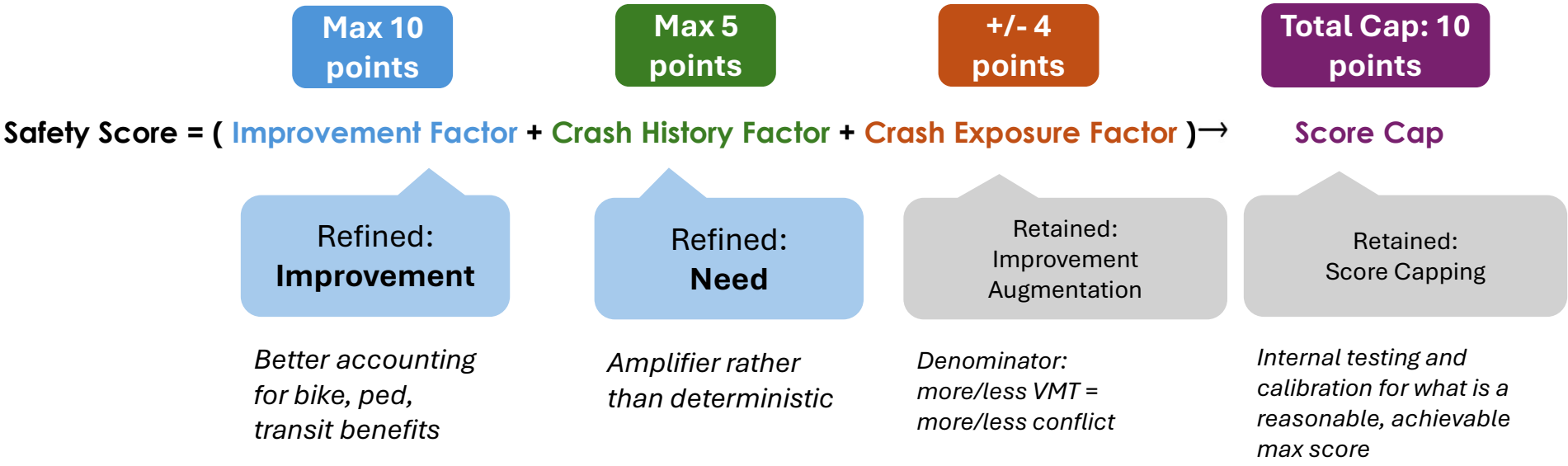
- The current Safety Metric assigns a roadway safety score based on classifying projects' combined Crash Reduction Factor from Proven Safety Countermeasures and crash history
  - The score is modified by +/- 4 points for crash exposure derived from net VMT change
  - Rail grade separation projects receive a 10

Score	Description	SEE KABCO Crash Severity Scale
10	(High Safety Need, 75% <= CRF_TOTAL)	High Safety Need (Fatal (K) & Serious Injury (A)) Rail Grade Crossing Projects Receive a 10
9	(High Safety Need, 50% <= CRF_TOTAL <75%)	High Safety Need (Fatal (K) & Serious Injury (A))
8	(High Safety Need, 30% <= CRF_TOTAL <50%)	High Safety Need (Fatal (K) & Serious Injury (A))
7	(High Safety Need, 10% <= CRF_TOTAL <30%) OR (Moderate Safety Need, 75% <= CRF_TOTAL)	High Safety Need (Fatal (K) & Serious Injury (A)) // Moderate Safety Need (Consider Injury or Complaint of Pain) (B or C))
6	(High Safety Need, .01% <= CRF_TOTAL <10%) OR (Moderate Safety Need, 30% <= CRF_TOTAL < 75%)	High Safety Need (Fatal (K) & Serious Injury (A)) // Moderate Safety Need (Consider Injury (B) or Complaint of Pain (C))
5	(Moderate Safety Need, 10% <= CRF_TOTAL < 30%) OR (Low Safety Need, 75% <= CRF_TOTAL)	Moderate Safety Need (Consider Injury (B) or Complaint of Pain (C)) // Low Safety Need (Property Damage Only (O))
4	(Moderate Safety Need, .01% <= CRF_TOTAL < 10%) OR (Low Safety Need, 30% <= CRF_TOTAL < 75%) OR (No Safety Need, 75% <= CRF)	Moderate Safety Need (Consider Injury (B) or Complaint of Pain (C)) // Low Safety Need (Property Damage Only (O))
3	(Low Safety Need, 10% <= CRF_TOTAL < 30%) OR (No Safety Need, 30% <= CRF_TOTAL < 75%)	Low Safety Need (Property Damage Only (O))
2	(Low Safety Need, .01% <= CRF_TOTAL < 10%) OR (No Safety Need, 10% <= CRF_TOTAL < 30%)	Low Safety Need (Property Damage Only (O))
1	(No Safety Need, .01% < CRF_TOTAL < 10%)	
0	(No Safety Need, No Countermeasure)	

Proposed Safety Metric Refinements

- Changing from using discrete point scale to a continuous scoring function
  - Makes it easier to distinguish projects from each other
- Adding different scoring components together (Safety Impact, Crash Exposure, Crash History) instead of using the matrix
  - Elevates proactive safety project components
- Safety Impact sub-score gives more credit for non-auto project components that don't intersect the roadway
  - Better accounting for safety impact of e.g., exclusive RoW transit, fully separated multi-use trails
- Safety Need sub-score gives more credit for a greater crash history
  - Better aligned with other Caltrans project evaluation practices; makes it easier to distinguish projects

