

California law requires urban areas to develop and biennially update a Congestion Management Program (CMP)—a plan that describes strategies to assess and monitor the performance of the county’s multimodal transportation system, addresses congestion and improves the performance of a multimodal system, and integrates transportation and land use planning.

As the Congestion Management Agency (CMA) for Alameda County, the Alameda County Transportation Commission (Alameda CTC) prepares the CMP. Alameda CTC coordinates with the Metropolitan Transportation Commission (MTC), transit agencies, local governments, the California Department of Transportation (Caltrans), and

the Bay Area Air Quality Management District (BAAQMD) to manage and update the CMP, and perform congestion management and monitoring activities.

The Alameda County CMP is a short-range plan that includes a variety of congestion management strategies, programs, and projects designed to meet, and often exceed, the legislative requirements with the goal of further improving the countywide transportation system to better meet the needs of all users. The CMP also supports the 2020 Countywide Transportation Plan (CTP).

Legislative Requirements

California’s current CMP legislation defers considerable authority to CMAs to develop and update each CMP but requires CMAs incorporate five key elements:

1. **level of service monitoring of a designated roadway network**
2. **a multimodal performance element;**
3. **a travel demand management element;**
4. **a land use analysis program; and**
5. **a capital improvement program.**

Following the adoption of the 2021 CMP by the Alameda CTC Commission, Alameda CTC will submit the CMP to MTC. As the regional transportation planning agency in the San Francisco Bay Area, MTC is required to evaluate the CMP’s consistency with MTC’s Regional Transportation Plan (RTP) and with the CMPs of the other counties in the Bay Area.

2021 Approach

CMP legislation was initially passed in 1991 and last updated in 2001 and is currently in conflict with other regulations like Senate Bill 743 (SB 743), the California Environmental Quality Act (CEQA), Complete Streets legislation, and current industry best practices. To resolve this conflict, existing CMP legislation must be amended to align with other more recent regulations.

The metric used to measure performance is at the heart of this conflict. CMP legislation requires use of a delay-based metric, Level of Service (LOS), to measure roadway performance. However, recently amended CEQA guidelines based on SB 743 require use of vehicle miles-traveled (VMT) as the primary metric for traffic impacts. This move from LOS to VMT supports Greenhouse Gas (GHG) reduction goals, multimodal performance measurement, and is in line with the Complete Streets practice.

Given that state legislation has not yet addressed this conflict, Alameda CTC continues to comply with CMP legislation. This 2021 administrative update demonstrates compliance with state and regional CMP requirements and reports work performed by Alameda CTC related to the major CMP elements since the last update in 2019. Elements of the 2019 CMP not hereby updated still apply. Chapter references that appear in this document are referring to

Chapters of the [2019 CMP document](#), which can be found here on Alameda CTC's website.



Summary of Activity and Program Changes from 2019

Alameda CTC's 2021 Congestion Management Program builds off the program requirements and methodologies established in previous CMPs, most recently the 2019 CMP. The following sections briefly describe Alameda CTC's approach to the five key elements defined in CMP legislation, as well as recent activity focused on meeting those requirements.

1

CMP Network and LOS Standards

State law requires CMAs to monitor LOS on an established CMP Network. State legislation defers authority to CMAs to define both the LOS methodology and the CMP network, provided:

- The LOS methodology measures delay and is uniformly applied; and
- The CMP network includes the state highway system and principal arterials.

LOS Methodology: Alameda CTC uses LOS standards defined in the 1985 Highway Capacity Manual (HCM 1985), the nationally accepted guidelines published by the Transportation Research Board. Alameda CTC has evaluated the applicability of these standards several times against more recent versions of the HCM. A more recent version of the HCM would hinder the ability to compare past performance trends, important for determining conformity with CMP legislation.

The HCM 2000 and 2010 both require a density-based, rather than speed-based LOS methodology for freeways and changed speed classifications for arterials, which would require additional data collection in addition to complicating conformity findings.

CMP Network: Alameda CTC must define and identify components of the transportation system that are being monitored and improved. For the purposes of the CMP, two different systems are used: the designated CMP roadway network, last updated in 2017 (Chapter 2 of 2019 CMP, "Designated CMP Roadway Network") and the broader and older Metropolitan Transportation System (MTS). The CMP roadway network is generally a subset of the MTS. Alameda CTC monitors performance on the CMP roadway network in relation to established LOS standards.

