

**GUIDANCE FOR CONSISTENCY OF
CONGESTION MANAGEMENT PROGRAMS
WITH THE REGIONAL TRANSPORTATION PLAN**

Metropolitan Transportation Commission

May 2009

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I. INTRODUCTION

A. Purpose of This Guidance

The Congestion Management Program (CMP) statutes establish specific requirements for the content and development process for CMPs, for the relationship between CMPs and the metropolitan planning process, for CMA monitoring and other responsibilities, and for the responsibilities of MTC as the regional transportation agency. CMPs are not required in a county if a majority of local governments and the Board of Supervisors adopt resolutions electing to be exempt from this requirement (AB 2419 (Bowler) Chapter 293, Statutes of 1996). This Guidance is for those counties that prepare a CMP in accordance with state statutes. For counties that opt out of preparing a CMP, MTC will directly work with the appropriate county agencies to establish project priorities for funding.

CMP statutes also specify particular responsibilities involving CMPs for the regional transportation agency, in the Bay Area, MTC. These responsibilities include review of the consistency of the CMPs with the RTP, evaluation of the consistency and compatibility of the CMPs in the Bay Area, and inclusion of the CMP projects in the Regional Transportation Improvement Program (RTIP).

The purpose of this guidance is to focus on the relationship of the CMPs to the regional planning process and MTC's role in determining consistency of CMPs with the Regional Transportation Plan (RTP).

B. Legislative Requirement for Congestion Management Programs

Congestion Management Programs were established as part of a bi-partisan legislative package in 1989, and approved by the voters in 1990. This legislation also increased transportation revenues and changed state transportation planning and programming processes. The specific CMP provisions were originally chartered by the Katz-Kopp-Baker-Campbell Transportation Blueprint for the Twenty-First Century by AB 471 (Katz); (Chapter 106, Statutes 1989). They were revised by AB 1791 (Katz) (Chapter 16, Statutes of 1990), AB 3093 (Katz) (Chapter 2.6, Statutes of 1992), AB 1963 (Katz) (Chapter 1146, Statutes of 1994), AB 2419 (Bowler) (Chapter 293, Statutes of 1996), AB 1706 (Chapter 597, Statutes of 2001), and SB 1636 (Figueroa)(Chapter 505, Section 4, Statutes of 2002), which defines and incorporates "infill opportunity zones".

CMP statutes establish requirements for local jurisdictions to receive certain gas tax subvention funds. Additionally, CMPs play a role in the development of specific project proposals for the Regional Transportation Improvement Program.

C. The Role of CMPs in the Metropolitan Planning Process

CMPs play a role in the countywide and regional transportation planning processes:

- CMPs can identify specific near term projects to implement the longer-range vision established in a countywide plan.
- Through CMPs, the transportation investment priorities of the multiple jurisdictions in each county can be addressed in a countywide context.
- CMPs establish a link between local land use decision making and the transportation planning process.
- CMPs are a building block for the federally required Congestion Management Program.

II. MTC's ROLE and RESPONSIBILITIES

A. MTC's Responsibilities regarding CMPs

MTC's direct responsibilities under CMP statutes are concentrated in the following provisions:

“The regional agency shall evaluate the consistency between the program (i.e., the CMP) and the regional transportation plans required pursuant to Section 65080. In the case of a multicounty regional transportation planning agency, that agency shall evaluate the consistency and compatibility of the programs within the region. (Section 65089.2 (a))

The regional agency, upon finding that the program is consistent, shall incorporate the program into the regional transportation improvement program as provided for in Section 65082. If the regional agency finds the program is inconsistent, it may exclude any project in the congestion management program from inclusion in the regional transportation improvement program. (Section 65089.2(b))

It is the intent of the Legislature that the regional agency, when its boundaries include areas in more than one county, should resolve inconsistencies and mediate disputes which arise between agencies related to congestion management programs adopted for those areas.” Section 65089.2.(d)(1))

B. The Regional Transportation Plan (RTP) Regulatory Setting and Goals

Federal Requirements

The primary federal requirements regarding RTPs are addressed in the metropolitan transportation planning rules in Title 23 of the Code of Federal Regulations (CFR) Part 450 and 500 and Title 49 CFR Part 613. These federal regulations have been updated to reflect the metropolitan transportation planning regulations called out in SAFETEA-LU. These requirements call for the metropolitan transportation planning process to include the development of a transportation plan addressing no less than a 20-year planning horizon. The transportation plan shall include both long-range and

short-range strategies/actions that lead to the development of an integrated multimodal transportation system to facilitate the safe and efficient movement of people and goods in addressing current and future transportation demand.

According to these requirements, the metropolitan transportation planning process shall be continuous, cooperative, and comprehensive, and provide for consideration and implementation of projects, strategies, and services that will address the factors listed below:

- Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency;
- Increase the safety of the transportation system for motorized and non-motorized users;
- Increase accessibility and mobility of people and freight;
- Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns;
- Enhance the integration and connectivity of the transportation system, across and between modes, for people and freight;
- Promote efficient system management and operation; and
- Emphasize the preservation of the existing transportation system.