Safety Metric Revisions



Vehicle Miles Traveled (VMT) Metric

CAPTI Guiding Principle

Promoting projects that do not significantly increase passenger vehicle travel, particularly in congested urbanized settings where other mobility options can be provided and where projects are shown to induce significant auto travel. These projects should generally aim to reduce VMT and not induce significant VMT growth. When addressing congestion, consider alternatives to highway capacity expansion, such as providing multimodal options in the corridor, employing pricing strategies, and using technology to optimize operations

VMT Metric

- The current metric rewards projects that reduce VMT or do not induce VMT by increasing highway capacity.
  - Induced/reduced VMT, not regional trends
  - VMT mitigation components count as part of the project
- This metric remains the same
  - Additional guidance for project sponsors is available in the methodology document

Score	Description
>5 to 10	Scaled between 5 and 10, with a score of 10 representing 10 million Annual VMT reduced
5	No VMT Change
0 to <5	Scaled between 0 and 5, with a 0 representing a 10 million Annual VMT increase

Land Use and Natural/Working Lands Metric

CAPTI Guiding Principles

Promoting compact infill development while protecting residents and businesses from displacement by funding transportation projects that support housing for low-income residents near job centers, provide walkable communities, and address affordability to reduce the housing-transportation cost burden and auto trips

Protecting natural and working lands from conversion to more intensified uses and enhance biodiversity by supporting local and regional conservation planning that focuses development where it already exists and align transportation investments with conservation priorities to reduce transportation's impact on the natural environment

Land Use & Infill Development Sub-Metric

- Currently, projects intersecting urbanized areas get "Land Use & Infill Development" scoring, whereas rural projects get "Natural Resources & Conservation" scoring.
- The current Land Use metric rewards projects that support infill housing in urban areas through creating
  - High Quality Transit Areas (HQTA) = 8-10 points
  - Transit infrastructure = 7 points
  - Active transportation = 6 points
  - Projects that build new SOV roadway(s) currently score below a 5

Proposed Land Use Metric

- Changing from discrete scores for non-HQTA projects to a function that gives different amounts of points for different components
  - Makes it easier to distinguish project benefits
- Adding credit for building housing or other placemaking elements
  - Captures more types of benefits
- Formula:
  - 3 x [Transit operation credits] + 2 x [Active Transportation credits] + [Other Housing/Placemaking element credit], capped at 8 points

Natural Resources Sub-Metric

- The current metric rewards natural resource enhancement in rural areas
  - Reference to CTP 2050 examples

- Changes to the metric:
  - Using Caltrans/FHWA data to classify urbanized areas; more projects will be eligible for rural scoring
  - More explicit examples for enhancements
  - Using additional data from SiteCheck to identify protected/natural areas
  - For projects near protected areas: 5.1 points for 1 enhancement, 10 points for 2+ enhancements

Short Q-A

Metrics: Safety, VMT, Land Use & Natural and Working Lands

Accessibility Metric

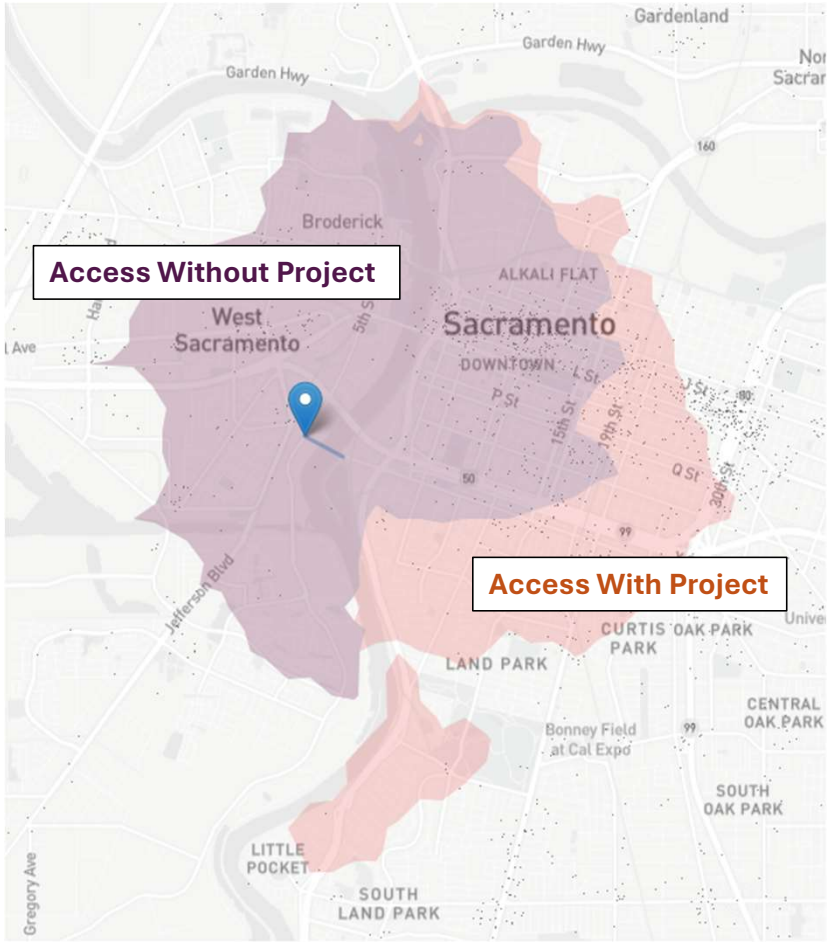
CAPTI Guiding Principles

Building toward an integrated, statewide rail and transit network, centered around the existing California State Rail Plan that leverages the California Integrated Travel Project to provide seamless, affordable, multimodal travel options in all contexts, including suburban and rural settings, to all users

