

Active Transportation Emphasis Area Guidance for Corridor Planning

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Active Transportation Emphasis Area Guidance

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Eight-Step Corridor Planning Process

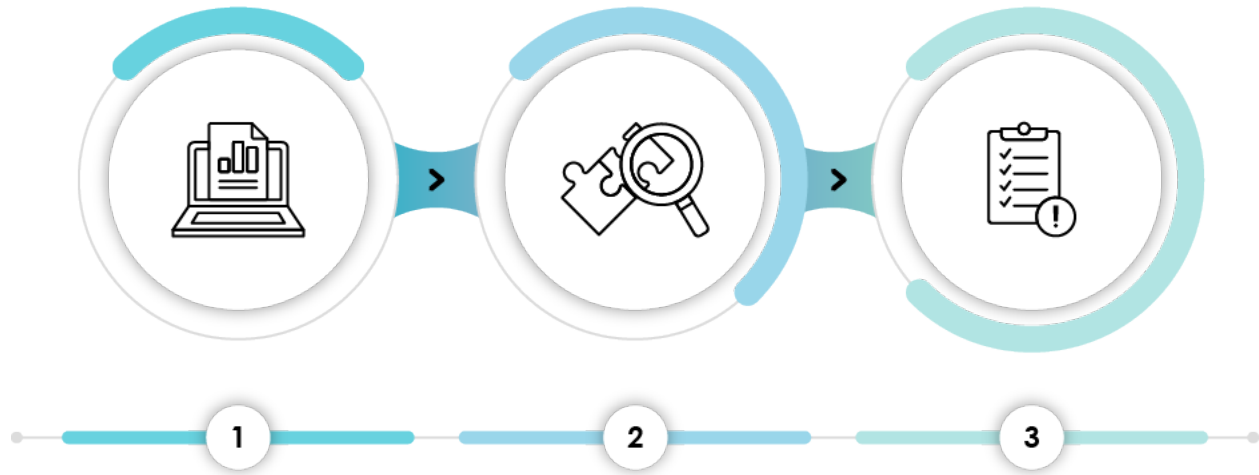
Active Transportation is one of a number of distinct emphasis areas which are to be considered in corridor plan analysis. This Active Transportation guidance has one goal – provide corridor planners with a framework to assess and analyze the variety of Active Transportation issues that can be addressed in Corridor Plans. As the “Eight Step” process will be required in the development of Corridor Plans, this Active Transportation Emphasis Area (EA) Guidance is based upon those eight steps. The Active Transportation EA Guidance assures consistency within the that framework, helps with the information/analysis that can be integrated into each step, and where to find it. This will ultimately ensure more direct Active Transportation considerations. A more detailed description of the Eight Step Process is found in the [Corridor Planning Process Guide](#) (February 2020) pages 14 through 54.

This Active Transportation EA Guidance acknowledges that “not one size fits all” in how corridor plans are to be developed, either in format or content. It also acknowledges that not all Active Transportation elements or analyses within the Corridor Plan may fit under each element of the eight-step process, as this guidance document would indicate. Ultimately, the eight-step process, in whatever form the District determines to be the most effective way of developing their corridor plans, will be the basis for the entire corridor plan. The examples of plans and tools, as well as other information sources within this EA Guidance, are for information only and should not be considered as required usage for each Corridor Plan. It is expected that Districts can and should utilize their active transportation multimodal evaluation resources to better meet specific corridor goals.

Additionally, while not all corridors will have bicycle or pedestrian facilities (for example, some corridors may only include freeway segments where bicycles and pedestrians are prohibited), an analysis should be done including local bike/pedestrian facilities in the corridor study area (which the corridor team will determine), including parallel facilities, facilities that cross under or over freeway corridors and the consideration of nearby land uses which could attract, or inhibit, increased bicycle and pedestrian mobility.

Corridor plans should identify how active transportation currently exists within a corridor and their connection to transit service. The analysis of potential scenarios should BE BOLD in identifying active transportation solutions to move people within the corridor and, when possible, quantify the expected increase of bicycle and pedestrian mode share.

Office of Active Transportation and Complete Streets Data Matrix



Gather Data

Identify existing conditions.

Identify Solutions / Strategies

Be Bold and Identify appropriate solution(s) based on a need identified in the data gathering process.

Prioritize Improvements / Analyze Strategies

Prioritize what to include in the project based on factors provided through the tools below.

TOOL	PURPOSE / USE
<p>Active Transportation Travel Demand (Bike Trip Count Data)</p>	<p>Trip data can be collected via manual/automated counts and counts can help validate big data platforms. Travel Demand Data can also be obtained from Regional Transportation Planning Agencies, Metropolitan Planning Organizations, Regional Bicycle Coalitions, and Local Agencies.</p> <p>Examples: Metropolitan Planning Organizations SCAG's Active Transportation Database (ATDB) Metropolitan Transportation Commission bridge count database</p> <p>District deployment of count technology such as Miovision</p>
<p>ATAIP</p>	<p>Data for location and condition of existing sidewalks, crosswalks, and bicycle facilities on the STN are available through the Active Transportation Asset Inventory Pilot (ATAIP) in the Transportation Asset Management (TAM) Map Portal. Use the Active Transportation tab, top right and turn on the Statewide Active Transportation Inventory layer.</p>

<p>California Active Transportation (CAT) Plans</p>	<p>The purpose of the District-Level Caltrans Active Transportation (CAT) Plans is to identify active transportation asset needs on, or across, the State Transportation Network (STN) that will create multimodal networks. Data sources found in CAT Plans include: public map-based needs, partner map-based needs, ATAIP (Active Transportation Asset Inventory Pilot), Level of Traffic Stress, LBNs (location-based needs), partner/stakeholder data, Main Streets, short trip density and/or trip potential, posted speeds, shoulder width, Disadvantaged Community data (CalEnviroScreen, Reduced-price school lunch, and MHI data), and pedestrian/bicycle prohibitions on the State Transportation Network.</p>
<p>California School Campus Database</p>	<p>Use the California School Campus Database to identify school boundaries in relation to the State Transportation Network.</p>
<p>Complete Streets Elements Toolbox</p>	<p>The Complete Streets Elements Toolbox is an educational tool to assist in the integration of Complete Streets Elements in Caltrans projects.</p>
<p>High Injury Network (HIN) and Vision Zero</p>	<p>Use the resources below to provide maps, data, and descriptive information about High Injury Network in the study area. Links to the HIN for major cities in CA: City of Los Angeles, City of Sacramento, City of San Diego, City of San Francisco, City of San Jose. You can also use the VISION ZERO COMMUNITIES MAP, and other resources for Vision Zero Strategies and Funding.</p>

<p>Local Coastal Programs</p>	<p>Identify public access requirements, as dictated by Local Coastal Programs and California Coastal Act.</p>
<p>Livability Calculator</p>	<p>Use the Livability Calculator tool to understand project impacts. The tool calculates the corridor's mean value for the livability metrics that are based on six livability principles. It also compares the selected corridor to the three main corridor typology categories (Emerging, Transitioning, and Integrated Corridors). It also offers a list of policies, programs, and strategies intended to enhance the livability of the corridor.</p>
<p>Main Streets</p>	<p>Use the Main Street, California: A Guide for Improving Community and Transportation Vitality resource to identify State Highway segments that function as a "Main Street."</p>
<p>Pedestrian / Bicyclist Safety Improvement Monitoring Program</p>	<p>The locations identified in the Pedestrian and Bicyclist Safety Improvement Monitoring Programs should be reviewed when developing corridor plans. If a location identified falls within the study area, the District Traffic Safety Engineer should be contacted to find out if the location has been investigated and if any safety countermeasures have been recommended. Locations are confidential and may be found on the Division of Safety Programs intranet site. Pedestrian Safety Improvement Monitoring Program Bicyclist Safety Improvement Monitoring Program</p>