State Requirements

California Government Code Section 65080 sets forth the State's requirements for RTPs. Section 65080 requires MPOs located in air quality nonattainment regions update their RTPs at least every four years.

State Regional Transportation Plan (RTP) Guidelines

The RTP Guidelines adopted by the California Transportation Commission (CTC) state that the CTC cannot program projects that are not identified in the RTP. Section 65080 states that the RTP shall contain three distinct elements:

- A **Policy Element** that reflects the mobility goals, policies and objectives of the region;
- An **Action Element** that identifies programs and actions to implement the RTP; and
 - A **Financial Element** that summarizes the cost of implementing the projects in the RTP in a financially constrained environment.
 - The Transportation 2035 Plan serves all the specific planning purposes outlined in the CTC RTP Guidelines

C. Consistency Findings

MTC's findings for the consistency of CMPs focus on five areas:

- Goals and objectives established in the RTP,
- Consistency of the system definition with adjoining counties,
- Consistency with federal and state air quality plans,
- Consistency with the MTC travel demand modeling database and methodologies; and
- RTP financial assumptions.

1) Goals and objectives established in the RTP

The Transportation 2035 Plan represents the transportation policy and action statement of how the Bay Area will approach the region’s transportation needs over the next 25 years. It was prepared by MTC in partnership with the Association of Bay Area Governments (ABAG), the Bay Area Air Quality Management District (BAAQMD), and the Bay Conservation and Development Commission (BCDC) and in collaboration with Caltrans, the nine county-level Congestion Management Agencies (CMAs) or substitute agencies, over two dozen Bay Area transit operators, and numerous transportation stakeholders and the public.

At the core of the proposed Transportation 2035 Plan is a vision of what the Bay Area transportation network should look like in 2035. The purpose and goals of the Transportation 2035 Plan provide the framework for this vision. The purpose of the Transportation 2035 Plan is to encourage and promote the safe and efficient management, operation and development of a regional intermodal transportation system that will serve the mobility needs of people and goods. The Commission adopted a Statement of Vision for the Transportation 2035 Plan which can be read in full in the RTP.

The RTP includes the following principles: Economy, Environment and Equity, referred to as the Three Es, and associated goals. The plan goals are not entirely confined to any one of the Three Es, but rather cut across and reinforce all three principles; these are further explained in the RTP.

Three E Principles and Goals

<i>Principle</i>	<i>Goal</i>
Economy	Maintenance & Safety
	Reliability
	Efficient Freight Travel
	Security & Emergency Management
Environment	Clean Air
	Climate Protection
Equity	Equitable Access
	Livable Communities

Further, the RTP incorporates a set of performance objectives for each of the Three E principles as quantifiable measures against which progress may be evaluated, as shown below:

RTP Performance Objectives

<i>Principle</i>	<i>Goal</i>	<i>Performance Objectives</i>
Economy	Maintenance & Safety	<p><i>Maintenance</i></p> <ul style="list-style-type: none"> • Maintain local road pavement condition index (PCI) of 75 or greater for local streets and roads • State highway distressed pavement condition lane-miles not to exceed 10% of total system • Achieve an average age for all transit asset types that is no more than 50% of their useful life • Increase the average number of miles between service calls for transit service in the region to 8,000 miles <p><i>Collisions/Fatalities</i></p> <ul style="list-style-type: none"> • Reduce fatalities from motor-vehicle collisions by 15 percent from today by 2035 • Reduce bicycle and pedestrian fatalities attributed to motor vehicle collisions by 25 percent each from 2000 by 2035 • Reduce bicycle and pedestrian injuries attributed to motor vehicle collisions by 25 percent each from 2000 by 2035
	Reliability; Efficient Freight Travel; Security & Emergency Management	<ul style="list-style-type: none"> • Reduce per-capita delay by 20 percent from today by 2035

Environment	Clean Air; Climate Protection	<ul style="list-style-type: none"> • Reduce daily per-capita vehicle miles traveled (VMT) by 10 percent from today by 2035 • Reduce emissions of finer particulates (PM_{2.5}) by 10 percent from today by 2035 • Reduce emissions of coarse particulates (PM₁₀) by 45 percent from today by 2035 • Reduce carbon dioxide (CO₂) emissions to 40 percent below 1990 levels by 2035
Equity	Equitable Access; Livable Communities	<ul style="list-style-type: none"> • Decrease by 10 percent the combined share of low-income and lower-middle income residents' household income consumed by transportation and housing

Note that these performance objectives do not constitute legal mandates, nor do they constitute thresholds of significance under CEQA.

Regional Transit Expansion Program

The Regional Transit Expansion Program – adopted by the Commission as Resolution 3434 – calls for a nearly \$12 billion investment in new rail and bus projects that will improve mobility and enhance connectivity for residents throughout the Bay Area. MTC has adopted a Transportation and Land Use Platform that calls for supportive land use plans and policies to support transit extensions in Res. 3434. Further, MTC has adopted a Transit Oriented Development Policy, as part of Res. 3434, that established specific housing thresholds for these extensions, requires station area plans and establishes corridor working groups. These regional policies and specific projects within the county should be recognized in the CMP (attached as Appendix C).