The designated CMP roadway network was initially developed in 1991 and includes freeways, state highways, and principal arterials to satisfy state legislative

requirements. These roadways are significant for regional trips and connect major activity centers to the regional transportation system. The network was last updated in 2017 to add an additional 220 miles of arterial roadways based on the outcomes of three modal plans: Countywide Multimodal Arterial Plan, Countywide Transit Plan, and Countywide Goods Movement Plan. Additionally, Alameda CTC identified 146 miles of roadways on major transit corridors to be included in a new transit performance monitoring network. These parts of the network are monitored for information purposes rather than conformity.

There have been no changes to the adopted LOS Methodology or CMP network since the 2019 CMP was approved. As part of the implementation of the CMP, Alameda CTC conducts a LOS monitoring study every two years. The last study was conducted in the fall of 2020, and the next will be in the spring of 2022. Because of the COVID-19 pandemic which began in March 2020, the standard monitoring window was moved from spring 2020 to the fall of 2020. Alameda CTC expects to return to the standard methodology approved in the 2019 CMP for the 2022 monitoring cycle with no changes to the CMP network. The 2020 monitoring cycle did not identify any deficient segments. Alameda CTC will monitor level of service on the CMP network in spring 2022 and report consistency with the LOS standards and identify potentially

deficient segments as part of the 2022 monitoring cycle.

2 Multimodal Performance and Monitoring

State law requires CMAs to evaluate their current and future multimodal transportation system performance for the movement of people and goods. Specifically, the CMP must contain performance measures that evaluate how the CMP functions including standards for evaluating frequency, routing, and coordination of transit services on that network. The CMP statute outlines three requirements that CMPs must define:

- Modes that should be covered by the performance element;
- Types of applications that performance measures should be used for; and
- Goals/objectives with which the performance measures should align.

To meet this requirement, Alameda CTC collects performance data for all modes using data from: transit agencies, through biennial multimodal monitoring cycles, the countywide travel model, and publicly available sources. All data are collected using established data collection processes consistent with those described in Chapter 4 of the 2019 CMP. Alameda CTC meets and exceeds the statutory minimums in terms of modes of

transportation, range of applications, and goals/objectives:

Modes of Transportation: Alameda CTC uses performance measures for five major transportation modes including auto (highway and arterial/local roads), transit, bicycle, pedestrian, and goods movement. In addition, Alameda CTC uses performance measures that capture cross-cutting issues such as environmental, economic, and equity objectives.

Types of Applications: Alameda CTC uses performance measures in six distinct types of applications. These applications are distinct in the scales of analysis, data sources/considerations, and frequency of reporting. Three are CMP-required uses of performance measures.

Goals and Objectives: Alameda CTC identifies goals and objectives as part of its CTP and as part of other countywide plans. Countywide modal plans have taken a focused look at goods movement, transit, arterial, bicycle, and pedestrian systems and these have fed into the CTP. The goals and objectives of all Alameda CTC plans are designed to align with the CTP, and the CTP goals encompass all CMP statutory goals (as well as other countywide goals such as state of good repair, equity, and health).

Alameda CTC works with partner agencies, including transit agencies, to collect and analyze countywide multimodal performance

data which is published in an annual performance report which summarizes available transportation performance measurement data and emerging trends. There have been no changes to modes of transportation, types of applications, or goals and objectives since the 2019 CMP. Chapter 4 of the 2019 CMP describes multimodal reporting methodologies in detail.

3 Travel Demand Management

The Commission adopted a countywide comprehensive TDM strategy in May 2013 that provides an inventory of TDM programs and activities present in Alameda County and recommends a strategy for better integrating, supporting, and building on these existing efforts, including implementation of the regional commute benefit program and the Guaranteed Ride Home Program. These programs are designed to make the most efficient use of existing facilities. The TDM element also incorporates strategies to integrate air quality planning requirements with transportation planning and programming.

- CMP legislation requires that the TDM element of the Congestion Management Program accomplish the following:
- Promote alternatives to single-occupant vehicle travel (e.g., carpools, vanpools, transit, bicycles, and park-and-ride lots);

- Promote improvements in the jobs-housing balance and transit-oriented developments;
- Promote other strategies, including flexible work hours, telecommuting, and parking management programs; and
- Consider parking “cash-out” programs (paying employees who do not use parking).

