

NOVEMBER 1990

CONGESTION MANAGEMENT PROGRAM

RESOURCE HANDBOOK

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1.0 INTRODUCTION

The Congestion Management Program (CMP) is a new effort to improve the relationship between land use, transportation and air quality. The law provides county-wide Congestion Management Agencies (CMA) a significant degree of latitude in meeting the statutory requirements. CMAs should carefully think through the implementation of this complex program. The various program elements can and should be linked together as an integrated package.

While the CMP is an independent requirement, it relates to other statutory and regulatory requirements. Transportation, air quality, and land use decisions have mutual impacts. The CMP must respond to environmental quality, clean air, transportation, and land use laws and regulations. Each of these also involve complicated and related processes. The CMP provides an opportunity to assist in meeting these requirements in addition to those found in the CMP Statutes. To the extent that planning processes can be integrated, the objectives of mobility, clean air, and appropriate land use can be met. To be effective, the CMP will have to be developed with the active involvement of the affected parties.

Transportation planners will use the CMP to assess potential congestion concerns and how a balanced, multi-modal program will address these concerns. Transportation planners will also look to CMPs to better understand the impact of land use decisions on the transportation system.

Air quality planners will look to the CMP to assist in achieving the transportation performance standards of the California Clean Air Act for serious and severe areas. These standards include reduced trips and vehicle miles traveled, no net increase in vehicle emissions after 1997, and a 1.5 commute-period vehicle occupancy by 1999.

For land use planners, the CMP provides a means of addressing land development, the separation of employment and housing, and resulting congestion, through the general plan process. Local governments and congestion management agencies can create strategies for increasing system efficiency through new road construction, flow improvements on the existing system, increased transit usage and demand management.

By working together, planners from these diverse but linked areas can reach decisions which enhance the quality of life for all Californians.

1.1 Handbook Purpose and Organization

In June of 1990, voters approved legislation which increased funding for California's transportation system. With this funding came new requirements for the transportation programming process including the Congestion Management Program (CMP) which is the subject of this handbook.

Although the legislation requiring the implementation of CMPs does not require guidelines, representatives of the agencies that may become involved with CMP implementation recommended that some form of non-mandatory guidance be developed. Because of this, a Task Force was formed to develop a resource document for CMP implementation. This Task Force was composed of representatives from various governmental agencies, public interest groups, and the private sector. This Resource Handbook is the result of their effort and is not intended to prescribe specific approaches, techniques, or methods.

This handbook describes the processes of development and administration, roles and responsibilities of involved agencies, program content, and linkages to other planning processes. A listing of technical resources is also provided. The purpose of this handbook is to provide answers to some of the questions that may be asked concerning CMPs and, for those questions that may have a variety of solutions, to provide insight for some of the issues that may be associated with various alternatives.

Because actual CMPs have yet to be developed, only general guidance and options can be included in the handbook at this time. The Task Force recommends the establishment of an on-going user group of Congestion Management Agencies (CMA) and other interested parties which could update this handbook in the future to add specific approaches.

In keeping with the voluntary nature of this resource handbook, the word "should" has been used to indicate actions that are not specifically required by the CMP legislation. Where the legislation specifies a required action, the words "required", "must", or "shall" are used. The reader is encouraged to consult the law (See Appendix A).

1.2 What is the purpose of the CMP?

The purpose of the Congestion Management Program is to develop a new integrated approach to making transportation programming decisions. This new process is intended to work toward the identification of an urban mobility system involving all modes and transportation providers. Through the participation of these providers and other interested parties, a single CMP capital improvement program is developed that determines what actions will be taken to protect and improve the multifaceted system.

1.3 What is a CMP?

A CMP is a county-wide program which will be updated annually to address congestion problems in a coordinated and cooperative manner with other agencies. CMPs are comprised of the following five components:

- An element defining the CMP transportation system and level of service standards for the highway and roadway portions of the system
- A transit standards element

- A transportation demand management and trip reduction (TDM) element
- A program for analyzing the impacts of land use decisions
- A seven year capital improvement program

In addition to these components and as a part of the process of developing and monitoring the CMP, the implementing agency is required to develop a traffic data base for use in a county-wide model and to monitor the implementation of the CMP elements.

To effectively address legislative goals, a Congestion Management Program requires appropriate land use, transportation, and air quality agencies to come together, integrate their planning processes, share information, and develop a coordinated approach to respond to congestion.

1.4 Which counties are required to have a CMP?

California Government Code Section 65089 (a) (see Appendix A, page A-2) requires that every county that includes an urbanized area adopt a CMP. The CMP shall include every city and the county. California Government Code Section 65088.1 (see Appendix A, page A-2) defines urbanized areas as being over 50,000 population. Using the 1980 Census, 31 counties meet this definition (See Table 1, page 4). The 1990 Census may revise this list.

1.5 What processes are involved with meeting the CMP requirements?

Figure 1 is a diagram of the four major processes:

- CMP Agency Designation
- CMP Development
- CMP Review and Adoption
- CMP Implementation, Monitoring, and Conformance

This handbook is organized along the structure diagrammed in Figure 1 and discusses each of the major processes and its tasks and programs in the order that they appear on the chart.