2) Consistency of the system definition with adjoining counties

The CMP statutes require that the CMA designate a system of highways and roadways which shall be subject to the CMP requirements. Consistency requires the regional continuity of the CMP designated system for facilities that cross county borders.

Infill Opportunity Zones

Cities and counties may designate “Infill Opportunity Zones” in order to support development of infill housing and mixed use developments in proximity to transit (SB 1636 (Figueroa)(Chapter 505, Section 4, Statutes of 2002). Traffic Level of Service (LOS) standards shall not apply to the streets and highways within an infill opportunity zone. Rather, an alternative level of service standard, multimodal

composite, or personal level of service standard may be used, or a list of flexible level of service mitigation options, including transit, pedestrian and other infrastructure, may be approved. Infill opportunity zones may serve as a valuable tool as the CMAs continue to work to connect land use and transportation planning. MTC encourages the exchange of information between the CMAs regarding approaches to alternative levels of service.

3) Consistency with pertinent Air Quality Plans, as incorporated in the RTP

The RTP incorporates Transportation Control Measures (TCMs) contained in the federal and state air quality plans to achieve and maintain the respective standards for ozone and carbon monoxide. The statutes require that the Capital Improvement Program (CIP) of the CMP conform to transportation related vehicle emission air quality mitigation measures. CMPs should promote the region's adopted transportation control measures (TCMs) for the Federal and State Clean Air Plans. In addition, CMPs are encouraged to consider the benefits of greenhouse gas (GHG) reductions in developing the CIP, although GHG emission reductions are not currently required in either Federal or State Clean Air Plans.

A reference to the lists of federal and state TCMs is provided in Table 1 of Attachment B. The lists may be updated from time to time to reflect changes in the list of TCMs.

In particular, TCMs that require local implementation should be identified in the CMP, specifically in the CIP. If needed MTC will indicate TCMs that need to be emphasized to help achieve federal and state air quality standards.

4) Consistency with the MTC Travel Demand Modeling Databases and Methodologies

MTC's statutory requirements regarding consistent databases are as follows:

The agency, (i.e., the CMA) in consultation with the regional agency, cities, and the county, shall develop a uniform data base on traffic impacts for use in a countywide transportation computer model . . . The computer models shall be consistent with the modeling methodology adopted by the regional planning agency. The data bases used in the models shall be consistent with the data bases used by the regional planning agency. Where the regional agency has jurisdiction over two or more counties, the data bases used by the agency shall be consistent with the data bases used by the regional agency. (Section 65089 (c))

MTC desires the development of highly consistent travel demand models, with coordinated regional and subregional models and shared databases, to provide a common foundation for transportation policy and investment analysis.

The Bay Area Travel Model User Community (BATMUC) of the Bay Area Partnership serves as a forum for sharing data and expertise, and providing peer review for issues involving the models developed by or for the CMAs, MTC, and other parties. BATMUC reports to the Partnership Technical Advisory Committee (PTAC). The MTC Checklist for Modeling will be used to guide the consistency assessment of CMA models with the MTC model.

The Checklist is included in Attachment B, and addresses:

- Demographic/econometric forecasts
- Pricing assumptions
- Network assumptions
- Auto ownership assumptions
- Trip generation methodology
- Trip distribution methodology
- Mode choice methodology
- Traffic assignment methodologies

5) RTP Financial Requirements and Projections

Under the federal SAFETEA, the actions, programs and projects in the RTP must be financially deliverable within reasonable estimates of public and private resources. While CMPs are not required by legislation to be financially constrained, recognition of financial constraints, including the costs for maintaining, rehabilitating, and operating the existing multi-modal system and the status of specific major projects, will strengthen the consistency and linkage between the regional planning process and the CMP. The CMA may submit project proposals for consideration by MTC in developing future financially constrained RTPs.

D. Consistency and Compatibility of the Programs within the Region

The CMP statutes require that, in the case of a multi-county regional transportation agency, that agency shall evaluate the consistency and compatibility of the congestion management programs within the region. Further, it is the Legislature's stated intention that the regional agency (i.e., MTC in the San Francisco Bay Area) resolve inconsistencies and mediate disputes between congestion management programs within a region.

To the extent useful and necessary, MTC will identify differences in methodologies and approaches between the CMPs on such issues as performance measures and land use impacts.

E. Incorporation of the CMP Projects into the RTIP

State transportation statutes require that the MTC, in partnership with the State and local agencies, develop the Regional Transportation Improvement Program (RTIP) on

a biennial cycle. The RTIP is the regional proposal for State and federal funding, adopted by MTC and provided to the California Transportation Commission (CTC) for the development of the State Transportation Improvement Program (STIP). In 1997, SB 45 (Statutes 1997, Chapter 622) significantly revised State transportation funding policies, delegating project selection and delivery responsibilities for a major portion of funding to regions and counties. Subsequent changes to state law (AB 2928 – Statutes 2000, Chapter 91) made the RTIP a five-year proposal of specific projects, developed for specific fund sources and programs. The RTIP is required to be consistent with the RTP that is currently in effect. The RTP is revised periodically.