Investing in networks of safe and accessible bicycle and pedestrian infrastructure, particularly by closing gaps on portions of the State Highway System that intersect local active transportation and transit networks or serve as small town or rural main streets, with a focus on investments in low-income and disadvantaged communities throughout the state

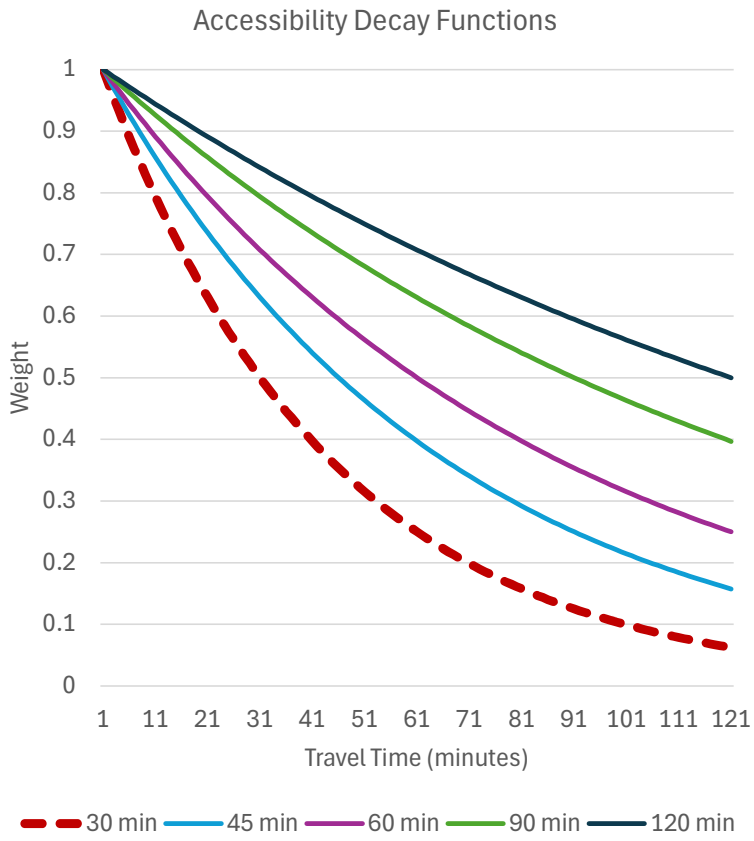
Accessibility Metric

- The current Accessibility metric measures the population-weighted percent change in access to destinations (jobs + non-work destinations)
- Destinations are weighted by travel time using an exponential decay function



Proposed Accessibility Metric Updates

- Based on partner feedback and the results of the SB-1 Cycle 4 CSIS Pilot, we are making two calibration updates to the Accessibility metric:
  1. Measure Accessibility as an average change rather than a percent change
  2. Utilize a more nuanced approach when weighting destinations by travel time



Accessibility Metric Scoring Rubric

- The threshold "*i*" denotes 1% of the statewide population-weighted average baseline access to destinations for a given mode and decay curve

Score	Description
>5 to 10	Population-weighted average change in access is scaled between 5 and 10, where a 10 corresponds to an increase in population-weighted access >= *i*
5	No change in population-weighted access
0 to <5	Population-weighted average change in access is scaled between 0 and 5, where a 0 corresponds to a decrease in population-weighted access >= *i*

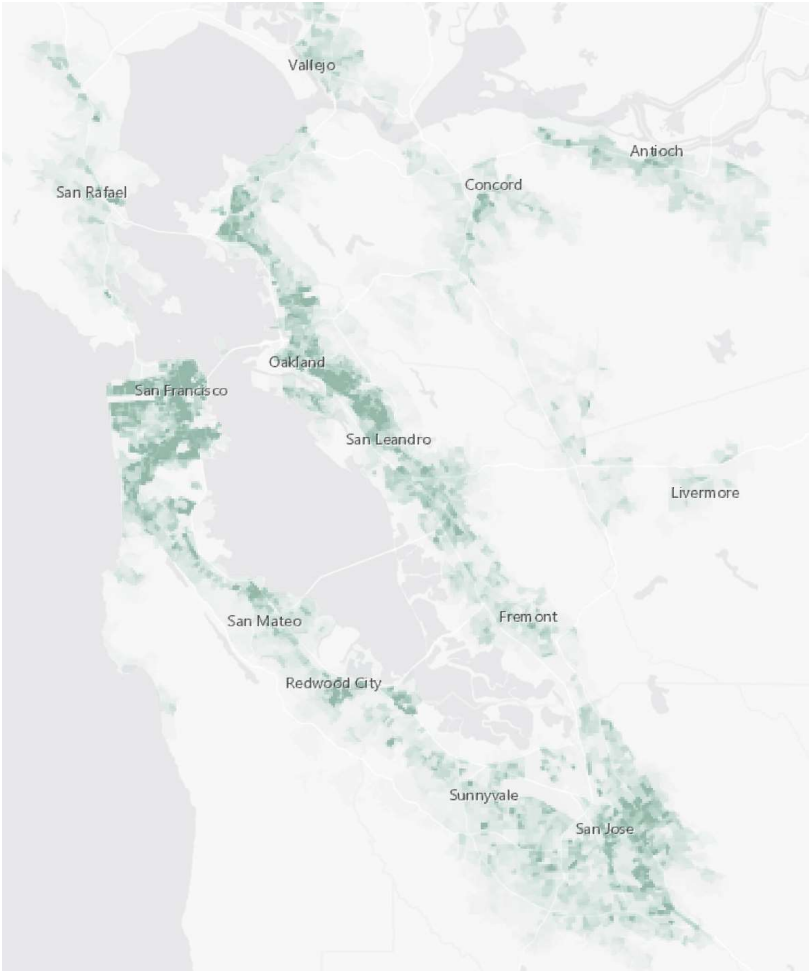
DAC Accessibility Metric

CAPTI Guiding Principle

Strengthening our commitment to social and racial equity by reducing public health and economic harms and maximizing community benefits to disproportionately impacted disadvantaged communities, low-income communities, and Black, Indigenous, and People of Color (BIPOC) communities, in urbanized and rural regions, and involve these communities early in decision-making. Investments should also avoid placing new or exacerbating existing burdens on these communities, even if unintentional