TABLE 1

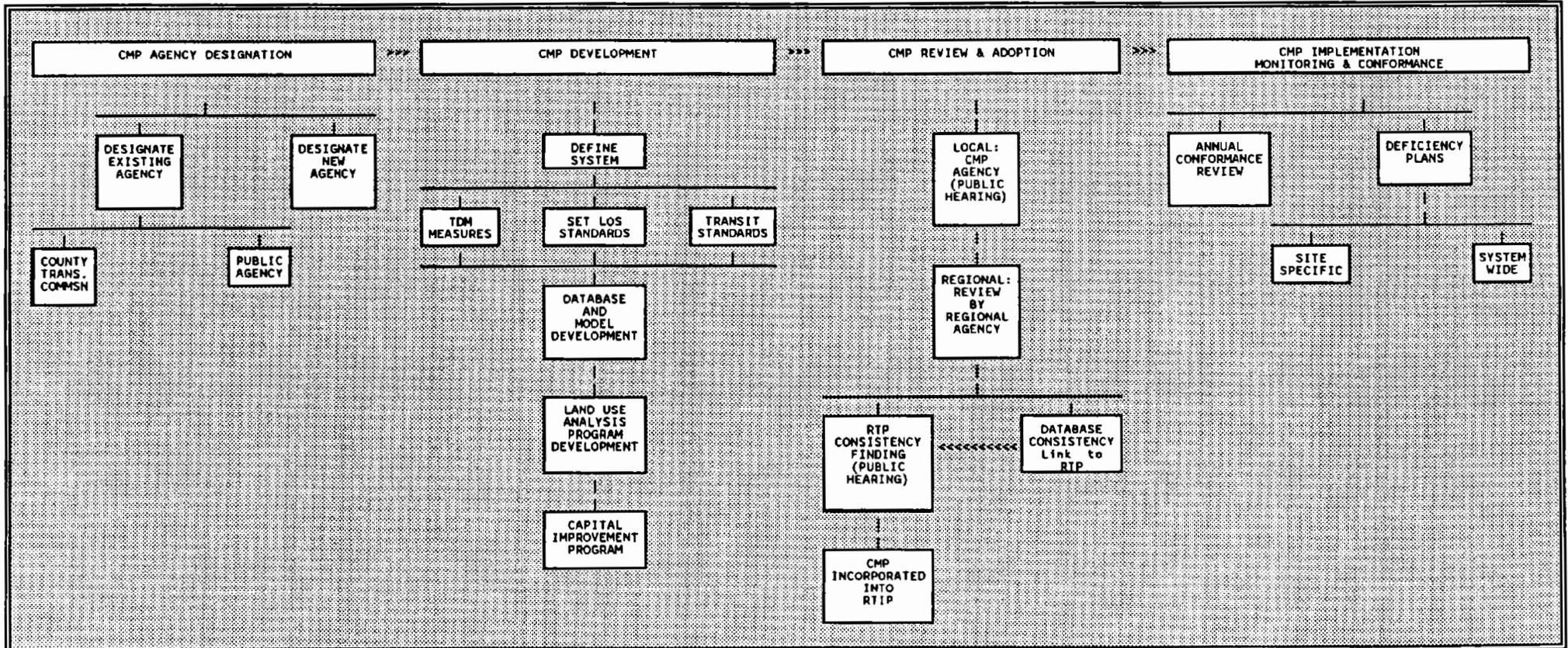
COUNTIES REQUIRED TO DEVELOP A CONGESTION MANAGEMENT PROGRAM

Alameda	San Diego
Butte	San Francisco
Contra Costa	San Joaquin
Fresno	San Mateo
Kern	Santa Barbara
Los Angeles	Santa Clara
Marin	Santa Cruz
Merced	Shasta
Monterey	Solano
Napa	Sonoma
Orange	Stanislaus
Placer	Sutter
Riverside	Tulare
Sacramento	Ventura
San Bernadino	Yolo
	Yuba

Total number of counties containing an urbanized area equals 31.
Listing based on 1980 Census data.

FIGURE 1

CONGESTION MANAGEMENT PROGRAM PROCESSES



1.6 Who is involved in the CMP process?

The CMP processes require the coordination and cooperation of several public agencies. Table 2 is a diagram of the major CMP processes and their participants as specified by statute. Each of the following chapters in this handbook will expand on the roles and responsibilities of the participants.

1.7 What options are available for funding CMPs and CMAs?

Developing and implementing the CMP has the potential to be a costly process. Statute does not identify a specific dedicated funding source for CMPs and CMAs. Therefore, when establishing their CMP processes, local agencies will need to consider locally available funding mechanisms. These may include general funds, local gas tax subventions, additional sales tax funds from the increased gas tax, vehicle registration fees, and the Transportation Development Act (TDA). Appendix E is a Legislative Council Opinion referencing the use of these funds for congestion management programs.

Other non-local planning and programming funds may be available to assist in the funding. These may include State Local Assistance (State Subvention Planning Funds), FHWA Planning (PL) Funds, Air Quality Plan Funds (AB 2766, 1990), UMTA Section 8 & 9 Funds, and Article XIX Funds. These sources may have limitations on their eligibility, use, and availability; and may require the development of cooperative agreements with their providers.

1.8 How does the CMP link to other planning requirements?

The Legislative Findings and Declarations establishing the CMP noted a lack of integrated transportation planning, increasing congestion in California, deteriorating air quality, and the adverse impacts on the state economy that are caused by these issues. Addressing this fragmentation requires that better linkages be made among current planning processes. The CMP can serve as an effective vehicle to facilitate joint planning efforts to address these problems.

CMPs are closely tied to the following planning requirements and processes (see Figure 2, page 8):

- Regional Transportation Plans (RTP)

The CMP works toward the implementation of the regional transportation plan and is required to be consistent with it. At the same time, the CMP controls projects which are included in the RTIP. Thus, the CMP statute establishes a balancing of responsibilities between the CMP and the RTP which can be best achieved by a cooperative process.

TABLE 2

CMP PROCESSES AND PARTICIPANTS¹

PARTICIPANT	CMA DESIGNATION	CMP DEVELOPMENT	CMP REVIEW & ADOPTION	CMP IMPLEMENTATION, MONITORING & CONFORMANCE
CITIES & COUNTIES	X	X	-	X
CMA	-	X	X	X
CALTRANS	-	X	-	-
TRANSIT PROVIDERS	-	X	-	X
REGIONAL AGENCY	-	X	X ²	-
AIR QUALITY AGENCY	-	X	-	X ³
PUBLIC	-	X	X	X