A balanced TDM element requires actions that local jurisdictions, Alameda CTC, the Bay Area Air Quality Management District, Caltrans, MTC, and local transit agencies undertake. Cities and other local jurisdictions may establish their own TDM programs that go beyond what Alameda CTC and BAAQMD develop. To meet the intent of the CMP legislation, the CMP requires local governments to undertake certain TDM actions, known as the Required Program outlined in Chapter 5 of the 2019 CMP.

Alameda CTC has continued to administer TDM programs, including the Guaranteed Ride Home Program, the Commute Choices webpage, Bicycle Safety Education Classes, the Safe Routes to School Program, and promotional campaigns and programs. There have been no major changes to the TDM element of the CMP since the 2019 CMP was approved. Alameda CTC will continue to work with local jurisdictions to ensure the Required Program is being met through the annual CMP conformity process.

4 Land Use Analysis Program

As part of the CMP, Alameda CTC must develop a program to analyze the impacts of land use decisions made by local jurisdictions on regional transportation systems. The program must generally be able to estimate the costs associated with those impacts, as well as provide credits for local public and private contributions to improve regional transportation systems.

While Alameda CTC’s Land Use Analysis Program was initially conceived as a program to meet the CMP legislative mandate, the growing focus at all levels of government on improved coordination between land use and transportation planning has resulted in the program’s evolution. The program now also serves as an opportunity for strategic thinking about how to plan for development that efficiently uses the transportation system, while ensuring that the mobility and access needs of residents and workers in Alameda County are fulfilled. In this context, the program includes:

- Legislatively required review of land use actions of local jurisdictions by Alameda CTC to ensure that impacts on the regional transportation system are disclosed and mitigation measures are identified;
- Land use projections from the Regional Planning Agency for use in the countywide model database by local jurisdictions;

- Planning initiatives and programs that foster transportation and land use connections; and
- Strategic monitoring of transportation-land use coordination performance measures.

Review of Land Use Actions: A major component of the Alameda CTC Land Use Analysis Program is the legislatively required review of land use development projects. The review of development projects allows Alameda CTC to assess impacts of individual development actions on the regional transportation system and ensures that significant impacts are appropriately mitigated. Alameda CTC reviews land use actions if the proposed land use development has the potential to cause countywide or regional-scale impacts. Projects are reviewed if they would cause a net increase of 100 p.m. peak-hour vehicle trips or more. Alameda CTC performs trip generation calculations using the latest Institute of Transportation Engineers Trip Generation Manual. Alameda CTC has not adopted thresholds of significance. Alameda CTC has not changed guidelines regarding the type and adequacy of mitigation measures since the 2019 CMP. Alameda CTC is responsible for monitoring conformance of local jurisdictions with the adopted CMP. While Alameda CTC does not have the authority to approve or deny local land use projects, it may find the local jurisdiction in non-conformance. If it fails to comply with the requirements of the Land

Use Analysis Program, a jurisdiction risks losing Proposition 111 gas tax subvention funds.

Travel Demand Model and Land Use Development Projections: The CMP legislation requires every CMA, in consultation with the regional transportation planning agency (MTC in the Bay Area), cities, and the county, to develop a uniform database on traffic impacts for use in a countywide travel demand model. Further, the legislation mandates the countywide model to be consistent with the assumptions of the regional travel demand model developed by MTC and the most current land use and socioeconomic database adopted by the Association of Bay Area Governments (ABAG) for Alameda County. In its role as the CMA, Alameda CTC must approve computer models used for sub-areas, including models used by local jurisdictions for land use impact analysis. All models must be consistent with the countywide model and standardized modeling assumptions. Alameda CTC last updated the Countywide Travel Demand Model in 2018 to be consistent with the most recently adopted Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS), Plan Bay Area 2040. Chapter 7 of the 2019 CMP further defines how Alameda CTC develops the countywide travel model and land use development database.

The Alameda Countywide Travel Demand Model is typically used to determine traffic volumes, transit ridership, and other information for future years. Jurisdictions are required to use the most current version of the Alameda Countywide Travel Demand Model for the CMP Land Use Analysis Program. Alameda CTC amended the CMP requirements in 1998, so that local jurisdictions are responsible for applying the travel model. All local jurisdictions have signed Master Use Agreements with Alameda CTC that outline the procedure for requesting the model for a specific application.