DAC Accessibility Metric

- The current Disadvantaged Community (DAC) Accessibility metric measures the DAC population-weighted percent change in access to destinations (jobs + non-work destinations)
- DAC populations are defined as residents of AB-1550 low-income households, consistent with the Caltrans Transportation Equity Index (EQI)



DAC Accessibility Metric Updates

- Based on partner feedback and the results of the SB-1 Cycle 4 CSIS Pilot, we are making two calibration updates to the DAC Accessibility metric:
  1. Utilize a more nuanced approach when weighting destinations by travel time (the same change previously-discussed for the Accessibility metric)
  2. Measure percent change as DAC population-weighted average percent change instead of weighted percent change in total destinations

DAC Accessibility Metric Scoring Rubric

Score	Description
>5 to 10	Percent change is scaled between this score range, where 10 corresponds to >=1% increase in DAC population-weighted access.
5	0% change in DAC population-weighted access.
0 to <5	Percent change is scaled between this score range, where 0 corresponds to >=1% decrease in DAC population-weighted access.

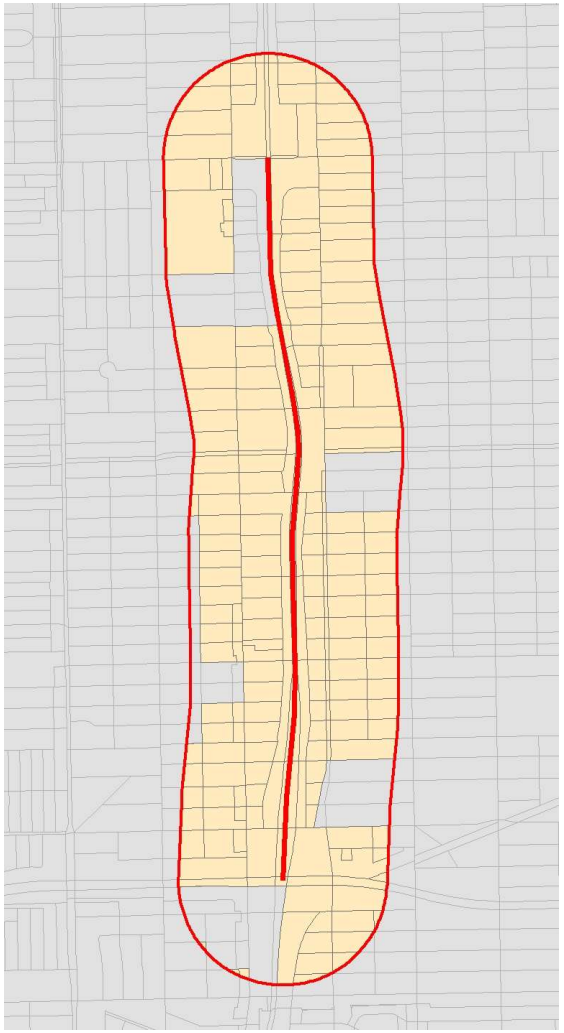
DAC Traffic Impacts Metric

CAPTI Guiding Principle

Strengthening our commitment to social and racial equity by reducing public health and economic harms and maximizing community benefits to disproportionately impacted disadvantaged communities, low-income communities, and Black, Indigenous, and People of Color (BIPOC) communities, in urbanized and rural regions, and involve these communities early in decision-making. Investments should also avoid placing new or exacerbating existing burdens on these communities, even if unintentional

DAC Traffic Impacts Metric

- The current Disadvantaged Community (DAC) Traffic Impacts metric measures the percent change in truck-weighted traffic impacting DACs
- DACs are defined as Census blocks screened by the Caltrans Transportation Equity Index (EQI) Traffic Exposure Screen



Proposed DAC Traffic Impacts Metric Updates

- Based on partner feedback and the results of the SB-1 Cycle 4 CSIS Pilot, we are making two calibration updates to the DAC Traffic Impacts metric:
  1. Measure traffic impacts as a raw change instead of a percent change
  2. Weight results by impacted populations

DAC Traffic Impacts Metric Scoring Rubric

$$\text{Truck-Weighted AADT Impact Score} = \frac{\sum(\text{Car AADT} + (\text{Truck AADT} \times 6)) \times \text{Population}}{1{,}000{,}000}$$

Score	Description
>5 to 10	Change in truck-weighted AADT impact score is scaled between 5-10, with 10 corresponding to a decrease in truck-weighted AADT impact score of 3 or greater.
5	No change in AADT anticipated, or no impact on DACs.
0 to <5	Change in truck-weighted AADT impact score is scaled between 0-5, with 0 corresponding to an increase in truck-weighted AADT impact score of 3 or greater.