<p>Pedestrian and Bicycle Environmental Quality Index</p>	<p>The PEQI is a quantitative observational tool used to assess the quality and safety of the physical pedestrian environment and inform pedestrian planning needs. The BEQI is used to measure the impacts of built environment factors on bicycle environmental quality, bicycle activity, and bicycle safety.</p>
<p>Pedestrian Safety Countermeasure Toolbox</p>	<p>The Pedestrian Safety Countermeasure Toolbox provides a set of tools for improving pedestrian safety on the State Transportation Network. Use this toolbox to address issues identified during traffic safety investigations conducted while evaluating high collision concentration locations and systemic safety locations.</p>
<p>Planning Complete Street Cost Estimating Tool</p>	<p>The purpose of the Planning Complete Street Cost Estimating Tool is to provide quick and intuitive cost estimations that can be used in the planning of new active transportation (bicycle and pedestrian) facilities.</p>
<p>Proven Safety Countermeasures</p>	<p>Corridor plans may include recommendations for pedestrian and bicyclist Proven Safety Countermeasures to increase safety. Proven Safety Countermeasures are the Federal Highway Administration's (FHWA) data-driven strategies (countermeasures) which are supported by studies undertaken across the United States and have been proven to provide significant and measurable safety benefits.</p>

<p>Regional / Local Bicycle and Pedestrian Plans</p>	<p>Identify existing conditions and needs using this data source. It contains an inventory of Pedestrian Plans, Bicycle Plans, and Active Transportation Plans found on the California Active Transportation Safety Information Pages (CATSIP): Local Pedestrian Plans, Bicycle Plans, and Active Transportations.</p>
<p>Smart Mobility Calculator</p>	<p>The Smart Mobility Calculator is a transportation, housing, and climate action coordination tool. Use this tool to understand area metrics such as Vehicle Miles Traveled.</p>
<p>Smart Mobility Framework (SMF) Mapping Application</p>	<p>The SMF Mapping Application (available by March 2022) will include a statewide place type map, based on the 5 place types introduced in the SMF Guide 2020. For each place type, you can find a list of general considerations in the SMF Guide.</p>
<p>Strategic Highway Safety Plan Crash Data Dashboard</p>	<p>This dashboard provides direct access to statewide crash data to support the data-driven implementation of the SHSP and coordinated safety programs. The dashboard currently uses finalized crash data from the Fatality Analysis Reporting System (FARS) and the Statewide Integrated Traffic Records System (SWITRS) and can be filtered to look specifically at pedestrian and bicyclist crash data.</p>
<p>Transportation System Network</p>	<p>Coordinate with District Traffic Safety Engineers to obtain data on the quality of the active transportation network: Number and width of vehicle lanes, shoulder widths, and design speed.</p>

<p>US Bicycle Routes and Coastal Trails</p>	<p>For coastal Districts, identify existing and planned California Coastal Trail segments and public access locations. These can be found on the DEA GIS Library (under General/Coastal), as well as in Local Coastal Program plans and regional transportation plans. The DEA GIS Library also contains the Pacific Coast Bike Route (PCBR). US Bicycle Routes USBR 50, 66, and 95 are other notable bicycle routes.</p>
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1. SCOPE EFFORT

The Corridor Plan's scope frames the overall corridor planning effort, defines the corridor partnership, identifies corridor planning horizons (short-, medium-, and long-term), develops data collection, engagement and communication plans, and identifies what defines the Corridor in addition to determining appropriate analysis tools. This step will result in a defined corridor team (including Caltrans, partner agencies, and stakeholders with interests in the corridor), agreement on the issues and potential opportunities that will be considered, and a comprehensive set of goals, objectives, and performance measures for the corridor.

Assembling the corridor team marks the beginning of stakeholder engagement, which should remain an on-going effort during the study. The main objective for this step is for the lead agency to determine who should be involved with a potential study, who will be involved as partners and stakeholders, and discuss the resources and expertise that team members could devote to a corridor planning effort.

- Consider all relevant active transportation partnerships, stakeholders, plans, Caltrans functional units, and existing guidance.
- Answer questions below to complete this step.

Questions that need to be answered in this phase for Active Transportation are:

- How is Active Transportation going to be represented on a corridor team?
- Who would that person (or persons) be? District Caltrans Active Transportation (CAT) Plan representatives? District Active Transportation or Complete Streets Coordinator(s)? District Bicycle/Pedestrian Coordinator?
- What are the Corridor Plan's goals/concerns regarding Active Transportation?
- Who are the local Bike/Ped advocates located in the corridor study area?
- Who are regional and local agencies' Bike/Ped contacts (key stakeholders)?
- How will Active Transportation interface with other multimodal options such as transit or micro-mobility?
- What are existing and planned active transportation facilities in the corridor, on and off the State Transportation Network?
- What active transportation data are available?
- Are there any non-motorized recreational routes (e.g., California Coastal Trail, Pacific Coast Bicycle Route, U.S. Bicycle Route 95, Great Redwood Trail) existing or planned within the project area?

2. GATHER INFORMATION

In this step, corridor information is collected and organized to inform an understanding of the corridor context, identification of different operational conditions in the corridor, current and future conditions, and the defining factors that can influence alternative investment scenarios. This information outlines the corridor description, basic system characteristics of the corridor and its unique elements within a larger national, State, and regional context. Districts are encouraged to create their own datasets to supplement those identified below.

- ☑ Review resources listed in the data matrix to identify active transportation needs and understand existing conditions. For more information on resources listed in the data matrix, see Appendix A.

Office of Active Transportation & Complete Streets' Intranet Page

The Active Transportation & Complete Streets (ATCS) Office leads active transportation and complete streets planning and policy. We engage partners, advocates, and communities to ensure their needs are voiced and met. The work improves linkages between land use planning, community values, transportation planning, decision-making, and transportation project delivery to achieve a more sustainable transportation system. Here is the link to the [Office of Active Transportation & Complete Streets \(AT&CS\)](#) intranet web page which has relevant active transportation plans, policy, data, and contact information.

3. CONDUCT BASELINE PERFORMANCE ASSESSMENT

In this step, corridor performance issues are identified and their causes are diagnosed. This task also includes performance assessment for the future baseline (do nothing or no build). It is critical to look carefully at the entire corridor for potential needs/priorities.

- ☑ Develop corridor profiles for active transportation mode share, mobility, safety, travel time, etc. using resources listed below.
- ☑ Use available resources to examine on-system (State Transportation Network/Caltrans) and off-system facilities (not maintained by Caltrans) to identify potential needs/priorities.

Performance Measures

The State Bicycle and Pedestrian Plan: Toward an Active California calls for increasing walking and bicycling in California. A corridor plan process can establish active transportation performance measures to measure biking and walking improvement. Performance measures are means to determine if active transportation is being improved by the corridor planning process. Districts have flexibility to decide how to use active transportation performance measures in the corridor planning process. Consider use of one or more of the following measures, and the accompanying questions.

- Level of traffic stress based on mobility data
- Number of fatal and severe injury collisions
- Number of destinations reached by walking and biking
- Mode share of non-single occupancy vehicle
- Number of active transportation assets in good condition
- Route directness
- Personal safety/safety from crime

Who is likely to be traveling in the corridor?