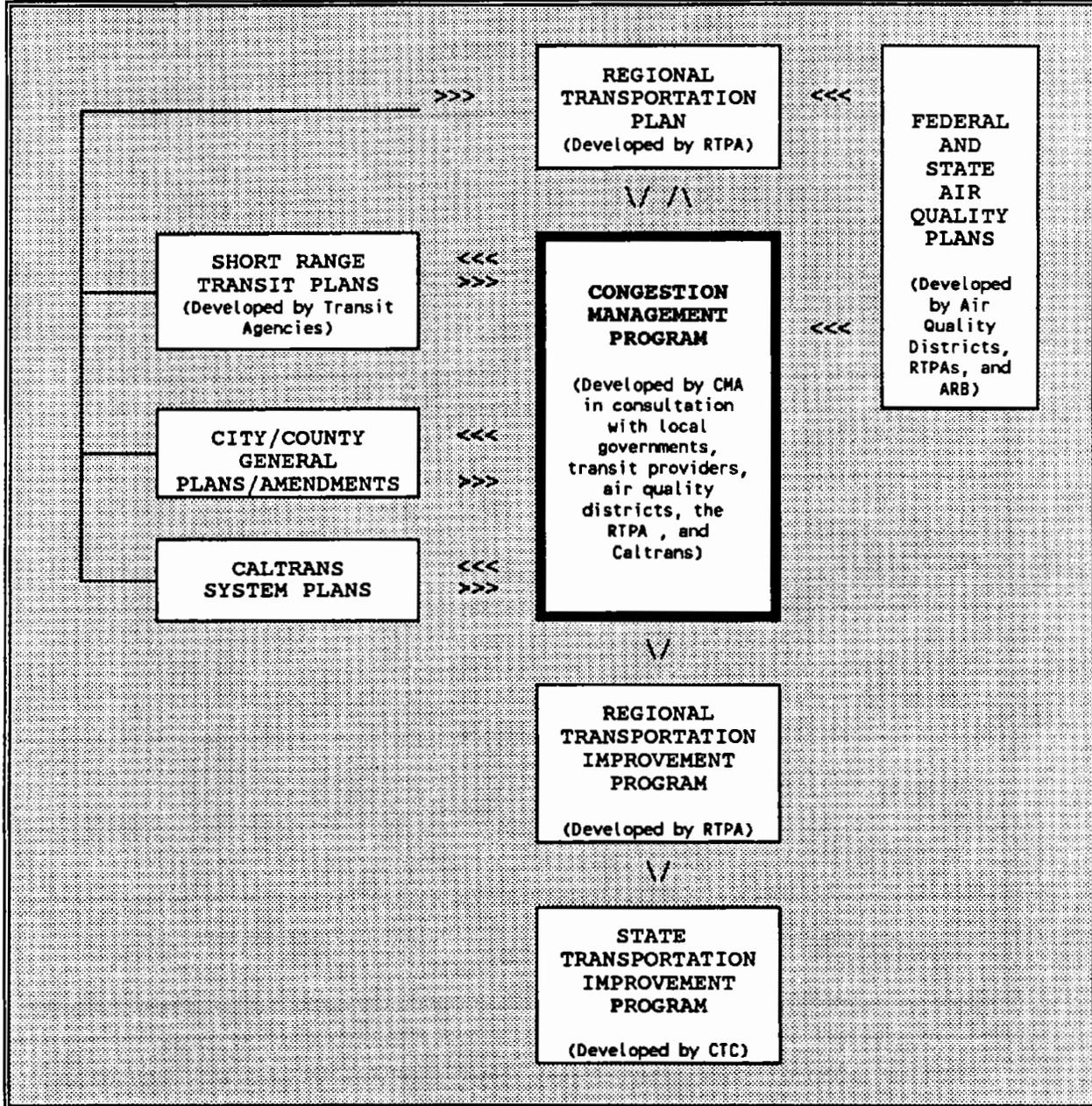
¹ Table identifies statutory responsibilities of various participants.

² Regional transportation planning agency review for consistency with RTP.

³ Air Quality Agency participation in deficiency plan process.

FIGURE 2

CMP RELATIONSHIP TO OTHER PLANNING PROCESSES



>>> Flow of influence, communication, and information.

Regional transportation plans can provide system definition, level of service, transportation demand management, and transit information for the CMP. Regional transportation plan databases can assist in developing required CMP databases and models. As they are being developed and implemented, CMPs may provide relevant information, policy direction, and funding priorities that may be used in subsequent regional transportation plan updates.

CMPs shall be submitted to the regional transportation planning agency for evaluation of consistency with the regional transportation plan. If the CMP is found to be consistent with the regional transportation plan, it shall be incorporated into the regional transportation improvement program. If the regional transportation planning agency finds the program is inconsistent, it may exclude any project in the CMP from inclusion in the regional transportation improvement program.

- Regional Transportation Improvement Program (RTIP)

CMPs include a seven year capital improvement program. For a project to be included in the regional transportation improvement program, it must be included in the capital improvement program of the CMP. Projects that are not in an regional transportation improvement program cannot be programmed for Flexible Congestion Relief and Urban and Commuter Rail funds. Projects that are included in the capital improvement program of an approved CMP receive first priority for Traffic System Management funds.

- General Plans

CMPs may be able to draw upon general plans for system definition, level of service standards, transit standards, and transportation demand management measures. General Plan land use information can be incorporated into CMP database and models. CMPs can influence the policies and actions described in the General Plan circulation and land use elements. The law does not require that the CMP be incorporated into the General Plan. ¹

¹ Refer to CGC Section 65089.5 (see Appendix A, page A-6) for CMP and General Plan liability. Where the CMP is not incorporated in the general plan, no action which must be consistent with the general plan can be challenged on the basis that the general plan is inadequate because the CMP may be incomplete or has not been implemented. Further, should the CMP be made a part of a general plan and the CMA's annual review of the CMP cause a change, a general plan amendment would be required. If there is an implementation failure, the city or county may be found in nonconformance. General plans are subject to initiatives which could be drafted to alter the CMP portion and could result in nonconformance or the need to develop a deficiency plan.

- Air Quality Attainment Plans

Regional transportation plans are required by federal law to conform to the State Implementation Plan. Because CMPs are required to be consistent with the regional transportation plan, CMPs will conform to the State Implementation Plan.

The California Clean Air Act requires air quality management/air pollution control districts to prepare plans to bring the state's air basins into compliance with state as well as federal air quality standards. The plans are to include transportation and indirect source control measures. To serve both congestion relief and air quality objectives, the CMA should work closely with the air quality management/air pollution control district and the regional transportation planning agency to be certain that the CMP elements and the air quality attainment plan measures adopted under the California Clean Air Act are also consistent.

It should be noted that, with the exception of Shasta County, all of the counties required to adopt a CMP are within air quality management districts or air pollution control districts which are expected to be designated as having "serious" or "severe" air pollution. The transportation performance standards of the California Clean Air Act should thus become objectives of the CMP planning processes in these counties (see Appendix D). Within the context of both Congestion Management and Clean Air Act requirements, air quality and mobility objectives must be balanced.