Passenger Mode Shift Metric

CAPTI Guiding Principles

Building toward an integrated, statewide rail and transit network, centered around the existing California State Rail Plan that leverages the California Integrated Travel Project to provide seamless, affordable, multimodal travel options in all contexts, including suburban and rural settings, to all users

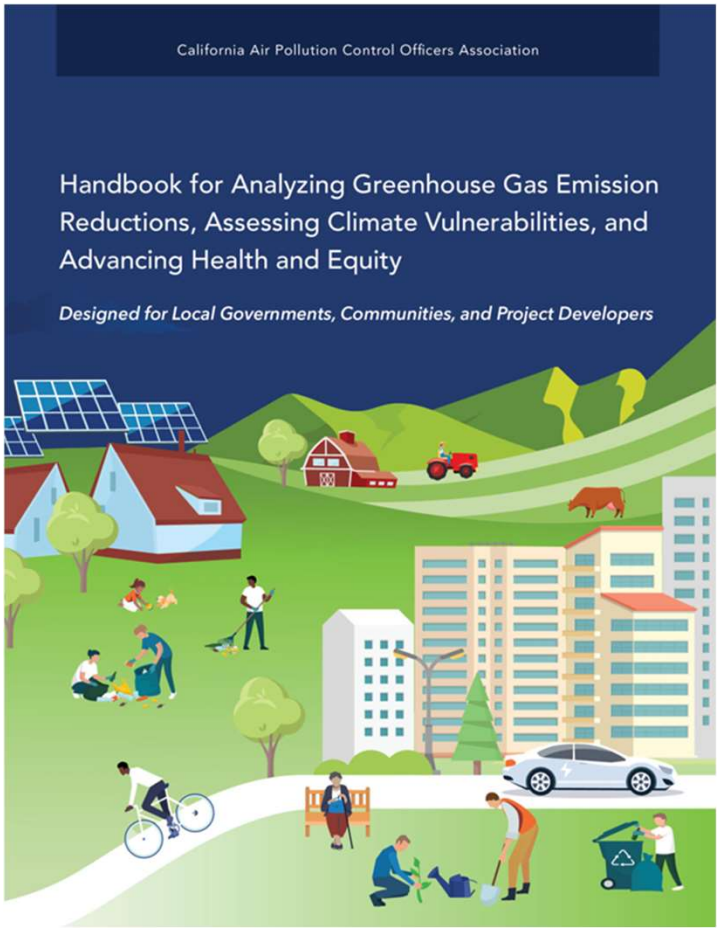
Investing in networks of safe and accessible bicycle and pedestrian infrastructure, particularly by closing gaps on portions of the State Highway System that intersect local active transportation and transit networks or serve as small town or rural main streets, with a focus on investments in low-income and disadvantaged communities throughout the state

Passenger Mode Shift

- The current Passenger Mode Shift metric measures the population-weighted average change in mode shift ratio
- The mode shift ratio is the ratio of non-auto access to destinations divided by auto access to destinations

Proposed Passenger Mode Shift Updates

- Based on partner feedback and the results of the SB-1 Cycle 4 CSIS Pilot, we are making two calibration updates to the Passenger Mode Shift metric:
  1. Utilize the same destination weighting approach used for Accessibility/DAC Accessibility
  2. Add additional points for mode shift-supporting project components that aren't captured in accessibility metrics



Passenger Mode Shift Updates: CAPCOA Point Add-On

Measures/Components	Added Points
Implement Conventional Carshare Program	.33
Implement Electric Carshare Program	.33
Implement Pedal (Non-Electric) Bikeshare Program	.33
Implement Electric Bikeshare Program	.33
Implement Electric Scooter share Program	.33
Reduce Transit Fares	.33
Provide Community-Based Travel Planning	.33
Implement Commute Trip Reduction Program (Voluntary)	.33
Implement Commute Trip Reduction Marketing	.33
Provide End of Trip Bicycle Facilities	.33
Implement Subsidized or Discounted Transit Program	.33
Provide Ridesharing Program	.33
Implement Employee Parking Cash Out	.67
Limit Residential Parking Supply	.67
Unbundle Residential Parking Costs from Property Costs	.67
Price Workplace Parking	1
Provide Employee-Sponsored Vanpool	1
Implement Commute Trip Reduction Program (Mandatory Implementation and Monitoring)	1
Implement Market Price Public Parking (On-Street)	1

Passenger Mode Shift Metric

- Additional points will be added to the base rubric score below if additional mode shift-enhancing project components are included in an environmental document

Score	Description
>5 to 10	Change in ratio is scaled in this score range, where 10 corresponds to >= 0.0013 change in the average population-weighted mode shift ratio across the region.
5	No change in population-weighted mode shift ratio.
0 to <5	Change in ratio is scaled in this score range, where 0 corresponds to a <= -0.0013 change in the mode shift ratio corresponding to a shift towards more auto-accessible destinations post-project implementation.