The CMP statutes establish a direct linkage between CMPs that have been found to be consistent with the RTP, and the RTIP. MTC will review the projects in the Capital Improvement Program (CIP) of the CMP for consistency with the RTP. MTC's consistency findings for projects in the CMPs will be limited to those projects that are included in the RTP, and do not extend to other projects that may be included in the CMP. Some projects may be found consistent with a program category in the RTP. MTC, upon finding that the CMP is consistent with the RTP, shall incorporate the program into the RTIP, subject to specific programming and funding requirements. If MTC finds the program inconsistent, it may exclude any project in the program from inclusion in the RTIP. Since the RTIP must be consistent with the RTP, projects that are not consistent with the RTP will not be included in the RTIP. MTC may include certain projects or programs in the RTIP which are not in a CIP, but which are in the RTP. In addition, SB 45 requires projects included in the Interregional Transportation Improvement Program (ITIP) to be consistent with the RTP.

MTC will establish funding targets for specific funds, based upon the fund estimate as adopted by the California Transportation Commission (CTC). Project proposals can only be included in the RTIP within these funding bid targets. MTC will also provide information on other relevant RTIP processes and requirements, including coordination between city, county, and transit districts for project applications, schedule, evaluations and recommendations of project submittals, as appropriate for the RTIP.

As per CTC's Guidelines, MTC will evaluate the projects in the RTIP based on specific performance indicators and measures as established in the RTP, and provide this evaluation to the CTC along with the RTIP. CMAs are encouraged to consider the performance measures in Transportation 2035 when developing specific project proposals for the RTIP; more details will be provided in the RTIP Policies and Procedures document, adopted by MTC for the development of the RTIP.

III. CMP PREPARATION AND SUBMITTAL TO MTC

A. CMP Preparation

If prepared, the CMP shall be developed by the CMA in consultation with, and with the cooperation of, MTC, transportation providers, local governments, Caltrans, and the BAAQMD, and adopted at a noticed public hearing of the CMA. As established in SB 45, the RTIP is scheduled to be adopted by December 15 of each odd numbered year. If circumstances arise that change this schedule, MTC will work with the CMAs and substitute agencies in determining an appropriate schedule and mechanism to provide input to the RTIP.

B. Regional Coordination

In addition to program development and coordination at the county level, and consistency with the RTP, the compatibility of the CMPs with other Bay Area CMPs would be enhanced through identification of cross county issues in an appropriate forum, such as Partnership and other appropriate policy and technical committees. Discussions would be most beneficial if done prior to final CMA actions on the CMP.

C. Submittal to MTC

To provide adequate review time, draft CMPs should be submitted to MTC in accordance to a schedule MTC will develop to allow sufficient time for incorporation into the RTIP for submittal to the California Transportation Commission. Final CMPs must be adopted prior to final MTC consistency findings.

D. MTC Consistency Findings for CMPs

MTC will evaluate consistency of the CMP every two years with the RTP that is in effect when the CMP is submitted; for the 2009 CMP the RTP in effect will be Transportation 2035. MTC will evaluate the consistency of draft CMPs when received, based upon the areas specified in this guidance, and will provide staff comments of any significant concerns. MTC can only make final consistency findings on CMPs that have been officially adopted.

Appendix A: Federal and State Transportation Control Measures (TCMs)

Federal TCMs:

For a list and description of current Federal TCMs, see the “Federal Ozone Attainment Plan for the 1-Hour National Ozone Standard” adopted Oct. 24, 2001, and “2004 Revision to the California State Implementation Plan for Carbon Monoxide, Updated Maintenance Plan for Ten Federal Planning Areas,” approved January 30, 2006.

State TCMs:

For a list and description of current State TCMs, see “Bay Area 2005 Ozone Strategy,” or subsequent revisions as adopted by the Bay Area Air Quality Management.

CMAQ Evaluation and Assessment Report:

MTC participated in a federal evaluation and assessment of the direct and indirect impacts of a representative sample of Congestion Mitigation and Air Quality (CMAQ)– funded projects on air quality and congestions levels. The study estimated the impact of these projects on emissions of transportation related pollutants, including carbon monoxide (CO), ozone precursors – oxides of nitrogen (NO_x), volatile organic compounds (VOCs) – and particulate matter (PM₁₀ and PM_{2.5}), as well as on traffic congestion and mobility. There is also additional analysis of the selected set of CMAQ-funded projects to estimate of the cost effectiveness at reducing emissions of each pollutant. This report may be of interest to CMAs; it is available on line at: <http://www.fhwa.dot.gov/environment/cmaqpgs/safetealu1808/index.htm> or from the MTC/ABAG Library.

Appendix B: MTC Checklist for Modeling Consistency for CMPs

Overall approach

MTC's goal is to establish a regionally consistent model "set" for application by MTC and the CMAs. The Partnership has finalized a report on modeling consistency issues recommending MTC develop and the CMAs incorporate a consistent set of model components on desktop computers (termed BAYCAST). For immediate use for the 2009 CMPs, the study recommended that the current Checklist format be utilized, and proposed specific tolerances. This revised Checklist incorporates the results of testing those specific tolerances, as well as additional analyses.