- California Environmental Quality Act (CEQA)

CMPs may be affected by CEQA requirements. CMAs will need to determine exactly what, if any, CEQA requirements apply to their CMP. CEQA also can play an important role in developing CMP land use analysis programs.

- Caltrans System Planning Documents

Caltrans system planning documents provide technical transportation information regarding the State highway system, including the definition of existing highway facilities and level of service concepts, discussion of present and future operating conditions, and recommendations for improvements necessary to attain concept service levels. This information will be useful to the CMA in establishing level of service standards and proposing improvements for the State highway system. In addition, Caltrans system planning may address a range of transportation issues involving different modes, transportation services, and special use facilities. Just as information developed by Caltrans will be useful to the development of the CMP, information developed by the CMA will be useful to Caltrans in updating and enhancing Caltrans system planning documents. This mutual coordination will assist in ensuring compatibility between the CMP and State system plans.

- Short Range Transit Plans (SRTP)
CMPs may draw from SRTPs for transit standards. CMP transit standards that are not within a SRTP may require transit agencies to consider SRTP modifications. CMAs are required to consult with transit agencies during CMP development.

These relationships will be discussed further in later chapters.

1.9 What State funding programs are linked to the CMP?

Cities and counties have a vested interest in developing and implementing CMPs because the programs are a prerequisite for obtaining State and local monies. These funding sources include the following:

- Local Subvention Funds
Local agencies should be actively involved in the preparation of the CMP because the CMA is responsible for making an annual determination that its cities and the county are conforming to the CMP. If local jurisdictions are not in conformance, the new increment of local subvention funds made available through the increased gas tax may be withheld (Section 65089.4, see Appendix A, Page A-6)
- Flexible Congestion Relief and Urban and Commuter Rail Funds
These funds are programmed through the regional transportation improvement program. In developing the regional transportation improvement program, the regional transportation planning agency (or Caltrans for small counties) must choose projects from the CMP capital improvement program. These CMPs must first be found to be consistent with the regional transportation plan; if they are found to be inconsistent, the regional transportation planning agency can elect to not program any or all of those projects included in the capital improvement program.
- Traffic System Management (TSM) Funds
Projects that are included in the capital improvement program of an approved CMP receive first priority for Traffic System Management funds, which are annually programmed by Caltrans.

1.10 What are the timing considerations of developing the CMP?

California Government Code 65089 (a) requires that CMPs be adopted and updated annually. Although there is no required date for adoption, CMPs must be completed in time to incorporate capital improvement program projects into the regional transportation improvement program. A second timing consideration is the schedule of funding for the

Traffic System Management program adopted by the California Transportation Commission.

CMAs should work closely with regional transportation planning agencies to develop an acceptable schedule for CMP review and adoption, allowing adequate time for inclusion of CMP projects into the regional transportation improvement program. The first deadline for completion of a regional transportation improvement program based on a CMP is December 1, 1991.

CMAs should be aware that California Clean Air Act attainment plans are to be adopted by local air districts in June 1991.

2.0 CONGESTION MANAGEMENT AGENCY FORMATION

2.1 What is required?

California Government Code 65089 (a) encompasses the requirements for designating the CMP agency (CMA). This code section directs each county that is required to have a CMP to designate a single agency to develop and monitor the CMP.

2.2 Who develops a CMP?

The designated CMA develops the CMP in consultation with other agencies. CMAs can be either the County Transportation Commission (as defined by Public Utilities Code 130000,) or another public agency, as designated by resolutions adopted by the county board of supervisors and the city councils of a majority of the cities representing a majority of the population in the incorporated area of the county. If the county and cities agree, they can either designate an existing public agency or form a new agency to develop and monitor the CMP.

2.3 How should the CMA be organized?

There are no requirements specifying the organization of the CMA. Therefore, this issue is best decided on a local level. CMAs should consider an organizational structure that encourages an informed decision making process. CMAs may want to consider the need for technical and policy advisory committees to assist in the decision making process.

2.4 What does the CMA do?

Once it has been designated, the CMA is responsible for developing the programs and procedures that meet the requirements of the legislation. This includes developing the CMP (see Chapter 3), approving local transportation models (see Section 3.6.1, page 30), reviewing and adopting the CMP (see Section 4.1.2, page 43), and monitoring local agency conformance to the adopted CMP (see Chapter 5).

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3.0 CONGESTION MANAGEMENT PROGRAM DEVELOPMENT

3.1 Introduction

3.1.1 What is required to be in the CMP?

As discussed in Chapter 1, the following major elements are required for the development of the CMP:

- An element defining the CMP system and its level of service standards
- A transit standards element
- A transportation demand management (TDM) element
- A program for analyzing the impacts of land use decisions
- A seven year capital improvement program

Each of these components of the CMP is discussed in more detail in the following sections of this chapter.

3.1.2 In what order should the CMP be developed?

There are no requirements for sequence in developing a CMP. One approach to CMP development has been diagrammed in Figure 1. This approach is the basis of organization for the remainder of this chapter. The process and their relationships is briefly described as follows:

- Defining the CMP System
This process identifies the system network.
- Developing Level Of Service (LOS) Standards
Establishes performance standards for the defined road network.
- Developing Transit Standards
Establishes transit standards which will aid in meeting CMP objectives of reducing congestion and improving air quality.
- Developing the Transportation Demand Management Element
Establishes policies and incentives which maximize the efficiency of system utilization.

- Developing the Database and Model
Encompasses the defined transportation system and aids in determining the level of service, transit standards, transportation demand management element, and capital improvement program.
- Land Use Analysis Program
Describes impacts of land use changes on the CMP System.
- Capital Improvement Program
Lists the projects that will be needed to maintain or improve level of service and transit standards that have been identified by modeling and the land use analysis program.

Each of these requirements is more fully described in the following sections. Note, however, that none of the CMP elements are intended to stand alone, but are intended to be mutually reinforcing.

3.2 Defining the System

3.2.1 Why define a CMP System?

The primary objective of defining a CMP System is to establish a transportation network to monitor performance in relation to established level of service standards. If standards are not being maintained, actions must be taken to mitigate site problems, or plans can be developed to improve the overall level of service of the system and improve air quality (see Section 5.2.2, page 51, Deficiency Plans).

3.2.2 What should a CMA include in the CMP System?

California Government Code Section 65089(b)(1)(A) (see Appendix A, page A-2) requires that at a minimum, the designated system include all state highways, and principal arterials. Once a highway or roadway is included in the system, it cannot be removed from it. All new state highways and principal arterials must be included in the system.