Short Q-A

Metrics: Accessibility, DAC- Accessibility, DAC-Traffic Impacts, and Mode Shift

Freight Metric

CAPTI Guiding Principle

Developing a zero-emission freight transportation system that avoids and mitigates environmental justice impacts, reduces criteria and toxic air pollutants, improves freight's economic competitiveness and efficiency, and integrates multimodal design and planning into infrastructure development on freight corridors

Freight Metric

The current Freight metric includes 2 sub-metrics:

- **Freight Efficiency** (up to 5 points)
  - Scores by project area travel time reliability. Corridors with low reliability receive higher points.
- **Freight Sustainability (**up to 5 points)
  - Scores by percent of project construction budget spent on freight Sustainability elements.
- Two sub-metrics are combined to reach a maximum of 10 points

Freight Metric Updates – Roadway Projects

Based on feedback and the results of the SB-1 Cycle 4 CSIS Pilot, we made the following updates:

- **Freight Efficiency** (up to 5 points)
  - Scores project using formula and converted to points:

  [Travel Time Reliability Index] x [Truck Volume] x [Truck Vehicle Hours Traveled (VHT) reduction]

- **Freight Sustainability** (up to 10 points)
  - Scores project by specific freight sustainable elements such as truck parking, truck lanes, grade separation over freight rail, and freight-related Intelligent transportation Systems (ITS).
- **Freight Efficiency and Freight Sustainability are combined to reach a maximum of 10 points**

Freight Metric Updates

Freight Sustainability Elements Scoring Rubric. Points received for each element are additive.

Points	Qualifying Sustainable Elements
5	• New or Expanded Truck Parking Facilities that addresses the statewide truck parking deficit • New grade separation over freight rail • New bridges that shorten travel distance by creating a more direct route, address existing asset's poor conditions, or improved to accommodate oversized truck or trains
3	• Dedicated truck lanes, truck climbing lanes, or runaway truck lanes •Intelligent transportation systems (ITS) and other technology to improve the flow or efficiency of freight
2	• Real-time traffic, truck parking, roadway condition, and multimodal transportation information systems • Electronic screening and credentialing systems for vehicles, including weigh-in-motion truck inspection technologies • Electronic cargo and border security technologies that improve truck freight movement • Physical separation of passenger vehicles from commercial motor freight

Example Project C

Project Area TTTRI: 1.75

Peak period truck volume: 4,000

Peak period Truck Travel Time Improvements: 3 minutes

Off-peak Truck Travel Time Improvements: 0 minutes

Sustainable elements: Freight ITS elements to direct truck traffic

Truck Efficiency Improvement Index = 1.75 x 4,000 x $\frac{3 \text{ minutes}}{60 \text{ minutes/hour}}$ = 350

- Project freight efficiency score = 350 / 400 * 5 points = **4.38 points**
- Project will receive **3 points** for the inclusion of freight ITS elements.
- Project total score = 4.38 + 3 = **7.38 points**.

Freight Metric Updates – Rail Projects

- Applies to rail projects that support freight rail movement.

  - Major infrastructure projects to address existing need or add capacity where it's needed
    - Major new tracks or routes, grade separations, intermodal railyard capacity improvements
  - Project increases operational flexibility to maximize existing capacity
    - Siding, positive train control, track and signal improvements, etc.
  - Commitment to expand freight operation after project completion
  - Alignment with state rail plan

  - Data requirements:
    - Estimated train-hours of delay reduction
    - Commitment letter or cooperation agreement from freight rail operators.
    - If project is identified in in the 2024 California State Rail Plan Appendix 2. Capital Projects

Zero-Emission Vehicle (ZEV) Infrastructure Metric

CAPTI Guiding Principle

Including investments in light, medium, and heavy-duty zero-emission vehicle (ZEV) infrastructure as part of larger transportation projects. Support the innovation in and development of the ZEV market and help ensure ZEVs are accessible to all, particularly to those in more rural or remote communities

ZEV Infrastructure Metric

The current ZEV Infrastructure metric calculates score using:

- The project's total funding requests
- Type of ZEV technology proposed
- The project's urban/rural setting.

ZEV Infrastructure Type	Ratio Calculation
Urban/Suburban ZEV Infrastructure	• Level 2 Charger Ports: 90 charger ports per $50M request • Level 3 Charger Ports: 24 charger ports per $50M request
Rural ZEV Infrastructure	• Level 2 Charger Ports: 40 charger ports per $50M request • Level 3 Charger Ports: 12 charger ports per $50M request
Freight ZEV Infrastructure	• 12 Heavy Duty Charger Ports per $50M request • Hydrogen: 10,000KG of site per day capacity with 2 nozzles
Rail/Transit ZEV Infrastructure	• 6 Heavy Duty Charger Ports per $50M request • Hydrogen: 10,000KG of site per day capacity with 2 nozzles
Rail/Transit ZEV Rolling Stock	• Rail ZEV Rolling Stock – Maximum Points • 10 BEB Buses per 50 million in Request • 5 Hydrogen Buses per 50 million in Request
Rail Projects	Rail projects that provide zero emission freight will be prioritized and automatically receive 3 points

ZEV Infrastructure Metric Updates

- Changed methodology: Establish ZEV Infrastructure required based on nearby highway volume
  - Highway volume reflects project area's urban/rural setting, population density, and potential charging demand
  - Total volume is used for passenger ZEV chargers. Truck volume is used for heavy duty freight chargers.
  - Less common technologies, such as hydrogen and ZEV transit infrastructure, are prioritized.
  - Points obtained for each infrastructure type are combined to calculate total score (up to 10 points).