Checklist

This Checklist guides the CMAs through their model development and consistency review process by providing an inventory of specific products to be developed and submitted to MTC, and by describing standard practices and assumptions to be followed. North Bay counties are not subject to Products 3, 5, 12, and 15, although the assumptions used should be described.

Because of the complexity of the topic, the Checklist may need additional detailed information to explain differences in methodological approach or data. Significant differences will be resolved between MTC and the CMA, taking advantage of the Bay Area Travel Model User Community (BATMUC). Standard formats for model comparisons will be developed.

Incremental updates

The CMA forecasts must be updated every two years to be consistent with MTC's forecasts. Alternative approaches to fully rerunning the entire model are available, including incremental approaches through the application of factors to demographic inputs or to trip tables. Similarly, the horizon year must be the same as the TIP horizon year, however, interpolation and extrapolation approaches are acceptable, with appropriate attention to network changes. These alternatives to full re-running of the model should be reviewed with MTC.

Defining the MTC model sets

Unless otherwise specified, the MTC model sets referred to below will be defined as those in use on October 1st of the year preceding the CMP update.

Using MTC Data for Key Assumptions

Key "bundles of assumptions" are needed for developing travel forecasts. These include Pricing Assumptions, Demographic Assumptions, Travel Behavior Assumptions, and Highway and Transit Network Assumptions.

A. Discuss the General Approach to Travel Demand Modeling by the CMA

Describe the model, and its relationship to the MTC model. If the model is based on MTC's model, describe any adjustments to model constants, coefficients, k-factor or friction factor re-estimation, market segmentation, and trip purposes.

PRODUCT 1: Description of the above.

B. Demographic/Economic/Land Use Forecasts:

Use exact ABAG Projections 2005 or Projections 2007 (preferred) for other Bay Area counties, and control totals (within 1 percent) for the county for population, households, jobs and employed residents. CMAs may reallocate growth forecasts within their own county in consultation with cities, MTC and ABAG. The latest set of ABAG's Projections must be used for all new demographic databases developed for baseline travel demand forecasting purposes after August 1 of the year preceding the CMP update. Future year forecasts should address the latest available ABAG Projection series. MTC, in consultation with the MCWG, will develop factors that may be used to achieve consistency with the most recent ABAG demographics. CMAs may also, of course, analyze alternative land use scenarios in addition to these forecasts. If a land use based model is utilized, production and attraction comparisons will be made with the MTC model.

PRODUCT 2: Summary sheet comparing ABAG Projections economic and demographic data (using the most current series) and CMP input data for population, households, jobs and employed residents for the 9 Bay Area counties for the base and forecast years (the year for comparison to the appropriate TIP must be included), and a statement establishing that the differences between the ABAG variables and those of the CMA input file do not exceed 1 percent at the county level for the subject county, and that no differences exist for the other 8 counties for a base case scenario.

C. Pricing Assumptions:

Use MTC's auto operating costs, transit fares, and bridge tolls.

PRODUCT 3: Statements establishing satisfaction of the above.

D. Network Assumptions:

Use MTC's regional highway and transit network assumptions for the other Bay Area counties. CMAs should include more detailed network definition relevant to their own county in addition to the regional highway and transit networks. For the CMP horizon year, to be compared with the TIP interim year, regionally significant network changes in the base case scenario shall be limited to the current Transportation Improvement Program (TIP) for projects subject to inclusion in the TIP.

PRODUCT 4: Statement establishing satisfaction of the above.

E. Auto Ownership Assumptions:

Use MTC auto ownership models or forecasts, or submit alternative models to MTC for review and comment.

PRODUCT 5: County and district level table(s) showing households by vehicle ownership level (0, 1, 2+ vehicle/household), and autos per household summaries at county and district levels, or autos per worker and total autos by district, and other pertinent auto ownership data if more appropriate. (Note that the term "district" used in these Guidelines may be interpreted as either MTC superdistricts or CMA defined districts.)

F. Trip Generation:

Use the BAYCAST person trip generation models for home-based work and non-work, and non-home based trips, or submit alternative models to MTC for review and comment. Results may be adjusted sub-regionally through calibration or modal constant adjustments.

PRODUCTS: 6) County and district level table(s) summarizing trip productions and trip attractions out of the trip generation model. Differences in trip productions and attractions for total person trips and for home based work trips should be no greater than 1% or 10,000 trips, whichever is higher, for comparisons for the subject county, each other county, and overall for the region or study area. For North Bay counties, figures are to be within 10% deviation for daily home based vehicle trips, using conversion factors as appropriate. Base year comparisons should be made with the Census data when available and appropriate.

7) Trip rate analysis, including home-based work trips per employed resident, home-based non-work trips per household, and non-home-based trips per total job.

8) Description of sub-regional adjustment factors, if any.

G. Trip Distribution:

Work trip distribution models must be calibrated to the 2000 Census Journey-to-Work commuter matrices. Trip distribution results must be balanced to productions, and attraction balancing problems should be discussed with MTC.

MTC, in consultation with the MCWG, will develop factors that may be used to achieve consistency with the most recent MTC trip distribution tables.