The statute does not provide a definition for principal arterial. Therefore, a definition will need to be cooperatively developed by the CMA and its constituents. System definition resources include the FHWA Functional Classification System Management Guidelines, city and county general plans, and the regional transportation plan.

CMAs can expand beyond the minimum requirements of the statutes. CMAs will need to define a system sensitive enough to demonstrate impacts from off-system improvements yet still be manageable for administration. This is a requirement for eligibility for regional transportation improvement program funding. The advantage to exceeding minimum requirements is that it may become easier to develop a linkage between proposed projects and their impact on the CMP system. However, too large a CMP system could become difficult and expensive for local agencies to monitor. CMAs will need to develop a balance between these two factors when defining their system.

3.2.3 With whom should the CMA consult during system definition?

It is important for the CMA to consider the compatibility of the CMP system with other defined systems. Because of this need, the CMA should consult with the following agencies:

- Local Governments

Local governments may provide information about existing and planned principal arterials and other transportation networks within their general plans. CMAs also will need to coordinate with local governments because of monitoring requirements for their portions of the CMP system.

- Regional Transportation Planning Agencies
The CMP is required to be consistent with the regional transportation plan. It is therefore logical that there be a consistency between the CMP system and the regional system as defined in the regional transportation plan. CMAs must coordinate with the regional transportation planning agency to ensure this consistency and in the event of a discrepancy, to allow for its resolution prior to adoption of the CMP.
- Caltrans
As a result of Caltrans' responsibility for operating the State highway system, Caltrans has a range of planning and policy information available. This information will be useful in designating an inter-related system of State highways, principal arterials, and other significant routes. In addition, Caltrans can assist the CMP agency in assessing the benefits of other modes and strategies in relation to the designated CMP system.
- Transit Providers
Transit providers will have an interest in the scope of the system to ensure that transit planning and programming can be adequately integrated.
- Air Quality Management/Air Pollution Control Districts
Because of the important role of the congestion management program in meeting air quality objectives, the air quality management/air pollution control district should be consulted when defining the system.
- Other CMAs
The CMA will need to ensure that the defined system is consistent with neighboring CMAs.

3.2.4 How does the CMP System relate to the land use analysis element?

The statute also refers to a regional system as part of the required land use analysis program. This system may differ from the defined CMP system (e.g., transit systems may need to be considered as part of the land use analysis). Refer to Chapter 3.7 for additional discussion of the land use analysis program.

3.3 Defining Level of Service (LOS) Standards

3.3.1 What is level of service?

Level of service definitions generally describe traffic conditions in terms of speed and travel time, volume and capacity, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Level of service is usually quantified in terms of letter designations, from A to F, with level of service A representing the best operating conditions and level of service F the worst.

3.3.2 Why are level of service standards set for the CMP System?

Level of service standards can be used to quantitatively analyze the impacts of land use changes and growth on the CMP system and as a yardstick to measure system performance. If the actual system performance falls below the standard, deficiency plans are required to be developed to restore or improve level of service (see Chapter 5). Failure to maintain Level of service standards may lead to a nonconformance finding and possible withholding of local subvention funds.

3.3.3 What are permissible level of service standards?

California Government Code 65089(b)(1)(B) (see Appendix A, page A-3) requires that level of service standards must be established no worse than:

- (1) Level of service E; or
- (2) Level of service F, if that is the current level of service.

CMA's may establish better levels of service standards. Different standards may be established for different parts of the system or for different facility types, e.g., high occupancy vehicle (HOV) lanes.

3.3.4 How are level of service standards determined for the CMP System?

As with CMP System Definition, CMA's will need to closely coordinate with local government agencies, Caltrans, regional transportation planning agencies, air quality management/air pollution control districts, and other transportation providers before deciding on their approach to level of service standards. The determination of level of service standards and the approach and methodology chosen will depend on the resources of the CMA's member agencies; their present approach to level of service as stated in their general plans, regional transportation plan, Caltrans' System Plans, and air quality plans; and

existing traffic analysis methodologies. The standards and methodologies chosen may result in local governments and agencies reevaluating their own methodologies and updating their planning documents. It could also result in a change in the way operating agencies monitor and evaluate their local systems. The standard can be determined with consideration for issues such as:

- Relative importance and role of the facility or mode
- Intensity and type of development in the vicinity of the segment
- Continuity in level of service provided to CMP system users
- System balance and continuity
- Air quality planning
- Future growth
- Public and user acceptability and expectations
- Attainability of standards
- Constraints to maintaining or achieving standards

Because the CMA is required to monitor local government conformance to the CMP, including adopted level of service standards, it will be necessary for the CMA to ensure that the adopted standard is monitored in a manner consistent with its format. Therefore, if the standard is established in terms of peak hour level of service, monitoring information should be provided in terms of peak hour performance.

3.3.5 How is level of service measured and calculated?

California Government Code Section 65089(1)(A) (see Appendix A, page A-2) requires that level of service be measured by Circular 212, the most recent version of the Highway Capacity Manual, or by a uniform methodology adopted by the CMA which is consistent with the Highway Capacity Manual. The legislation leaves the choice of level of service measurement methodology to the CMA, unless alternatives other than Circular 212 or the Highway Capacity Manual are used. This means that the methodologies used by the CMAs to collect and analyze traffic and facility-related capacity data, and measure, calculate, and analyze level of service should be consistent with currently accepted traffic engineering practices.

In those cases where an alternative method is used, a determination on its consistency with the Highway Capacity Manual is needed from either the regional transportation planning agency or Caltrans if the regional transportation planning agency is also the CMA.

Highway level of service is commonly assessed for both uninterrupted and interrupted traffic flow. Uninterrupted flow facilities can include two-lane and multilane freeways, expressways and conventional highways. Interrupted flow facilities include expressways and conventional highways that are controlled at intersections by signals. Uninterrupted flow facilities are analyzed on a segment basis. Interrupted flow facilities are analyzed on either a segment or intersection basis depending on the spacing of the signals.

In defining and measuring level of service on the CMP system, the CMA will need to identify route segments and key intersections that will be included in this level of service analysis. In establishing level of service standards, the CMA should consult with the regional transportation planning agency, cities and counties, and Caltrans to consider how the level of service standards will contribute to the operation of the regional transportation system as a whole.