Based on demographics and accessibility data/destinations in the area. Mode share for bicycling and walking can be calculated from the National and California Household Travel Surveys for all trips or for commute trips only using the American Community Survey. The all trips measure is available about once every 10 years, and, especially for walking, follows a much stronger growth trajectory than commute trips. Caltrans is already measuring the percent of projects that include complete streets features as part of the Strategic Plan.

Long-term, additional measures to be tracked could include:

» Pedestrian miles of travel and bicycle miles of travel would provide a more comprehensive evaluation of the level of activity.

» A measure of bicycle level of traffic stress for the portions of the state transportation system that allow bikes will help track improvements in the quality of the system over time

Do people feel comfortable walking or biking in the corridor?

People's feelings of comfort while walking and biking correlates with how frequently they will choose to walk or bike. There are many data-driven ways to measure the experiences of people walking and biking:

CAT plans contain Bicycle Level of Traffic Stress on the highway system for the whole state. This information will be uploaded to [AT&CS's Intranet](#). Currently the data is stored in the [Clowder Tool](#).

Caltrans Maintenance [Level of Service \(LOS\)](#) program was developed to evaluate and report how well the it is keeping up with highway maintenance needs including lighting, sweeping, litter/debris removal, and crack sealing.

The Pedestrian Environmental Quality Index (PEQI) is a quantitative observational tool used to assess the quality and safety of the physical pedestrian environment and inform pedestrian planning needs. The BEQI is used to measure the impacts of built environment factors on bicycle environmental quality, bicycle activity, and bicycle safety.

The Bicycle Environmental Quality Index (BEQI) is used to measure the impacts of built environment factors on bicycle environmental quality, bicycle activity, and bicycle safety.

Links: [Pedestrian](#) and [Bicycle](#) Environmental Quality Index

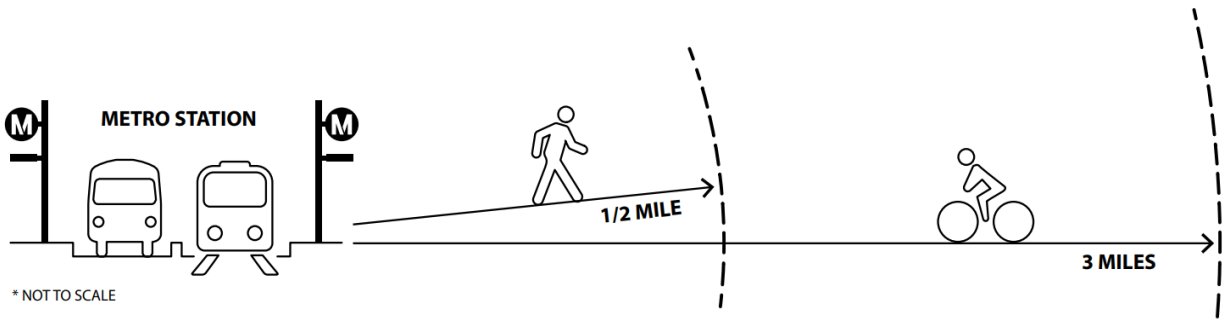
Are there gaps in the active transportation network in the corridor?

Gaps can be identified as

- No pedestrian or bicycle facilities in “main street” or “inter-community rural connectors” in the CAT Plan.
- High-stress segments of the existing active transportation network

How many or what percent of destinations in the corridor can be reached by walking and bicycling?

For pedestrians, the upper boundary is usually understood to be a 15-minute walk, which translates to a half-mile radial distance centered around a transit station or stop. For bicyclists, this travel distance increases to a three-mile radial distance. For example, the figure below illustrates these access sheds, the distances people travel in a set duration of time (15 minutes) using different active transportation modes. See [Metro's First/Last Mile Guidelines](#) for more information.



What safety concerns do people have while walking or biking in the corridor?

Public Surveys and Mapping

Summarize public comments regarding safety in the corridor that have been collected through the CAT Plans, Street Story, or other planning efforts conducted by regional or local agencies.

Is the active transportation network clear and well-signed?

Identify connections with the local network, regional trail system, or interregional facilities (e.g., US bike routes, California Coastal Trail) and determine whether there is adequate wayfinding signage for active transportation users.

4. IDENTIFY POTENTIAL PROJECTS AND STRATEGIES

In this step, potential projects and strategies are identified at sufficient levels of detail for analysis and evaluation based on existing plans and studies, as well as the performance assessment, gaps identification, and diagnosing the causes of congestion, safety, and reliability issues.

- Identify projects that meet existing and anticipated travel demand.
- Identify what bicycle, pedestrian, and transit facilities are needed within the corridor and its communities to move people safely and efficiently. Consider these facility needs for OFF and ON the state transportation network.
- Reflect the first/last mile needs for transit service and any Main Street community considerations.

Statewide transportation policy like the Climate Action Plan for Transportation Infrastructure ([CAPTI](#)) and [State Bicycle and Pedestrian Plan](#) direct a focus on

transportation projects that reduce greenhouse gas emissions, reduce vehicle miles traveled, and shift to transit, bicycle and pedestrian modes. After assessing the corridor's and communities' needs, you are encouraged to **be bold** in how you package scenarios for bike and pedestrian projects and strategies.

Identify projects that meet existing and anticipated travel demand using bicycle and pedestrian modes and partner them with transit. Consider what bicycle, pedestrian, and transit facilities or connections are needed within the corridor and its communities to safely and efficiently move trips to bicycle and pedestrian modes. Consider the needs off and on the State Transportation Network and reflect the first/last mile transit needs and any Main Street considerations.

You are encouraged to be realistic as well in your planning scenarios. For example, taking into consideration that rail, bus, and first/last mile improvements have the potential to create a greater mode shift than just biking. Or, packaging just active transportation improvements for communities along a rural, mountainous conventional highway corridor when interregional transit trips are not available.

Existing Plans

Projects and strategies can be found in Regional Plans, General Plans, local bicycle and pedestrian plans, transit plans, and local land use specific plans. Note also that input from local bicycle and pedestrian advocacy groups may be reflected in CAT Plans, or District bicycle or pedestrian committees.

Bicycle Facilities

The [Contextual Guidance for Bicycle Facilities Memorandum](#) identifies the preferred type of bicycle facility based on place type and surrounding land use. Identify areas in the corridor where the existing conditions do not meet the preferred bicycle facility type. Caltrans has endorsed National Association of City Transportation Officials (NACTO) [guidance](#) on selecting all ages and abilities bikeways.

Pedestrian Facilities

The [Pedestrian Safety Countermeasure Toolbox](#) provides a set of tools for improving pedestrian safety on the State Transportation Network. Use this toolbox to address issues identified during traffic safety investigations conducted while evaluating high collision concentration locations and systemic safety locations. Refer to presentation slides for the [Pedestrian Safety Countermeasures Training](#).

Complete Streets Elements Toolbox

The [Complete Streets Elements Toolbox](#) is an educational tool to assist in the integration of Complete Streets Elements in Caltrans projects. This Toolbox includes complete streets planning concepts, complete streets elements definitions, district and local

examples, design guidelines and specifications for individual complete streets elements, and quantification of complete streets in the asset management tool.

Note: The CS Elements Toolbox 2.0 adopted in 2018 is the most current approved application. Staff are currently working on the update process for version 3.0.

5. ANALYZE IMPROVEMENT STRATEGIES

In this step, possible improvement projects and strategies may be grouped into scenarios to be evaluated. An Analysis Plan may also be developed to scope the analysis effort and to identify resources required for the analysis.

- Identify how strategies will impact mode shift and accessibility and whether the analysis creates improvements.
- Consider state goals, VMT/GHG reduction, and moving people from vehicles to bicycle, pedestrian, and transit modes.