PRODUCTS: 9) County and district level table(s) showing attraction balancing analysis, i.e., comparison of “modeled” attractions from the trip distribution model to “desired” attractions from the trip generation (trip attraction) models.

10) County-to-county level trip tables. Differences in trip productions and attractions for total person trips and for home based work trips from and to the subject county should be no greater than 5% or 10,000 trips, whichever is higher, for comparisons for the subject county, interactions with each other county, and overall for the regional interaction with the subject county. For rural counties, CMAs should develop appropriate comparisons to MTC’s model system, in consultation with MTC, using conversion factors as appropriate. Base year comparisons should be made with the Census data when available and appropriate.

11) District-to-district level trip tables for intra-county trips.

All trip distribution analyses are to be stratified by trip purpose.

H. Mode Choice:

If a legit mode choice model is to be used, MTC’s BAYCAST models should be used, or submit alternative methodology for MTC review.

PRODUCTS: 12) County-to-county and district-to-district (intra-county) level table(s) showing mode choice forecasts by trip purpose and travel mode. There is no need to document the county-to-county mode choice forecasts for trips that do not start, end, or pass through the particular county of interest.

13) Vehicle trip tables, county-to-county and intra-county district-to-district, stratified by trip purpose.

Differences in trips for drive alone for total daily person trips and for home based work trips from and to the subject county should be no greater than 10% or 10,000 trips, whichever is higher, for each county interaction, and overall for the region/study area. For North Bay counties, conversion factors may be needed.

Differences in trips for transit, shared ride 3+, and shared ride 2 for total person trips and for home based work trips from and to the subject county - should be no greater than 10,000 trips for each county interaction, and 10% overall for the region/study area.

Base year comparisons should be made with the Census data when available and appropriate.

I. Traffic Assignment

Use capacity restrained assignment for peak hour or peak period traffic assignments, or submit alternative methodology for MTC review.

PRODUCTS: 14) Description of trip assignment methodology for daily and/or peak hour (period) assignment for both transit and highway.

15) Description of peaking factors and vehicle occupancy assumptions utilized.

Alternatively, CMAs may elect to utilize MTC zone-to-zone person/vehicle trip tables, adding network and zonal details within the county as appropriate, and then re-run the assignment. In this case, only Products 14 and 15 are applicable if vehicle trip tables are utilized, and additionally Products 12 and 13 if person trip tables are utilized.

Appendix C: MTC's Regional Transit Expansion Program of Projects (MTC Resolution 3434) TOD Policy

Res. No. 3434, TOD Policy (Appendix D-2), revised Sept 24, 2007, is shown below; other associated Res. 3434 appendices are available upon request from the MTC library.

Date: July 27, 2005
W.I.: 12110
Referred by: POC
Revised: 10/24/07-C

Attachment D-2
Resolution No. 3434
Page 1 of 7

MTC RESOLUTION 3434 TOD POLICY FOR REGIONAL TRANSIT EXPANSION PROJECTS

1. Purpose

The San Francisco Bay Area—widely recognized for its beauty and innovation—is projected to grow by almost two million people and one and a half million jobs by 2030. This presents a daunting challenge to the sustainability and the quality of life in the region. Where and how we accommodate this future growth, in particular where people live and work, will help determine how effectively the transportation system can handle this growth.

The more people who live, work and study in close proximity to public transit stations and corridors, the more likely they are to use the transit systems, and more transit riders means fewer vehicles competing for valuable road space. The policy also provides support for a growing market demand for more vibrant, walkable and transit convenient lifestyles by stimulating the construction of at least 42,000 new housing units along the region's major new transit corridors and will help to contribute to a forecasted 59% increase in transit ridership by the year 2030.

This TOD policy addresses multiple goals: improving the cost-effectiveness of regional investments in new transit expansions, easing the Bay Area's chronic housing shortage, creating vibrant new communities, and helping preserve regional open space. The policy ensures that transportation agencies, local jurisdictions, members of the public and the private sector work together to create development patterns that are more supportive of transit.

There are three key elements of the regional TOD policy:

- (a) Corridor-level thresholds to quantify appropriate minimum levels of development around transit stations along new corridors;
- (b) Local station area plans that address future land use changes, station access needs, circulation improvements, pedestrian-friendly design, and other key features in a transit-oriented development; and
- (c) Corridor working groups that bring together CMAs, city and county planning staff, transit agencies, and other key stakeholders to define

expectations, timelines, roles and responsibilities for key stages of the transit project development process.