3.3.6 How do level of service standards affect local governments?

Cities and the county are responsible for conformance to the adopted level of service for all segments of the defined CMP system, including state highways. Because the county and cities have approval authority over land use decisions which may ultimately affect conformance to the adopted level of service, local governments will need to carefully balance the adopted level of service standard with the proposed land use plans for their jurisdictions. Local governments will also need to consider the impacts on level of service that their future land use decisions may have on the defined CMP system. Therefore, cities and counties may have to develop remedies to increase funding for projects and programs which will improve the level of service on the system (including the state highway portions).

3.3.7 What other system operational characteristics should be analyzed?

Although it is not a requirement of the CMP legislation, it may be beneficial for the CMA and its constituents to examine other types of operational characteristics. These types of analyses have value when considering system improvements, deficiency plans, changes to adopted level of service and transit standards, and implementation of new transportation demand management measures. The following types of analyses should be used to supplement the level of service analysis required by statute.

- System Balance

System balance is the relationship of changes to segment operating conditions between segments. The purpose of analyzing system balance is to ensure that

improvements to one portion of the system do not adversely impact other segments.

- System Continuity

System continuity is the compatibility of level of service between adjacent segments of the same facility or corridor within the system. The purpose of analyzing system continuity is to prevent abrupt changes in level of service between contiguous segments.

- Overall System Characteristics

Examination of overall system characteristics involves analyzing the system at a more general level. Because level of service analysis is a broad measure, it may not be sensitive enough to indicate incremental changes in performance. Other measures may be helpful to provide a full understanding of the overall operating characteristics of the system. Potential measures include:

- Excess peak hour demand (total system volume minus system capacity)
- Daily vehicle hours of delay (amount of travel at less than free flow speed)
- Lane miles of congested facilities (miles of streets and highways operating at less than free flow during peak period)
- Travel time savings for users of the system
- Transit capacity versus utilization
- VMT/person trip
- VMT/vehicle trip
- Vehicle Occupancy

3.4 Transit Standards Element

3.4.1 Why are transit standards established?

Transit standards (for both bus and rail) will work in partnership with level of service standards and the transportation demand management element to achieve desired mobility and air quality goals.

3.4.2 What standards are required?

California Government Code Section 65089(b)(2) (see Appendix A, page A-3) requires that standards be established for the frequency and routing of public transit, and for the coordination of transit service provided by separate operators.

3.4.3 How are transit standards established?

The CMA will need to consult with local transit operators, local governments, and the air quality management/air pollution control district to develop transit standards. The CMA may choose to use the existing service standards of the local operator, as set forth in their Short Range Transit Plan as a source for developing required standards. The CMA may also need to consider the type of transit operation: fixed route or demand response, when establishing standards.

However, because most operators choose to set their standard to define a minimum mobility threshold, and the need for the CMP to support an adopted level of service, the CMA may need to generate standards which will address ways for transit to accommodate a larger share of trips during periods of congestion. It may be necessary for the CMA to identify person trips within the CMP system and establish a mode split to accomplish this task. This should be done in consultation with transit agencies, and the process should examine and identify the costs (including expected farebox recovery ratio) associated with increased service levels.

Regardless of the purpose chosen by the CMA, standards should be established with the following considerations:

- Routing Standards
Routing standards should be approached at the corridor level to provide the transit operator with maximum flexibility in locating service routes.

- Frequency Standards
Frequency standards should be determined by considering corridor passenger generation capability, transit system capacity, and service type proposed. Standards for frequency of service should be sufficient to encourage ridership.
- Coordination Standards
Both schedule and fare coordination aspects should be addressed to minimize transfer inconveniences. The coordination of transit schedules, ticket transfers, and intermodal connections should be addressed to improve the convenience of transfers.

Transit standards should support the measures identified in the Trip Reduction and Travel Demand Element of the CMP (see Section 3.5, page 26) and should also be compatible with applicable federal and state air quality plans.

3.4.4 How can transit standards affect deficiency plans?

Note: See Chapter 5 for a complete discussion of deficiency plans.

Some types of deficiency plans will be examining overall improvement in level of service and air quality. These plans will be developed from lists provided by the local air quality management/air pollution control district. If the measures proposed by the deficiency plan require increased transit services, or encourage increased transit usage, there will be a need to examine the adopted transit service standards to determine whether they are capable of meeting the requirements of the deficiency plan.

3.4.5 How can transit standards affect conformance?

Cities and counties may be responsible for conformance to transit standards. CMAs should work with transit operators and local governments to ensure that transit standards are realistic and can be funded.

Transit operators may not be able to provide the levels of service required by the CMP. In this event, cities and counties could be penalized for nonconformance to transit standards. Therefore, cities and counties may have to develop remedies to increase transit service funding.

3.4.6 How can transit standards affect transportation models?

It is very difficult to simulate the impact of improved transit standards on traffic level of service. It may be necessary to refine this type of capability to determine the impact of increased transit service within a corridor and upon adopted level of service standards.

3.4.7 How can transit standards affect land use analysis programs?

Note: See Section 3.7 for a complete discussion of land use analysis program requirements.

Because transit standards are an adopted part of the CMP and land use analysis programs are required to examine the impact of land use decisions on transportation systems (which can include a transit system), the land use analysis program will need to be capable of identifying land use impacts on transit. Additionally, some of the proposed mitigations developed by the land use analysis program will rely on transit services. These mitigations should be analyzed within the context of the adopted transit standards.

3.4.8 How can transit affect the regional transportation plan?

Regional transportation plans are required to address mass transportation. Because the CMP adopts transit standards and may rely on transit as an important mitigation tool, it is necessary for the standards to be consistent with the policies, goals, and improvements identified in the regional transportation plan. Because the scheduling of most improvements in mass transportation, as well as the service level standards for transit, are required to be established in the CMP, regional transportation planning agencies should take CMP transit standards, and priorities into account when developing the RTP.

3.5 Trip Reduction and Travel Demand Management Element

3.5.1 What is the purpose of this element?

Although not specified by statute, the Trip Reduction and Travel Demand Management (TDM) element has at least five purposes:

1. To improve system efficiency by developing measures that will increase the person through-put of the system with a minimum of capital improvements.
2. To integrate modal options by ensuring that measures chosen are supportive of alternative mode choices.
3. To reduce vehicle trips and vehicle miles traveled by encouraging alternative choices.
4. To improve the overall system level of service by reducing vehicle demand or by maximizing the person throughput of the system.
5. To integrate air quality planning requirements with the transportation planning and programming functions.