We encourage you to **be bold** in your improvement strategies while also being able to answer how it impacts mode shift and whether the analysis creates improvements. In identifying strategies consider how it affects mode shift and reduction of VMT and greenhouse gas (GHG) emissions. Districts will choose which tools are appropriate for analysis and the type of analysis conducted will determine whether low, medium, or high-detail analysis is required (See [Corridor Planning Process Guide](#) Section 5).

The scenarios should include bicycle, pedestrian, and transit modes. And the results should show how these modes are able to move people within a corridor. A new Accessibility tool will be available by June 2022, which allows an understanding of how scenarios improve bicycle, pedestrian, transit, and driver accessibility to jobs and other destinations (education, healthcare).

The focus of these improvement strategies and the accompanying analysis is to meet state goals ([California Transportation Plan 2050](#), [CAPTI](#), Executive Orders) reduce VMT, move people from vehicles to bicycle, pedestrian, and transit modes, and reduce GHG emissions. The scenarios should be able to show whether and how mode shift and accessibility improvements may occur.

6. SELECT AND PRIORITIZE SOLUTIONS

In this step, decisions are made on which corridor projects and strategies are promising for addressing the identified goals, objectives, and performance measures for the corridor. The outcome is a recommended set of multimodal solutions for the corridor that addresses the identified issues and opportunities.

- Consider the resources below in recommending a set of multimodal solutions for the corridor.
- Determine the costs and benefits to STN users, communities, and any other stakeholders when prioritizing improvement strategies.

Geospatial Information Analysis Network Tool [GIANT]

GIANT stands for Geospatial Information Analysis Network Tool. Corridor Planning is one way in which district transportation candidate projects get identified and compiled for inclusion into a district's project list and GIANT will help modernize the way corridor plans are made with a digitized version of transportation concepts, prioritization of projects and needs.

This tool provides detailed asset information that has significance to Maintenance, Traffic Operations, and Transportation Planning. It maps existing bike/pedestrian infrastructure. GIANT is currently in a prototype stage wherein the purpose of it is to develop and implement functionality in a manner conducive to changing Caltrans planning practices. There is no hyperlink to it and there is no generic access/permission to GIANT at this time. Ultimately, one or two people in District Planning offices will have access to GIANT for editing but all will be able to view the GIS information. Potential date for completion (and a District link to GIANT) is 2023.

Livability Calculator for Transit Corridors

A spreadsheet-based Transit Corridor Livability Calculator tool and the Transit Cooperative Research Program (TCRP) Research Report 187 "Livable Transit Corridors: Methods, Metrics, and Strategies" are available, [here](#). The tool calculates the corridor's mean value for the livability metrics that are based on six livability principles. It also compares the selected corridor to the three main corridor typology categories (Emerging, Transitioning, and Integrated Corridors). It also offers a list of policies, programs, and strategies intended to enhance the livability of the corridor.

Instructions for using the Calculator tool are embedded within. Additional guidance in the form of a User Manual can be found in Appendix H of TCRP Research Report 187. [In this video](#) (minutes 16:58 to 33:00), you can get more information about the Transit Corridor Livability Calculator and how to use it. You can select the project area in the Smart Mobility Calculator, then download the data in CSV format, open the excel spreadsheet and copy the first column (FIPS) into the Livability Calculator tool (Inputs tab, under the Census Block Group IDs).

Note: To ensure the Calculator tool is fully functional, make sure the tool's spreadsheet file and the TCRP Research Report 187 PDF file are both saved to the same directory folder on your computer. This tool can assist when necessary. It is context dependent, for example, if you have heavy transit on a corridor, it would be useful.

Place Type Related Considerations

The Smart Mobility Framework (SMF) Mapping Application (available by March 2022) will include a statewide place type map, based on the 5 place types introduced in the SMF Guide 2020. For each place type, you can find a list of general considerations in the SMF Guide. You can also use the results of "SMF - Implementation Guide and Mapping Application" project (completion February 2022) for place type related considerations for corridor plans.

Planning Complete Streets Cost Estimating Tool

The purpose of [Planning Complete Street Cost Estimating Tool](#) is to provide quick and intuitive cost estimations that can be used in the planning of new active transportation (bicycle and pedestrian) facilities. Planning level cost estimates for the entire project can be broken down by segment, project type, and project elements. The tool calculates cost for segment cross section type (pedestrian/bikeway) using the number of miles and width to calculate cost. The tool uses Basic Engineering Estimating Systems (BEES) items from the Caltrans Cost Database (CCDB) and incorporates bid costs from CCDB to provide estimates that are informed by the most recent costs in Caltrans construction contracts throughout the State.

In the link above, you will find the Planning Complete Street Cost Estimating Tool, Fact Sheet, User Guide, Training Webinar (video and presentation slides). Watch the Webinar first to view the presentation slides, then go through the User Guide for more information. It is important to check the "Tool Limitations and Considerations" on page 19 of the User Guide, before using the tool in a project. The costs are based on the data from the Contract Cost Database (bids from 2017 to 2019).

Note: This tool is particularly beneficial at the project level to address concerns such as how many miles of Class IV bikeway or sidewalks are needed. The CS Cost Estimating

Tool is an Excel-based tool for planning-level cost estimations at the Project Initiation Documents stage for Complete Streets Elements.

7. PUBLISH / IMPLEMENT CORRIDOR PLAN

In this step, the corridor planning process is documented with the publication of the Corridor Plan. The adopted corridor plan documents how a corridor is performing today (and estimates for the future), why it is performing that way, and recommends projects and strategies that support the corridor goals and objectives agreed upon by its partners. It may include an implementation schedule.

- Consider the potential users of the corridor plan when communicating information.
- Include helpful images that provide real-world active transportation context to the information being presented in the plan.

Publication of the Corridor Plan does not represent the end of the corridor planning process but is an important milestone that will be revisited by the corridor team in future review cycles. It should be officially adopted by the lead agency and core partners. After its adoption, it can be officially used to identify project candidates for funding programs or planning efforts that identify future investment opportunities.

8. MONITOR AND EVALUATE PROGRESS

In this step, ongoing reporting on corridor performance is conducted. Corridor objectives may be re-assessed and refined by the corridor team. Corridor Plans should be updated every five years or at the discretion of the lead and/or partner agencies.

- Ensure mechanisms are in place for ongoing monitoring and evaluation.
- Include a plan for monitoring of corridor performance indicators, regular updates of the corridor performance assessment, and publication of results.

Ongoing reporting on corridor performance is conducted to evaluate the effectiveness of recommended projects and strategies on corridor performance over time. Corridor objectives may also be re-assessed and refined by the corridor team. The Corridor Plan

may also identify triggers and events that may necessitate the update of the Plan and a reassessment of strategies. Examples of conditions that may warrant revisiting the Corridor Plan include technological disruptions or advancements, major new economic, population or environmental changes in the corridor, or significant new regional or statewide planning initiatives. The lead agency and corridor team need to ensure mechanisms are in place for ongoing monitoring and evaluation. The mechanisms should include a plan for monitoring of corridor performance indicators, regular updates of the corridor performance assessment and publication of results.

FUNDING PROGRAMS

Following the Corridor Planning Process, all good planning work then needs to be built. Now we need to work on funding. The objectives of the planning process move forward when we focus on funding and building the infrastructure. Through this information, we want corridor planners to be aware of funding mechanisms and programs that are available to you as you package scenarios.