2. TOD Policy Application

The TOD policy only applies to physical transit extensions funded in Resolution 3434 (see Table 1). The policy applies to any physical transit extension project with regional discretionary funds, regardless of level of funding. Resolution 3434 investments that only entail level of service improvements or other enhancements without physically extending the system are not subject to

**TABLE 1
Resolution 3434 Transit Extension Projects Subject to Corridor Thresholds**

Project	Sponsor	Type	Threshold is met with current development?
BART East Contra Costa Rail Extension	BART/CCTA	Commuter Rail	No
BART – Downtown Fremont to San Jose / Santa Clara (a) Fremont to Warm Springs (b) Warm Springs to San Jose/Santa Clara	(a) BART (b) VTA	BART extension	No
AC Transit Berkeley/Oakland/San Leandro Bus Rapid Transit: Phase 1	AC Transit	Bus Rapid Transit	Yes
Caltrain Downtown Extension/Rebuilt Transbay Terminal	TJPA	Commuter Rail	Yes
MUNI Third Street LRT Project Phase 2 – New Central Subway	MUNI	Light Rail	Yes
Sonoma-Marín Rail	SMART	Commuter Rail	No
Dumbarton Rail	SMTA, ACCMA, VTA, ACTIA, Capitol Corridor	Commuter Rail	No
Expanded Ferry Service to Berkeley, Alameda/Oakland/Harbor Bay, Hercules, Richmond, and South San Francisco; and other improvements.	WTA	Ferry	No
* Ferry terminals where development is feasible shall meet a housing threshold of 2500 units. MTC staff will make the determination of development feasibility on a case by case basis.			

the TOD policy requirements. Single station extensions to international airports are not subject to the TOD policy due to the infeasibility of housing development.

3. Definitions and Conditions of Funding

For purposes of this policy “regional discretionary funding” consists of the following sources identified in the Resolution 3434 funding plan:

- FTA Section 5309- New Starts
- FTA Section 5309- Bus and Bus Facilities Discretionary
- FTA Section 5309- Rail Modernization
- Regional Measure 1- Rail (bridge tolls)
- Regional Measure 2 (bridge tolls)
- Interregional Transportation Improvement Program
- Interregional Transportation Improvement Program-Intercity rail
- Federal Ferryboat Discretionary
- AB 1171 (bridge tolls)
- CARB-Carl Moyer/AB434 (Bay Area Air Quality Management District) ¹

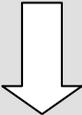
These regional funds may be programmed and allocated for environmental and design related work, in preparation for addressing the requirements of the TOD policy. Regional funds may be programmed and allocated for right-of-way acquisition in advance of meeting all requirements in the policy, if land preservation for TOD or project delivery purposes is essential. No regional funds will be programmed and allocated for construction until the requirements of this policy have been satisfied. See Table 2 for a more detailed overview of the planning process.

4. Corridor-Level Thresholds

Each transit extension project funded in Resolution 3434 must plan for a minimum number of housing units along the corridor. These corridor-level thresholds vary by mode of transit, with more capital-intensive modes requiring higher numbers of housing units (see Table 3). The corridor thresholds have been developed based on potential for increased transit ridership, exemplary existing station sites in the Bay Area, local general plan data, predicted market demand for TOD-oriented housing in each county, and an independent analysis of feasible development potential in each transit corridor.

¹ The Carl Moyer funds and AB 434 funds are controlled directly by the California Air Resources Board and Bay Area Air Management District. Res. 3434 identifies these funds for the Caltrain electrification project, which is not subject to the TOD policy.

**TABLE 2
REGIONAL TOD POLICY IMPLEMENTATION PROCESS
FOR TRANSIT EXTENSION PROJECTS**

Transit Agency Action	City Action	MTC/CMA/ABAG Action
<p align="center"><i>All parties in corridors that do not currently meet thresholds (see Table 1) establish Corridor Working Group to address corridor threshold. Conduct initial corridor performance evaluation, initiate station area planning.</i></p> <p align="center"></p>		
<p>Environmental Review/ Preliminary Engineering /Right-of-Way</p>	<p>Conduct Station Area Plans</p>	<p>Coordination of corridor working group, funding of station area plans</p>
<p align="center"><i>Step 1 Threshold Check: the combination of new Station Area Plans and existing development patterns exceeds corridor housing thresholds .</i></p>		
<p>Final Design</p>	<p>Adopt Station Area Plans. Revise general plan policies and zoning, environmental reviews</p>	<p>Regional and county agencies assist local jurisdictions in implementing station area plans</p>
<p align="center"><i>Step 2 Threshold Check: (a) local policies adopted for station areas; (b) implementation mechanisms in place per adopted Station Area Plan by the time Final Design is completed.</i></p> <p align="center"></p>		
<p>Construction</p>	<p>Implementation (financing, MOUs) Solicit development</p>	<p>TLC planning and capital funding, HIP funding</p>

**TABLE 3: CORRIDOR THRESHOLDS
HOUSING UNITS – AVERAGE PER STATION AREA**

Project Type \ Threshold	BART	Light Rail	Bus Rapid Transit	Commuter Rail	Ferry
Housing Threshold	3,850	3,300	2,750	2,200	2,500*

Each corridor is evaluated for the Housing Threshold. For example, a four station commuter rail extension (including the existing end-of-the-line station) would be required to meet a corridor-level threshold of 8,800 housing units.

Threshold figures above are an average per station area for all modes except ferries based on both existing land uses and planned development within a half mile of all stations. New below market rate housing is provided a 50% bonus towards meeting housing unit threshold.