ZEV Infrastructure Type	Number or Capacity Required to Obtain 10 Points
Level 2 Charging Ports	Charger requirement is scaled based on AADT: •Four (4) charging ports for areas with 6,000 or less AADT on nearby highway •One (1) additional charging port for each 3,300 increase in AADT •Seventy (70) charging ports at the maximum for areas with AADT above 220,500
Level 3 Charging Ports	Charger requirement is scaled based on AADT: •Four (4) charging ports for areas with 6,000 or less AADT on nearby highway •One (1) additional charging port for each 11,000 increase in AADT •Twenty-four (24) charging ports at the maximum for areas with AADT above 215,000
Medium- and Heavy-Duty Truck Charging Ports	Charger requirement is scaled based on Truck AADT •Four (4) charging port for areas with 500 or less Truck AADT on nearby highway •One (1) additional charging port for each 3,000 increases in Truck AADT •Eight (8) charging ports at the maximum for areas with Truck AADT above 9,500 •Hydrogen: 4,000 kg of site per day capacity with two (2) nozzles
Rail/Transit ZEV Infrastructure	•Six (6) medium- and heavy-duty truck charging ports •Hydrogen: 4,000 kg of site per day capacity with two (2) nozzles
Rail/Transit ZEV Rolling Stock	•One (1) ZEV locomotive •Ten (10) battery-electric buses • Five (5) hydrogen buses

Public Engagement Metric

CAPTI Guiding Principle

Strengthening our commitment to social and racial equity by reducing public health and economic harms and maximizing community benefits to disproportionately impacted disadvantaged communities, low-income communities, and Black, Indigenous, and People of Color (BIPOC) communities, in urbanized and rural regions, and involve these communities early in decision-making. Investments should also avoid placing new or exacerbating existing burdens on these communities, even if unintentional

Public Engagement Metric

The current Public Engagement metric:

- Assessed by a Project Review Committee, which reviews documents provided by the project sponsor.
- Provides a rubric containing the following criteria:
  - **Public Engagement Plan (PEP) or Equivalent – 20% weight, 2 points total**
  - **Public Engagement Actions Undertaken – 40% weight, 4 points total**
  - **Project responsiveness to Public Feedback – 40% weight, 4 points total**
- Provides descriptions for each criterion in the rubric, which have overlaps that could use additional clarity.
- Provides a final "consensus" score on a step-function scale of 0, 2, 4, 6, 8, or 10, with each step having a subjective qualifier (e.g., "Superior," "Excellent," "Average," "Adequate," "Inadequate," or "Unacceptable").

Proposed Public Engagement Metric

Based on feedback and the results of the SB-1 Cycle 4 CSIS Pilot:

- Retained the checklist style rubric approach, as well as the following criteria:
  - **Public Engagement Plan (PEP) or Equivalent – 2 points total**
  - **Public Engagement Actions Undertaken – 4 points total**
  - **Project responsiveness to Public Feedback – 4 points total**

- Translated the descriptions in the checklist into measurable actions worth either one-half or one-whole-points.
- Approximately half of the points are given to community-context specific engagement actions and consideration/involvement of disadvantaged communities.

Proposed Public Engagement Metric

Public Engagement Plan (PEP), or equivalent (2 points total)

The project has a published PEP (or equivalent):

- PEP identifies prior engagement conducted. (0.5 point)
- PEP identifies community-specific context and key stakeholders, including local and regional partners. (0.5 point)
- PEP identifies disproportionately impacted disadvantaged, low-income, and Black, Indigenous, and People of Color (BIPOC) communities. (0.5 point)
- PEP identifies several outreach strategies and engagement methods that are appropriate and adequate for the community-specific context and key stakeholders identified above. (0.5 point)

Public Engagement Actions Undertaken (4 points total)

Diverse group of communities and stakeholders were engaged.

- Local and regional partners, local businesses, and the general public were engaged. (0.5 point)
- Disadvantaged, low-income, and BIPOC communities were included. (0.5 point)
- Tribal Organizations and leaders were included. (0.5 point)
- Community-Based Organizations (CBOs) were included. (0.5 point)

Project enumerates multiple methods of outreach conducted.

- At least three (3) methods were used. (0.5 points)
- More than five (5) methods were used. (0.5 point)
- Time and location of outreach events were appropriate for the community. (0.5 point)
- Number of events held was appropriate for the scale/impact of the project. (0.5 point)

Proposed Public Engagement Metric

Project Responsiveness to Public Input (4 points total)

Project is responsive to community input.

- Comments from members of the public were collected during engagement. (0.5 point)
- Project scope incorporated input from stakeholders identified above. This should be demonstrated by responsiveness to public comments, public comments that express support for the project, OR that the project scope has been modified or refined as a result of community input, either in early planning or through project development. (1 point)
- Project incorporated feedback from low income, tribal organizations and leaders, BIPOC communities and/or CBOs. (1 point)

Project has documented support from the diverse group of stakeholders and community members.

- Project has documented support from agency partners. (0.5 point)
- Project has documented support from at least four (4) community groups. (0.5 point)
- Project has documented support from at least two (2) disadvantaged groups such as tribal organizations and leaders, and CBOs. (0.5 point)

Climate Adaptation and Resiliency Metric

CAPTI Guiding Principle

Assessing physical climate risk as standard practice for transportation infrastructure projects to enable informed decision-making, especially in communities that are most vulnerable to climate-related health and safety risks

Climate Adaptation and Resiliency Metric

The current Climate Adaptation and Resiliency metric:

- Assessed by a Project Review Committee, which reviews documents provided by the project sponsor.
- Assessed for the following criteria:
    1. Identification/evaluation of climate change effects/stressors/risks, vulnerabilities, and adaptation strategies
    2. Consistency with State, regional, and local Climate Change Adaptation Plans/Policies/Actions
    3. Evaluation of Climate Change-related risks to vulnerable communities, and
    4. Disaster management components of larger projects
- Provides six (6) scoring rubrics, each of which is associated with a final score on a step-function scale of 0, 2, 4, 6, 8, or 10.
- Each rubric outlines each of the 4 criteria as opposed to each criteria having its own checklist or rubric.
- Provides descriptions for each criteria in each rubric, which relies on subjective qualifiers.