It is important to consider funding opportunities in corridor plans for active transportation improvements being identified. In addition to traditional STIP funding sources, there is a Complete Streets Program in SHOPP, and the ability to fund some complete streets elements in Highway Maintenance (HM) 1/Pavement and HM 3/Bridge Program funding.

Below are some funding programs that are typically used for Active Transportation Planning Projects. Refer to California Transportation Commissions' list of [funding programs](#) for more federal and statewide funding opportunities that may be available to plan, design, or construct improvements to biking and walking facilities on or across the State Transportation Network.

Funding Programs that may include Active Transportation elements:

- [SHOPP/SHSMP](#): holds complete streets project funding targets and allocations by District.
- [ATP](#): created by Senate Bill 99 to encourage increased use of active modes of transportation, such as walking and biking.
- Highway [Minor Program Funding](#): the maintenance funding program can build low cost (striping) improvements as part of pavement repair projects.
- [INFRA](#): The Infrastructure for Rebuilding America (INFRA) discretionary grant program established under the FAST Act of 2015, helps to rebuild America's aging infrastructure.

- [RAISE](#): The Rebuilding American Infrastructure with Sustainability and Equity funding program selection criteria includes safety, environmental sustainability, quality of life, economic competitiveness, state of good repair, innovation, and partnerships with a broad range of stakeholders.
- [Solutions for Congested Corridors Program](#): is a statewide, competitive program that provides funding to achieve a balanced set of transportation, environmental, and community access improvements to reduce congestion throughout the State.
- [Trade Corridor Enhancement Program](#): provides funding for infrastructure improvements on federally designated Trade Corridors of National and Regional Significance, on California's portion of the National Highway Freight Network, as identified in California Freight Mobility Plan, and along other corridors that have a high volume of freight movement.
- [ITIP](#): Caltrans prepared the first ITSP in 1998 in response to Senate Bill 45 (1997), which dedicates 25% of State Transportation Improvement Program (STIP) funding to interregional highway and passenger rail facilities. The Caltrans controlled portion of the interregional improvement funds is programmed in the Interregional Transportation Improvement Program (ITIP).

Innovative Funding:

- [CEQA Mitigation](#): SB 743 was signed in 2013, with the intent to “more appropriately balance the needs of congestion management with statewide goals related to infill development, promotion of public health through active transportation, and reduction of greenhouse gas emissions.” When implemented, “traffic congestion shall not be considered a significant impact on the environment” within California Environmental Quality Act (CEQA) transportation analysis. Pairing active transportation projects with transit projects in a corridor may help mitigate a roadway capacity increasing project's CEQA transportation impact.

SUPPORT DOCUMENTS

Complete Intersections (2010)

[Complete Intersections](#) - A Guide to Reconstructing Intersections and Interchanges for Bicyclists and Pedestrians; Provides direction on implementing an important aspect of Caltrans' Complete Street Policy. This is a comprehensive and easy-to-follow guide that identifies actions that will improve safety and mobility for bicyclists and pedestrians at intersections and interchanges. The Complete Intersections Guide provides tools and

techniques to improve bicycle and pedestrian transportation using basic guiding principles for common intersection types.

Main Street, California (2013)

The Division of Design, in partnership with Caltrans Maintenance and Operations and Planning and Modal Programs, completed a comprehensive evaluation of main street concepts to assist Caltrans, agency partners, and local stakeholders to improve the vitality of State highway main streets. Six hundred internal and external stakeholders helped shape the update of the document [Main Street, California](#): A Guide for Improving Community and Transportation Vitality.

Design Flexibility in Multimodal Design Memorandum (2014)

This Caltrans [memo](#) highlights its flexible approach towards designing multimodal transportation projects on the State Transportation Network as reflected in the Caltrans HDM, Chapter 80:

"A 'one-size-fits-all' design philosophy is not Departmental policy."

"This guidance allows for flexibility in applying design standards and approving design exceptions that take the context of the project location into consideration, which enables the designer to tailor the design, as appropriate, for the specific circumstances while maintaining safety."

The memorandum also mentions other resources: Publications such as the National Association of City Transportation Officials (NACTO) "Urban Street Design Guide" and "Urban Bikeway Design Guide," and the Institute of Transportation Engineers (ITE) "Designing Urban Walkable Thoroughfares," are resources that Caltrans and local entities can reference when making planning and design decisions on the State Transportation Network and local streets and roads.

Caltrans endorsement of NACTO's Urban Street Design Guide (2014)

In addition to the HDM, Caltrans endorsed the National Association of City Transportation Officials (NACTO) [Urban Street Design Guide](#) in 2014. Caltrans explained that the "endorsement of the NACTO guidelines is part of an ongoing effort to integrate a multimodal and flexible approach to transportation planning and design." Design flexibility is particularly important for speed management to allow for context sensitivity.

Small Town and Rural Multimodal Networks (2016)

The [Small Town and Rural Multimodal Networks](#) report is a resource and idea book intended to help small towns and rural communities support safe, accessible, comfortable, and active travel for people of all ages and abilities. It provides a bridge between existing guidance on bicycle and pedestrian design and rural practice,

encourage innovation in the development of safe and appealing networks for bicycling and walking in small towns and rural areas, and show examples of peer communities and project implementation that is appropriate for rural communities.

Toward an Active California (2017)

Caltrans has adopted "[Toward an Active California](#)," the State Bicycle and Pedestrian Plan. This document is California's first statewide plan that lays out the policies and actions that Caltrans and its partner agencies will take to achieve the department's ambitious statewide goals to double walking and triple bicycling trips by 2020.

Smart Mobility Framework Guide (2020)

Nearly a decade ago, Caltrans introduced smart mobility as an overall approach to respond to the State's interrelated challenges of mobility and sustainability. [The Smart Mobility Framework](#), formally known as *Smart Mobility 2010: A Call to Action for the New Decade*, was prepared by Caltrans in partnership with the US Environmental Protection Agency, the Governor's Office of Planning & Research, and the California Department of Housing & Community Development to address both long-range challenges and short-term programmatic actions to implement multi-modal and sustainable transportation strategies in California.

Many Caltrans staff have embraced smart mobility principles but have expressed a need for guidance on how the principles can be applied in practice. The [Smart Mobility Framework Guide 2020](#) addresses that need by describing strategies, performance measures, and analysis methods for implementing smart mobility, organized around five themes: network management, multimodal choices, speed suitability, accessibility and connectivity, and equity. The guide also describes the application of place types to identify transportation planning and project development priorities across the state. Case study examples are used to illustrate the application of smart mobility strategies in real-world plans and projects, both within California and elsewhere in the U.S.

The SMF related documents are uploaded into [AT&CS intranet](#).

TPSIS (Transportation Planning Scoping Information Sheet)

The Transportation Planning Scoping Information Sheet (TPSIS) compiles and documents relevant information from current plans, datasets, and stakeholder discussions to make recommendations to Project Nomination Teams and District Asset Managers during the pre-PID scoping of multi-objective transportation projects. The TPSIS documents transportation needs and opportunities identified through the planning process and helps to ensure that proposed projects are consistent with planning concepts, statewide goals, and planning decisions. Section 6 (Smart Mobility, Active Transportation and Transit), provides information on the project area, place types,

bicycle, pedestrian, rail and transit condition, needs, and opportunities. For more information see [Project Nomination Process](#). Section 6: Smart Mobility, Complete Streets, and Equity will identify place types, trip generators, bicycle and pedestrian safety, and active transportation impediments.

Complete Streets Decision Document (CSDD)

This document will be used by planners and project managers, at the project-level, to verify that complete streets needs are included and are not removed from Caltrans projects. The goal is to develop and institute a project waiver in the PID and other project delivery phases to positively verify inclusion of Complete Street facilities, justify non-inclusion decisions, and track at each phase.