** Ferry terminals where development is feasible shall meet a housing threshold of 2500 units. MTC staff will make the determination of development feasibility on a case by case basis.*

- Meeting the corridor level thresholds requires that within a half mile of all stations, a combination of existing land uses and planned land uses meets or exceeds the overall corridor threshold for housing (listed in Table 3);
- Physical transit extension projects that do not currently meet the corridor thresholds with development that is already built will receive the highest priority for the award of MTC’s Station Area Planning Grants.
- To be counted toward the threshold, planned land uses must be adopted through general plans, and the appropriate implementation processes must be put in place, such as zoning codes. General plan language alone without supportive implementation policies, such as zoning, is not sufficient for the purposes of this policy. Ideally, planned land uses will be formally adopted through a specific plan (or equivalent), zoning codes and general plan amendments along with an accompanying programmatic Environmental Impact Report (EIR) as part of the overall station area planning process. Minimum densities will be used in the calculations to assess achievement of the thresholds.
- An existing end station is included as part of the transit corridor for the purposes of calculating the corridor thresholds; optional stations will not be included in calculating the corridor thresholds.

- New below-market housing units will receive a 50 percent bonus toward meeting the corridor threshold (i.e. one planned below-market housing unit counts for 1.5 housing units for the purposes of meeting the corridor threshold. Below market for the purposes of the Resolution 3434 TOD policy is affordable to 60% of area median income for rental units and 100% of area median income for owner-occupied units);
- The local jurisdictions in each corridor will determine job and housing placement, type, density, and design.
- The Corridor Working Groups are encouraged to plan for a level of housing that will significantly exceed the housing unit thresholds stated here during the planning process. This will ensure that the Housing Unit Threshold is exceeded corridor-wide and that the ridership potential from TOD is maximized.

5. Station Area Plans

Each proposed physical transit extension project seeking funding through Resolution 3434 must demonstrate that the thresholds for the corridor are met through existing development and adopted station area plans that commit local jurisdictions to a level of housing that meets the threshold. This requirement may be met by existing station area plans accompanied by appropriate zoning and implementation mechanisms. If new station area plans are needed to meet the corridor threshold, MTC will assist in funding the plans. The Station Area Plans shall be conducted by local governments in coordination with transit agencies, Association of Bay Area Governments (ABAG), MTC and the Congestion Management Agencies (CMAs).

Station Area Plans are opportunities to define vibrant mixed use, accessible transit villages and quality transit-oriented development – places where people will want to live, work, shop and spend time. These plans should incorporate mixed-use developments, including new housing, neighborhood serving retail, employment, schools, day care centers, parks and other amenities to serve the local community.

At a minimum, Station Area Plans will define both the land use plan for the area as well as the policies—zoning, design standards, parking policies, etc.—for implementation. The plans shall at a minimum include the following elements:

- Current and proposed land use by type of use and density within the ½ mile radius, with a clear identification of the number of existing and planned housing units and jobs;
- Station access and circulation plans for motorized, non-motorized and transit access. The station area plan should clearly identify any barriers for pedestrian, bicycle and wheelchair access to the station from surrounding neighborhoods (e.g., freeways, railroad tracks, arterials with inadequate pedestrian crossings), and should propose strategies that will remove these barriers and maximize the number of residents and employees that can access the station by these means. The station area and transit village public spaces shall be made accessible to persons with disabilities.
- Estimates of transit riders walking from the half mile station area to the transit station to use transit;
- Transit village design policies and standards, including mixed use developments and pedestrian-scaled block size, to promote the livability and walkability of the station area;

- TOD-oriented parking demand and parking requirements for station area land uses, including consideration of pricing and provisions for shared parking;
- Implementation plan for the station area plan, including local policies required for development per the plan, market demand for the proposed development, potential phasing of development and demand analysis for proposed development.

The Station Area Plans shall be conducted according to the guidelines established in MTC's Station Area Planning Manual.

6. Corridor Working Groups

The goal of the Corridor Working Groups is to create a more coordinated approach to planning for transit-oriented development along Resolution 3434 transit corridors. Each of the transit extensions subject to the corridor threshold process, as identified in Table 1, will need a Corridor Working Group, unless the current level of development already meets the corridor threshold. Many of the corridors already have a transit project working group that may be adjusted to take on this role. The Corridor Working Group shall be coordinated by the relevant CMAs, and will include the sponsoring transit agency, the local jurisdictions in the corridor, and representatives from ABAG, MTC, and other parties as appropriate.

The Corridor Working Group will assess whether the planned level of development satisfies the corridor threshold as defined for the mode, and assist in addressing any deficit in meeting the threshold by working to identify opportunities and strategies at the local level. This will include the key task of distributing the required housing units to each of the affected station sites within the defined corridor. The Corridor Working Group will continue with corridor evaluation, station area planning, and any necessary refinements to station locations until the corridor threshold is met and supporting Station Area Plans are adopted by the local jurisdictions.

MTC will confirm that each corridor meets the housing threshold prior to the release of regional discretionary funds for construction of the transit project.

7. Review of the TOD Policy

MTC staff will conduct a review of the TOD policy and its application to each of the affected Resolution 3434 corridors, and present findings to the Commission, within 12 months of the adoption of the TOD policy.