3.5.2 What are the statutory requirements for this element?

California Government Code Section 65089(b)(3)(see Appendix A, page A-3) requires that the trip reduction and travel demand element promote alternative transportation methods, such as carpools, vanpools, transit, bicycles, and park-and-ride lots; improvements in the balance between jobs and housing; and other strategies, including flexible work hours and parking management programs.

It is important to note that California Government Code Section 65089.3(a)(2) establishes a conformance requirement (See Chapter 5) for the adoption of trip reduction and travel demand ordinances by local governments. It is logical that these requirements should be addressed in the trip reduction and travel demand element of the CMP.

3.5.3 What are some of the sources for the transportation demand management element?

Because of the linkages of transportation demand management measures to the Air Quality Plan, regional transportation plan, and general plans, CMAs will be required to coordinate and consult with at least the following agencies when developing this element:

- Air Quality Management/Air Pollution Control Districts

Many air quality management/air pollution control districts are adopting "reasonably available transportation control measures" (Health and Safety Code 40918) and/or regulations which promote alternative transportation methods. Air quality management/air pollution control district transportation control measures can work together with the CMP's travel demand element and local trip reduction ordinances to meet the statutory requirements of both CMP law and the California Clean Air Act. The State Air Resources Board has identified the following measures as reasonably available:

- Employer based trip reduction rules
- Trip reduction rules for other sources (indirect source control)
- Management of parking supply and pricing
- High Occupancy Vehicle system plans and implementation programs
- Comprehensive transit improvement programs for bus and rail
- Land development policies for motor vehicle trip reduction
- Development policies to strengthen on-site transit access for new and existing land developments

To encourage coordination between CMPs and the Federal and State Clean Air Acts, measures included in the transportation demand management element of the CMP and measures in the Air Quality Attainment Plan should be mutually consistent.

- Local Governments

Local government general plan circulation elements will often include policies and actions which will encourage alternative transportation mode choices. The land use elements of the general plan may contain policies promoting a balance between jobs and housing. Zoning ordinances may enforce these policies. In some cases, it may be necessary for local governments to develop these items if they are not already within their general plan.

Local governments must adopt and implement trip reduction ordinances. CMAs will need to work with local governments to develop and adopt ordinances that suit the needs of their communities. One possibility is for local governments to adopt zoning ordinances which act as trip reduction or travel demand ordinances. For example, local governments may amend their zoning ordinances to limit parking supply, or to concentrate high density land uses near transit stations. Other possibilities include

implementing market incentives or adopting a region-wide ordinance (such as Regulation 15 in the South Coast Air Basin).

- Regional Transportation Planning Agencies

Regional transportation plans contain a transportation system management section which identifies regional transportation system management measures that could be incorporated into the transportation demand management element. Regional transportation planning agencies are also responsible for finding regional transportation plan conformance to the Federal Clean Air Act. Given that the CMP is to be consistent with the regional transportation plan, it is appropriate for the CMA to consult with the regional transportation planning agency (see Section 4.2.2, page 44, for a discussion of regional transportation planning agency CMP consistency findings).

- Ridesharing Agencies

Ridesharing agencies can provide information on commute alternatives including car and buspooling. They can assist in providing marketing information and alternative commute mode statistics, and help to implement adopted transportation demand management measures.

- Transit Providers

Transit providers have short range transit plans, marketing incentive programs, and passenger survey information which will assist in developing the transportation demand management element. In addition, the transportation demand management measures should be compatible with the transit standards established for the CMP. The CMA should consult with transit providers to determine the impact of proposed transportation demand management measures on the services they are providing.

- Other CMAs

Adjacent CMAs should coordinate with each other to determine that their transportation demand management elements are compatible or complementary to each other.

3.5.4 How can the transportation demand management element affect deficiency plans?

Note: See Chapter 5 for a complete discussion of Deficiency Plans.

Local governments may be required to complete deficiency plans which improve the level of service of the system by relying on the implementation of transportation demand management measures. These measures should be consistent with those measures described in the transportation demand management element.

3.5.5 How can the transportation demand management element affect conformance?

As mentioned previously, California Government Code Section 65089.3(a)(2) establishes a conformance requirement (See Chapter 5) for the adoption of trip reduction and travel demand ordinances by local governments. These ordinances will need to be locally developed to appropriately address the character and requirements of each community. CMAs may also seek to ensure that statutorily described transportation demand management measures are incorporated into local general plans where applicable.

3.5.6 How can the transportation demand management element affect land use analysis programs?

Note: See Section 3.7 for a complete discussion of land use analysis program requirements.

Transportation demand management measures may be chosen as a mitigation for land use proposals. Land use decisions could also address jobs/housing balance issues through mitigations or new zoning ordinances. These mitigations and ordinances should be analyzed for their impact on the adopted level of service and consistency with adopted transportation demand management measures in the CMP.

3.5.7 How can the transportation demand management element be affected by the regional transportation plan?

Regional transportation plans are required to conform to the Federal Clean Air Act requirements. Because the CMP must be consistent with the regional transportation plan, the transportation demand management element will need to be consistent with Federal and State Clean Air Act requirements.

3.6 Database and Model Development

3.6.1 What are the statutory requirements?

California Government Code Section 65089(c) (see Appendix A, page A-3) requires that the CMA, in consultation with the regional transportation planning agency, cities, and the county, develop a uniform data base on traffic impacts for use in a county-wide transportation computer model. It also requires that the county-wide model be the basis for computer models used for county sub-areas and cities, and that all models be consistent with the modeling methodology and databases used by the regional transportation planning agency. The CMA also approves sub-county area traffic models and models used by local jurisdictions for land use impact analysis (see Section 3.7).

The purpose of this requirement is to guide the congestion management decision making process in identifying the most effective balance of transportation programs and projects which maintain level of service standards. This includes the consideration of the benefits of transit service and transportation demand management programs, as well as the need for projects that improve congestion on the CMP highway and arterial system. The modeling requirement is also intended to assist local agencies in assessing the impact of new development on the transportation system. The CMA will need to consider the nature of the analysis, functions of specific analytic tools, and its available resources when deciding how to fulfill this requirement of the statute.