Completing the California Coastal Trail

As required by the legislature, the California Coastal Conservancy completed this report [Completing the California Coastal Trail](#) in 2003 which articulated a plan—including identification of Caltrans' role—for completion of the CCT.

GUIDANCE/POLICIES/LEGISLATION

The following are State and Departmental policies and legislation regarding, or including, elements of Active Transportation implementation.

- [DP-37 Complete Streets \(2021\)](#): The intent of this directive is to ensure that all transportation projects funded or overseen by Caltrans will provide comfortable, convenient, and connected complete streets facilities for people walking, biking, and taking transit or passenger rail unless an exception is documented and approved.
- [Executive Order \(EO\) N-19-19 \(2019\)](#): Directs State government to increase efforts to reduce greenhouse gas emissions and mitigate the impacts of climate change while building a sustainable and inclusive economy.
- [SB 400 Reduction of greenhouse gases emissions \(2019\)](#): Adds bikeshare and e-bikes as mobility options in the Clean Cars 4 All Program; proponents expect this will provide a strong incentive for Californians to switch from car to bike travel.
- [AB 1266 Traffic Control Devices Bicycles \(2019\)](#): Existing law authorizes the Department of Transportation or local authorities to erect official traffic control devices within or adjacent to intersections of highways under their respective jurisdictions to regulate or prohibit turning movements at those intersections. When a turn is required, existing law requires the erection of a sign giving notice of that requirement, except as specified. Existing law prohibits a driver of a vehicle from disobeying the directions of a traffic control device erected pursuant to that provision. This bill would exempt from the prohibition described above operators of bicycles traveling straight through an intersection,

if an official traffic control device indicates that the movement is permitted. The bill would require the Department of Transportation to develop standards to implement these provisions.

- [SB 1 Transportation Funding \(2017\)](#): Requires transportation funding be used where feasible to preserve, protect, and reduce environmental impacts using project features that promote adaptation to withstand the negative impacts of climate change.
- [SB 99 Active Transportation Program \(2013\)](#): Encourages increased use of active modes of transportation, such as biking and walking, increase safety and mobility for non-motorized users and advance the active transportation efforts of regional agencies to achieve greenhouse gas (GHG) reduction goals. The ATP consolidates existing federal and state transportation programs, including the Transportation Alternatives Program (TAP), Bicycle Transportation Account (BTA), and State Safe Routes to School (SR2S), into a single program with a focus to make California a national leader in active transportation.
- [SB 743 VMT \(2013\)](#): Vehicle miles traveled (VMT), not level of service or other vehicle delay metric, is the most appropriate measure of transportation impacts in California Environmental Quality Act (CEQA) analyses. Caltrans released [additional information on SB 743](#) as it relates to the projects on the State Transportation Network. Strategies that support mode shift such as those identified in Active Transportation Plans, segments to complete the California Coastal Trail, higher vehicle occupancy, shorter average vehicle trips, and transportation demand management can contribute to reduction of VMT. VMT impacts of a transportation project should be mitigated to the maximum extent possible.

[AB 1358 Circulation Element \(2008\)](#): The legislative body of a city or county, upon any substantive revision of the circulation element of the general

plan, modify the circulation element to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.

- [Section 31408 of the Coastal Act \(2008\)](#): Caltrans has an obligation and a role in completion of the California Coastal Trail. For coastal Districts, the requirement includes coordination with the California Coastal Commission, the Conservancy, and the Department of Parks and Recreation in “the development of the California Coastal Trail. To the extent feasible, and consistent with their individual mandates, each agency, board, department, or commission of the state with property interests or regulatory authority in coastal areas shall cooperate with the conservancy with respect to planning and making lands available for completion of the trail, including constructing trail links, placing signs, and managing the trail.
- [SB 375 Travel Demand Models: Sustainable Communities Strategy \(2008\)](#): Builds on the existing framework of regional planning to tie together the regional allocation of housing needs and regional transportation planning in an effort to reduce greenhouse gas (GHG) emissions from motor vehicle trips. Requires the CTC to maintain guidelines for travel demand models used in the development of regional transportation plans that, to the extent practicable, including mode splitting that allocates trips between automobile, transit, carpool, and bicycle and pedestrian trips.
- [Assembly Bill 1396 \(2007\)](#): AB 1396 requires each transportation planning agency whose jurisdiction includes a portion of the California Coastal Trail, or property designated for the trail that is located within the coastal zone, to coordinate with the Coastal Conservancy, the Coastal Commission, and Caltrans regarding development of the CCT. To this end, each transportation planning agency is required to include provisions for the CCT in their RTPs (Government Code [65080.6](#)).
- [AB 32 Global Warming Solutions Act \(2006\)](#): Mandates the reduction of GHG emissions to 1990 levels by the year 2020 and 80% below 1990 levels by 2050.

- [DP-05 Multimodal Alternatives Analysis \(1992\)](#): The intent of this Policy is improved mobility options for the people of California; a new strengthened or expanded relationship with the Department's partners; and early resolution of issues leading to mutually acceptable solutions and a subsequent reduction in project delay and uncertainties. Wiser investments and more cost-effective, viable and achievable options to California's transportation needs are expected.

Appendix A

Mobility Data

Safety

Caltrans Strategic Plan (2020-2024) sets a goal to eliminate fatalities and serious injuries on California's roads by 2050. Achieving this ambitious goal requires the implementation of a [Safe System approach](#). The Safe System approach anticipates human mistakes by designing the roadway to minimize the risk of crashes, and when a crash occurs, the impact on the human body does not result in a fatality or serious injury. This approach should be incorporated into all corridor plans, particularly when planning for the most vulnerable road users, pedestrians, and bicyclists. The District Traffic Safety Engineer should be consulted throughout the development of the corridor plan to ensure that the safety data included is accurate and up to date.

Pedestrian and Bicyclist Safety Improvement Monitoring Programs: The Division of Safety Programs conducts an annual data-driven safety analysis to identify and address pedestrian and bicyclist crashes to reduce fatalities and serious injuries. The Pedestrian and Bicyclist Safety Improvement Monitoring Programs utilize both reactive and proactive approaches. The reactive pedestrian and bicycle programs identify and address pedestrian and bicycle related high collision concentration locations. The spot locations are then investigated, and potential countermeasures are selected to reduce or prevent collisions involving pedestrians or bicyclists. The proactive approach, also known as the systemic approach, seeks blanket improvements that can be implemented at sites throughout the network, based on specific roadway features that are associated with a particular crash type. The Systemic approach uses historical crash data to identify the types of roadways that have recurring safety concerns, but it provides a way to also make improvements where crashes have not yet occurred. Both approaches are needed and are typically considered complimentary rather than separate alternative approaches.

The locations identified in the Pedestrian and Bicyclist Safety Improvement Monitoring Programs should be reviewed when developing corridor plans. If a location identified falls within the study area, the District Traffic Safety Engineer should be contacted to find out if the location has been investigated and if any safety countermeasures have been recommended. Locations are confidential and may be found on the Division of Safety Programs intranet site.

[Pedestrian Safety Improvement Monitoring Program](#)

[Bicyclist Safety Improvement Monitoring Program](#)

Additional Resources

[Strategic Highway Safety Plan \(SHSP\) Crash Data Dashboard](#) : This dashboard provides direct access to statewide crash data to support the data-driven implementation of the SHSP and coordinated safety programs. The dashboard currently uses finalized crash data from the Fatality Analysis Reporting System (FARS) and the Statewide Integrated Traffic Records System (SWITRS) and can be filtered to look specifically at pedestrian and bicyclist crash data.