Other LUAP Activities: The Regional Transit Expansion Program, originally adopted by MTC in 2001 as Resolution 3434 and updated as part of Plan Bay Area in 2013 and again in 2017 as part of Plan Bay Area 2040, identified the regional commitment to transit investments in the Bay Area. Resolution 3434 identified \$18 billion in transit expansion investment projects and included a TOD policy to condition transit expansion projects funded under Resolution 3434 on supportive land use policies. Alameda CTC has worked with local jurisdictions, transit providers, congestion management agencies in adjoining counties, ABAG, and MTC to address the TOD policy in regional corridors.

MTC is currently updating the TOD Policy and Alameda CTC is an active stakeholder in this process and participates on the technical advisory committee.

Since the 2019 CMP Update, Alameda CTC made minor updates the Land Use Analysis Program to provide guidance for cities to meet the requirements of both the CMP and SB 743. Current CEQA guidelines do not allow environmental documents to use a delay-based metric to make decisions on a project, or to require mitigation measures. However, to demonstrate conformity with the CMP cities must require an analysis of impacts to all modes, including autos, using a delay-based metric to calculate project impacts. This analysis may be provided in an appendix, or separate from the CEQA process. Alameda CTC will continue to use the Priority Development Area Investment and Growth Strategy to encourage development in the county's PDAs and support alternative transportation modes.

5

Capital Improvement Program

The Capital Improvement Program reflects Alameda CTC's efforts to maintain or improve the performance of the multimodal transportation system for the movement of people and goods and to mitigate regional transportation impacts identified through the Land Use Analysis Program.

Per federal requirements, Alameda CTC considers various multimodal methods to improve the existing system, such as traffic



operations systems, arterial signal timing, parking management, transit transfer coordination, and transit marketing programs.

Projects selected for the Capital Improvement Program are consistent with the assumptions, goals, policies, actions, and projects identified in the latest adopted RTP, Plan Bay Area 2040. As the Regional Transportation Planning Agency for the Bay Area, the Metropolitan Transportation Commission (MTC) is responsible for developing regional project priorities for the Regional Transportation Improvement Program (RTIP) for the nine counties of the Bay Area. As part of the CMP, Alameda CTC must also include in the Capital Improvement Program the list of projects proposed for Alameda County's share of State Transportation Improvement Program (STIP) funding. MTC incorporates the list of Alameda County's proposed STIP projects into the RTIP. MTC then submits the RTIP to the California Transportation Commission for inclusion in the STIP.

Starting in 2013, Alameda CTC adopted a Strategic Planning and Programming Policy that consolidates existing planning and programming processes to improve the efficiency and effectiveness of future policy decisions on transportation investments. This policy resulted in the Comprehensive Investment Plan (CIP).

Alameda CTC's CIP serves three purposes:

- Translate long-range plans into short-range implementation by focusing on project/program delivery over a five-year programming window with a two-year allocation plan;
- Serve as Alameda CTC's strategic plan for voter-approved transportation funding (such as 1986 Measure B, 2000 Measure B, 2010 Vehicle Registration Fee, and 2014 Measure BB) as required by the respective legislation for each funding program; and
- Establish a comprehensive and consolidated programming and allocation plan for fund sources under Alameda CTC's authority for capital improvements, operations, and maintenance projects and programs.

Each year, Alameda CTC's CIP financial assumptions are updated to include the latest revenue projections. New projects and programs are considered through updates of the CIP, generally occurring every two years.

Through the next CMP update, Alameda CTC will continue its coordination of long-range planning documents with short-range implementation via the Alameda CTC CIP. The next CIP will continue to reflect a combination of near-term transportation investments to achieve the vision and goals of Alameda CTC's modal plans and the CIP.

Consistency and Conformance

Local Conformance: Alameda CTC is responsible for ensuring local government conformance with the CMP. Alameda CTC annually monitors jurisdictions to ensure conformance with the implementation of four elements: LOS standards on the CMP network, travel demand management including the required TDM program, the Land Use Analysis Program, and the Capital Improvement Program.

Regional Consistency: MTC adopts CMP consistency guidelines that require an evaluation of the CMP for consistency with the RTP and compatibility of programs within the region. Once MTC finds consistency with the RTP, it will incorporate Alameda CTC's CIP, which is its CMP Capital Improvement Program, into the RTIP. The most recent CMP Guidance (Resolution 3000) for consistency was updated by MTC in December 2020.