Proposed Climate Adaptation and Resiliency Metric

Simplifies the six (6) scoring rubrics into one (1) checklist, which weighs the existing criteria as follows:

1. Identification/Evaluation of Climate Change Effects/Stressors/Risks (Prerequisite #1).
    - Identification/Evaluation of **Infrastructure** and **Communities** vulnerable to potential climate impacts (20% of the total score)
2. Consistency with State, regional, and local Climate Change Adaptation Plans/Policies/Actions (Prerequisite #2).
    - **Infrastructure** Adaptation and Disaster Management Strategies (40% of the total score)
        - Harden assets to climate stressors, nature-based adaptation strategies, design elements for disaster management/evacuation
    - **Communities** Adaptation and Disaster Management Strategies (40% of the total score)
        - Engagement with vulnerable communities, design elements that improve community resiliency to climate events, consideration of evacuation and emergency operations.

Proposed Climate Adaptation and Resiliency Metric

- Translates the descriptions for each criterion into measurable actions that are worth 1 point each, or partial points if the project scope is not completely responsive to the climate risk assessment.
- A final “consensus” score is calculated by adding the points together
- Refines the Project Review Committee scoring materials to standardize the evaluation and minimize discrepancies, making the score more precise.
- Refines the intake forms to provide project sponsors clarity on which documents are needed to score well against the criteria.

Proposed Climate Adaptation and Resiliency Metric

Vulnerabilities to Climate Change Impacts (2 points total)

Transportation Infrastructure vulnerable to Impacts (1 point)

- Identify assets (e.g., roadways, bridges, culverts) in the study area that are vulnerable to potential impacts, including their assigned priority levels according to the District Adaptation Priorities Reports. For assets that are likely to be exposed but not identified in the respective Adaptation Priorities Report, discuss how climate stressors could potentially impact asset performance (throughput) and user safety.

Communities Vulnerable to Impacts (1 point)

- Evaluate climate impacts to vulnerable communities, including low-income, disadvantaged, and Black, Indigenous, People of Color (BIPOC) communities, and tribal governments/communities.

Proposed Climate Adaptation and Resiliency Metric

Strategies for Transportation Infrastructure (4 points total)

- Project incorporates strategies to harden assets (e.g., roadways, bridges, culverts) against each historic and forecasted stressor identified in the Climate Risk Assessment. (1 point)
- Nature-based adaptation strategies are incorporated into the project scope. (1 point)
- Disaster management (emergency evacuations, response, and recovery) prioritizes solutions other than roadway widening, such as ITS, contraflow measures, providing additional ingress/egress/street connectivity, intersection geometric improvements (1 point)
- Adapting transportation infrastructure to climate stressors or climate events is a primary objective of the project. (1 point)

Strategies for (Vulnerable) Communities (4 points total)

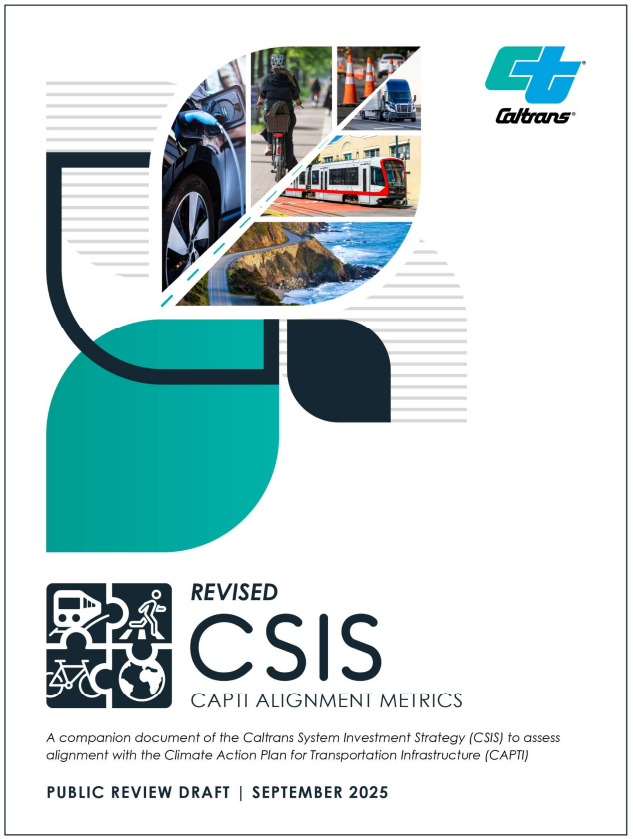
- Communities identified as vulnerable in the Climate Risk Assessment have been considered and engaged throughout the project planning, scoping, and design process. (1 point)
- Adaptation strategies will improve the resilience of these communities to climate stressors (e.g., shade trees/structures, porous pavement, nature-based solutions, evacuation strategy). (1 point)
- The project demonstrates reasonable nexus to an evacuation route (or other route likely to be used for evacuation) that is documented in a Community Wildfire Protection Plan, Local Hazard Mitigation Plan, and/or the Safety element of a local General Plan, AND the project demonstrates it is prepared to handle emergency operations. (1 point)
- Enhancing community resilience to climate stressors or climate events is a primary objective of the project. (1 point)

Key Milestones

- **Public Review:** September 8 to October 10
- **Stakeholder Workshops:** Sept 17 and Sept 25
- **Review feedback and Revise**: Oct through Nov
- **Release the Finalized Document**: December

[Caltrans System Investment Strategy (CSIS) | Caltrans]

[Public Review Draft Revised CAPTI Alignment Metrics]



Q&A/Open Comment

THANK YOU

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