Vision Zero and the High Injury Network Resources: Vision Zero is a strategy that seeks to eliminate fatalities and serious injuries. The strategy was first implemented in Sweden in the late 1990s and has since spread throughout the world. Many US cities have adopted Vision Zero goals and are implementing the strategy by identifying their High Injury Networks (HINs). HINs are corridors where the highest concentration of crashes, fatalities, and serious injuries are occurring. The development of HINs is to establish which corridors carry a higher risk for fatalities and serious injuries. Establishing HINs can also help identify areas of need and focus limited resources. In 2021, the Southern California Association of Governments (SCAG) released a [report](#) that provides a review of existing California HINs developed at the city, county, and metropolitan planning organization (MPOs) levels of government and provides details on which components were included in each HIN and how they were created. Based on HINs reviewed, the report provides recommendations for statewide guidance on a definition of and methodology for HINs. FHWA also provides a step-by-step guide for the development of Local Road Safety Plans that may be helpful at the corridor level. You can use the resources below to provide maps, data, and descriptive information about High Injury Network in the study area.

Links to the HIN for major cities in CA: [City of Los Angeles](#), [City of Sacramento](#), [City of San Diego](#), [City of San Francisco](#), [City of San Jose](#).

You can also use the [VISION ZERO COMMUNITIES MAP](#), and other resources for [Vision Zero Strategies and Funding](#).

More information on Vision Zero and High Injury Networks can be found at the websites listed below:

[Vision Zero Network](#)

[Recommendations for California Statewide Guidance High Injury Networks, SCAG](#)

[Local Road Safety Plan DIY, FHWA](#)

Proven Safety Countermeasure: Corridor plans may include recommendations for pedestrian and bicyclist Proven Safety Countermeasures to increase safety. Proven Safety Countermeasures are the Federal Highway Administration's, (FHWA) data-driven

strategies (Countermeasures) which are supported by studies undertaken across the United States and have been proven to provide significant and measurable safety benefits. Additionally, Caltrans has issued, and will continue to issue, guidance and standards that support the effective implementation of Proven Safety Countermeasures.

[Division of Safety Programs Proven Safety Countermeasures Intranet Page](#)

Other Measures of Quality

Collect data on the quality of the active transportation network. Things that may affect quality are

- Sidewalk and bikeway widths – ATAIP for bikeway widths
- Number and width of vehicle lanes – [Transportation System Network](#) (TSN)
- Shoulder and parking lane widths – TSN for shoulder widths
- Speed limits and operating speeds – TSN for Design Speed; CAT Plans for Posted Speed (regulatory speed limits)
- Signage
- Grades/topography
- Landscaping
- Lighting
- Crime
- Noise
- Sidewalk and bikeway pavement conditions - ATAIP
- Visibility at crossings
- Utility poles or other appurtenances reducing the functional widths of sidewalks
- Trash cans, debris, or other curbside uses reducing the functional widths or comfort of bikeways

Field visits and information from local agencies can supplement any data gaps.

Active Transportation Travel Demand (Bike Trip Count Data)

Travel demand for active transportation will include walking trips, bicycling trips, and short-distance automobile trips. Trip data can be collected via manual/automated counts and counts can help validate big data platforms. You may use big data platforms such as [Miovision](#) (bicycle and pedestrian counts) and [StreetLight Data](#) (Statewide data for the period of 2017-2018). Planners can view all active transportation activity within 500 meters of a Caltrans facility anywhere in California including trip origins/destinations, trip length/duration metrics, and demographic information describing travelers. Data can be filtered by district, origin zone, trip mode, and day parts (time of day), etc. Contact staff at headquarters for access to Streetlight data.

Other sources of count data may be available from [Metropolitan Planning Organizations](#) (MPOs), Regional Transportation Agencies (RTPAs), local agencies, and/or regional bicycle coalitions. Regional Transportation Plans show existing and planned active transportation needs and bike and pedestrian counts may be available, as in the [SANDAG region](#). Further, count data can be used as a prioritization metric in the planning process.

University of California Los Angeles (UCLA) Institute of Transportation Studies (ITS) also has developed the Bike Count Data Clearinghouse in 2014. UCLA's Bike Count Data Clearinghouse has been transitioned to the [SCAG's Active Transportation Database \(ATDB\)](#) to expand functionality and incorporate pedestrian trips. The Active Transportation Database (ATDB) was developed to collect and store bicycle, pedestrian, wheelchair, and scooter/skateboard volume counts from infrastructure and planning projects across Southern California. The [Metropolitan Transportation Commission](#) maintains an automatic counter system to detect and record the number of [trips](#) on select bicycle/pedestrian paths on Bay Area Toll Authority bridges.

District-level Active Transportation Plans

The purpose of the District-Level [Caltrans Active Transportation \(CAT\) Plans](#) is to identify active transportation asset needs on or across, the State Transportation Network (STN) that will create multimodal networks. These [plans](#) will identify and prioritize active transportation asset needs that will lead to safer, more comfortable and connected pedestrian, bicycle, and transit access networks. Final products of these plans include: summary document, story map (includes the maps in the context of the narrative, specific locations used as examples, and a link to the explore map), and explore map (allows all users to view the data and specific areas of interest). Data sources found in CAT Plans include: public map-based needs, partner map-based needs, ATAIP (Active Transportation Asset Inventory Pilot), Level of Traffic Stress, LBNs (Location-based needs), partner/stakeholder data, Main Streets, short trip density and/or trip potential, posted speeds, shoulder width, Disadvantaged Community data (CalEnviroScreen, Reduced-price school lunch, and MHI data), and pedestrian/bicycle prohibitions on the State Transportation Network.

The needs identified in these plans were developed through a multi-step analysis process that incorporated a variety of data sources including sidewalk and bicycle lane condition data, CalEnviroScreen scores, crash data, local and county plan data, and data collected from partner agencies and the public. The needs were then sorted into three tiers based on the plan goals of safety, mobility, equity, and preservation. Tier 1 needs scored highest on most or all of the plan metrics and should be addressed at the soonest possible opportunity. Tier 2 and 3 needs scored high on some but not all goals. This does not mean they won't be addressed. During project development,

needs in the area should be considered, regardless of priority (tier) level. Each of the 12 Caltrans Districts will have their own prioritized needs list.

These needs can help you to prioritize where to start corridor plans and/or change the extent of a project boundary to capture high priority needs. Using these needs to start conversations with local and regional partners about partnership opportunities. It is important to understand that additional work is required to take these needs and build community support for improvements in the corridor. Building on the work that has already been done to prioritize using safety, mobility, equity, and preservation in your CAT Plan is also essential. Leverage the data from the plans to implement comprehensive projects in high priority areas. Partnerships will be required to implement raised median, smart lighting, street trees, transit priority, and other elements into a corridor.

Other Existing Plans

Review community plans, road safety audits, and other documents for impediments.

Field visits

A field visit will be conducted during the Project Initiation Document Phase. Consult with Advance Planning to assess whether a planning level reconnaissance is requested.

Smart Mobility Calculator

[The Smart Mobility Calculator](#) is a transportation, housing, and climate action coordination tool. It includes Caltrans' data for the Daily Vehicle Miles Traveled or VMT (Per Capita, Per Employee, Per Capita for Home Base Work) and by showing how much an area's VMT is above or below the regional average, the tool can be used to apply SB 743 CEQA project analysis parameters. In addition to VMT, the Tool includes several other urban quality metrics related to environmental impacts, affordability, health, and social equity. Included metrics are Housing and Transportation Affordability, Dwelling Density, Population Density, Job Density, Carbon Emissions, Pedestrian Collisions, Job Accessibility, Walkability, Walking Percent, Obesity, and Cardiovascular Disease. It also shows the location of rail transit stations and the disadvantaged communities (per SB 535). [In this video](#) (minutes 0:00 to 16:57), you can get more information about the Smart Mobility Calculator and how to use it.