Based on the 2021 CMP updates, the CMP fulfills the spirit, purpose, and intent of the CMP legislation because it:

1. Contributes to maintaining or improving transportation system service levels.

The projects and programs contained in the CMP are a subset of the transportation investments adopted in the Alameda County Countywide Transportation Plan.

The CMP can be viewed as the short-range implementation program for the CTP.

2. Conforms to MTC's criteria for consistency with Plan Bay Area.

Table 1 lists MTC's 2021 consistency requirements for CMPs in the Bay Area region. The CMP has met all these requirements.

3. Provides a travel model consistent with MTC's regional model.

The Alameda Countywide Travel Demand Model was updated to include the land uses and projects and programs in the most recently adopted RTP, Plan Bay Area 2040, for which MTC approved the model conformance.

4. Is consistent with MTC's adopted Transportation Control Measures.

The transportation control measures in the RTP for the Bay Area based on the federal and state air quality plans are shown in Appendix H of the 2019 CMP and have not changed in the 2021 CMP. The CMP includes many project types and programs identified in regional plans.



5. Specifies a method for estimating roadway level of service consistent with state law.

State legislation permits two approaches for assessing LOS, either The Alameda County CMP specifies using the 1985 Highway Capacity Manual (HCM1985) for LOS monitoring and conformity purposes and the HCM2000 for the Land Use Analysis Program.

6. Identifies candidate projects for the RTIP.

The RTIP candidates listed in the CMP's Capital Improvement Program meet MTC's requirements for inclusion in the STIP program.

7. Was developed in cooperation with jurisdictions and other interested parties.

Prior updates of the CMP included working with interested parties through meetings and regular mailings, and updates and notifications on the Alameda CTC website. The 2021 update will be reviewed by the Alameda County Technical Advisory Committee; the Planning, Policy and Legislation Committee; and the Alameda County Transportation Commission before being sent to MTC for review.

8. Provides a forward-looking approach to the impact of local land use decisions on transportation.

The Land Use Analysis Program allows consultation with Alameda CTC early in the land development process. Early input will help ensure a better linkage between land use decisions and transportation investment. The 2021 CMP update retained the expanded discussion of Alameda CTC's activities identified during the two prior updates to fulfill the legislative requirements of Senate Bill 375 and Assembly Bill 32 to better integrate transportation and land use and to reduce greenhouse gas emissions by curtailing VMT.

9. Considers the benefit of greenhouse gas reductions in developing the CIP.

The CMP considers the benefits of greenhouse gas reductions in the Land Use Analysis Program and in developing the CIP. The 2021 CMP continues to include the Alameda County Priority Development Area Investment and Growth Strategy recommendations and options for alternative trip-generation rates to promote infill development in the Land Use Analysis Program that will help support the reduction of VMT and greenhouse gas emissions.

Table 1. Regional Consistency Requirements

RTP Consistency

Have the RTP goals and objectives been included in the CMP?

Does the CMP include references to Resolution 3434?

CMP System

Have all state highways and principal arterials been included?

Are all state highways identified?

Has the CMA developed a clear, reasonable definition for "principal arterials" as part of its submittal plan?

Has this definition been consistently applied in the selection of arterials to include in the designated system?
If not, why?

Does the CMP system connect to the CMP systems in adjacent counties?

Air Quality Requirements

Does the CMP include locally implementable federal and state TCMs, as previously documented and included in MTC's Plan Bay Area, MTC Resolution 2131, and the BAAQMD's Bay Area 2017 Clean Air Plan Control Strategy?

Modeling Consistency (on completion of the current update to the countywide model)

Are the regional "core" assumptions for auto operating costs, transit fares and bridge tolls being used, or are reasons to the contrary documented?

Does the forecasting model include transit and carpool use (through either a person trip generation model or a "borrowed share" approach)?

Does the model produce trip distribution results that are reasonably consistent with those of MTC?

Is the modeling methodology documented?

LOS Consistency

Is LOS assessed using a methodology agreeable to MTC?

RTIP Requirements

Are the proposed RTIP projects consistent with the Plan Bay Area?

Process

Has the CMP been developed in cooperation with all concerned agencies (i.e., transit agencies, applicable air quality district(s), MTC, adjacent counties, etc.?)

Has the CMP been formally adopted according to the requirements of the legislation?