Note: The place typology in this tool is based on the old version Smart Mobility Framework or SMF (2010) and the new document "SMF Guide (2020)" is using a different place typology. Place typology for Caltrans projects would be the one introduced in the SMF Guide 2020. The SMF Mapping Application (would be available by March 2022) will include a statewide place type map, based on the 5 place types introduced in the SMF Guide 2020. This tool is limited to urban counties in California including:

Alameda/Contra Costa, Los Angeles, Orange, Sacramento, San Diego, San Francisco,

San Mateo, and Santa Clara County. It shows VMT per Capita based on Caltrans VMT numbers.

Connectivity Data

Describe (with data/map/information) the existing and proposed walkways and bikeway facilities and their classifications in the corridor study area.

Caltrans Facilities: Active Transportation Asset Inventory Pilot (ATAIP)

Data for location and condition of existing sidewalks, crosswalks, and bicycle facilities on the STN are available through the Active Transportation Asset Inventory Pilot (ATAIP) in the [Transportation Asset Management \(TAM\) Map Portal](#) under the Active Transportation tab.

Note: ATAIP is limited to the three main Active Transportation core assets (Bikeways, Sidewalks, and Crosswalks). This data source does not capture other Complete Street Assets (like Transit related facilities) and does not capture assets at ramp locations, only on the mainline system. ATAIP data captures only existing assets and their condition; it does not capture proposed facilities. Additionally, ATAIP is not fully accurate or up to date. The link to the ATAIP data will be uploaded into AT&CS internal webpage.

Local Facilities: Regional/Local Bicycle and Pedestrian Plans

The following spreadsheet is an inventory of Pedestrian Plans, Bicycle Plans, and Active Transportation Plans for 154 cities throughout California which can be found in California Active Transportation Safety Information Pages (CATSIP):

[Local Pedestrian Plans, Bicycle Plans, and Active Transportations](#)

Note: Any omission of plans from this list does not constitute evidence that a jurisdiction has not completed such a plan. For the most up to date information on these plans, please consult your local transportation agency. The linked list is not comprehensive and that city websites should also be checked for more recently updated plans.

Recreational Facilities

Cities, counties, and regional transportation planning agencies may have information on recreational facilities.

California Coastal Trail

Caltrans, the Coastal Conservancy, Coastal Commission, and California Department of Parks and Recreation share various responsibilities for planning and completing the California Coastal Trail (CCT) in partnership with a number of regional and local agencies and non-governmental organizations. [Section 31408 of Public Resources Code, Division 21](#) obligates Caltrans to “cooperate with the conservancy with respect to planning and making lands available for completion of the trail, including

constructing trail links, placing signs, and managing the trails." For coastal Districts, identify existing and planned California Coastal Trail segments and public access locations. These can be found on the [DEA GIS Library](#) (under General/Coastal), as well as in [Local Coastal Program](#) plans and regional transportation plans. The DEA GIS Library also contains the Pacific Coast Bike Route (PCBR). [USBR 50, 66, and 95](#) are other notable bicycle routes.

Bicycle Parking

Bike parking is part of the bicycle network. Bike parking at mass transit nodes is fundamental to providing connectivity to transit.

Transit

- Routes
- Stop locations

Shared Micro-Mobility

- Service areas

Accessibility Data

Origin-Destination

Identify destinations in your corridor where people are likely to travel between. Big data platforms, such as Streetlight, among other sources, can provide Origin Destination analyses to identify not just bike/ped counts but help determine the viability of proposed improvements at locations based on where bikes/peds travel between.

"Main Streets" and Schools

Planners need to understand community context whether it's a main street that serves a community or destinations that require crossing the highway. Corridor Planners need to understand and be aware of highway segments and how they serve and affect the local community. As a planner you must understand whether there is a bicyclist, pedestrian, or a vulnerable user who needs to cross or go along the highway to reach local destinations. We are to serve communities through active transportation planning and understand vulnerable users and what community destinations are around/along the state highway.

Does the highway segment function as a "Main Street"? If so, please provide recommendations to address concerns within the corridor plan. Use the [Main Street, California: A Guide for Improving Community and Transportation Vitality](#) resource to identify State Highway segments that function as a "Main Street." We also encourage consideration of "inter-community rural connectors" as these corridors have a specific function and needs that will be influential in decision-making. Inter-community rural

connectors are State Transportation Network segments that are the only route you can take to get to and from two communities. For example, State Route 166 between the communities of Santa Maria and Guadalupe. This definition was established in [District 5's Active Transportation Plan](#) and we encourage other Districts to identify those locations. The final Active Transportation Plan for District 5 will be available [here](#).

When considering schools, it is important to call them out and improve these areas for walking/biking with vulnerable users (children). Identify schools and crosswalks (crosswalks near schools will always be painted yellow) in your corridor planning process. The [California School Campus Database \(CSCD\)](#) is a GIS database containing campus boundaries of kindergarten through 12th grade schools, colleges, and universities. Identify the campus boundary in relation to the State Transportation Network.

Other tools and resources can be found in the [Safe Routes to School Programs in Rural California: A Guide for Communities and Partners](#) and on the California Bicycle Coalition's [web page](#).

Pedestrian/Bicyclist/ Transit Trip Generators

A trip generator, here, refers to both origins and destinations for Pedestrian/ Bicyclist/ Transit trips. We need to know if there is any (existing or proposed) Pedestrian/ Bicyclist/ Transit Trip Generators in or adjacent to the corridor area; And if the corridor provides unique or primary access (defined as access which is not otherwise available within approximately one-half mile of the study area) into or out of any of the trip generators or between communities. Trip generators are integral to this guide as they help indicate areas of high bike and pedestrian trip opportunities for improvement and identify mode shift opportunities.

Here is a list of trip generators:

- **Residential Areas:** Indicate any general areas of dense residential housing.
- **Parks:** Include areas that would attract people, whether officially designated as a park or not.
- **Recreational Areas:** Examples include athletic fields, dog parks.
- **Religious Facilities.**
- **Schools** (including public and private schools, colleges, universities, daycare, or other educational institution).
- **Health / Medical Facilities.**
- **Town Centers:** Typically, would include areas where town halls, libraries and other public facilities exist.
- **Shopping Centers:** Especially centers with businesses where non-motorized customers might be expected (restaurants, bookstores, drug stores, etc.).

- **Employment Areas:** Factories, large office buildings, hospitals, government offices. "high density employment centers"- meaning the amount of employment opportunities along the corridor rather than individual businesses with a lot of employees. For example, a main street may have 10 businesses in 1 block all with small number of employees, yet this is influential in reducing VMT and commute patterns if we provide appropriate infrastructure.
- **Transit Stops/Centers.**
- **Public Transit Facilities:** Train/bus stations, airports.
- **Shared-Use Trail Access / Parking.**
- **Park and Ride:** Park and ride lots offer convenient and safe location to transfer from a single passenger vehicle to a local or regional transit bus, carpool, or vanpool.
- **Other:** Other known facilities expected to generate or attract non-motorized users.

Caltrans is beginning research into latent demand methodology for active transportation. That work will help identify areas where the largest increases in bicycling and walking may be seen with increased investment in the active transportation infrastructure.