3.6.2 What is a model?

There is a distinct relationship between travel demand, land use patterns, and transportation systems. A model then, could be defined as the application of analytical techniques (i.e. mathematical and statistical relationships) to quantify those relationships.

In applying computer models, the CMA should evaluate the appropriateness of the process to the scope and scale of the issues to be addressed. Conventional computer models used by regional transportation planning agencies are capable of generating travel forecasts, similar to the Urban Transportation Planning System (UTPS) model used nation-wide. For small area analysis, other computer and non-computer analytical methods (i.e. traffic engineering calculations) are used to determine land use impacts on the transportation system. However, it is important that these techniques be consistent with region-wide analysis.

3.6.3 What aspects of the CMP are amenable to quantitative analysis?

Quantitative analysis will play some role in the development of each CMP element. However, the type, scope and method of analysis will vary as suggested below:

- Traffic Level of Service
Future traffic level of service projections may be made largely through transportation forecasting models and/or traffic impact analysis (see Section 3.6.4, page 32). Models can be used for the following purposes:
 - Project future traffic volumes
 - Analyze the impacts of improvements
 - Maintain system balance and continuity
 - Develop an understanding of the overall performance of the system.
- Transit Standards
Modeling can assist in determining where major transit operational changes in routing, frequency, and coordination might effect a shift from auto to transit use.
- Trip Reduction and Travel Demand Element
Few transportation agencies have models capable of modeling transportation demand management measures. It may be necessary for CMAs to determine the impact of increased modal choices and temporal shifts within a corridor upon adopted level of service standards. This will allow for the analysis of transportation demand management measures in conjunction with traffic level of service and transit service. Travel demand forecasting can be used to focus certain transportation demand management techniques on particular market segments, e.g. the promotion of ridesharing on longer distance commuters.
- Land Use Analysis
This element requires an assessment of the impact of "local land use decisions" on the regional transportation system. If these decisions are defined as major policies concerning the general plan, e.g. limiting future development to incorporated areas, or changing densities of major land tracts, county-wide/large scale travel demand modelling is essential to ascertain the overall impacts of these changes on the transportation network. If land use decisions are limited to site specific projects, more localized quantitative methods such as local/small area traffic analysis are appropriate.

- Capital Improvement Program
Modelling can be used as an "early warning system" to identify future system problems, and to broadly assess the relative benefits of alternative capital investment packages. This will assist in maintaining level of service standards, system balance, and continuity.
- Deficiency Plans
Modelling or other quantitative analyses may be necessary to forecast highway segments or intersections that will not meet established standards in the future, and assist in developing action plans to improve those deficiencies.

3.6.4 What modelling techniques are appropriate?

It is important to understand the limitations as well as the benefits of computer models and other analytical tools before applying them to the CMP process. Two of the most common methods that are likely to be used are county-wide/large scale models and local/small area analysis methods. These techniques are described as follows:

- County-wide/large scale models
These types of models typically use inputs that affect travel behavior such as: income, auto ownership, and trip purpose patterns to predict the generation and distribution of trips, assignments of trips to the transportation network, and choice of mode. Travel demand forecast modelling is distinguished, among other factors, for its focus on system and corridor level impacts. Consequently, this approach is most appropriate for the following applications:
 - Broad cumulative impacts of large scale land use changes on the transportation network
 - Impacts of a comprehensive set of major capital investments or operations changes
 - Regional estimates of vehicle emissions that impact air quality.

Key outputs of travel demand models are traffic volumes, speeds, percent shared ride versus single auto occupancy, mode split (percent travel by auto, transit, walking), transit boardings and alightings, etc. Information can be presented in terms of daily averages, or peak hour. Speed distributions, trips, and vehicle miles traveled, are necessary outputs for estimating vehicle emissions, which in turn can estimate air quality impacts.

Large scale transportation models are not sensitive to relatively small changes in land use and circulation systems, Site specific analysis may be necessary for these purposes.

- Local/small area analysis methods

Project level evaluations, such as level of service measurements of a single intersection or facility, or impacts of site specific land use developments, must be assessed through other methods. These methods rely on traffic engineering analysis including traffic counts, geometric characteristics of the roadways, and information such as turning movements. Environmental impact analyses of specific development projects typically use these methods to estimate the traffic impacts of proposed land uses. It should be noted that there are both computer and non-computer analytical methods for this type of analysis.

3.6.5 What should the model encompass?

At a minimum, a county-wide model should include the entire CMP roadway and transit system (it is possible that the county-wide system may be described by aggregating more than one sub-regional model). A model should also be sufficiently detailed to detect significant impacts to the CMP system caused by off-system or transit improvements and land use decisions. Local models should define local streets and roads that may affect the defined CMP system because of their potential to contribute vehicle trips.

3.6.6 What needs to be included in the database?

The database is the quantitative information needed as inputs to the computer model. Data requirements are a significant and costly part of the modeling program. Therefore, existing data sources should be used whenever possible.

The database includes land use, socio-economic and demographic factors, and transportation system data such as traffic volumes and transit operational data, and other data. Potential sources of this data include local governments, regional transportation planning agencies, State agencies, and private firms. The census is an important source of data. The CMA collects the data for input into the computer traffic model, and updates it to analyze the impacts of changes to the transportation system. Local data will also be provided as part of the monitoring process. The level of detail and precise data needed will depend on the input needs of each county's transportation model. Because of the required consistency with the regional data bases, the model's development and updating will be an ongoing and iterative process between the CMA and the regional transportation planning agency.

3.6.7 What should be considered when developing the model?

When developing the model the CMA should consider the following:

- Participation and coordination with other agencies
CMAs will need the participation of other agencies to provide the data and assumptions that will fuel the model. At a minimum, the CMA will need input from the following agencies:
 - Regional Transportation Planning Agencies
By statutory requirement, the model must be consistent with the regional transportation planning agency database, assumptions and methodology.
 - Local Governments
Local governments provide much of the transportation and land use data.
 - Caltrans
Caltrans can provide state highway information as well as information from the state-wide model (VMT, inter-regional travel information).
 - Transit Agencies
Transit agencies may be able to provide passenger count information that can be useful in determining modal choices.
 - Air Quality Management/Air Pollution Control Districts
Transportation and air quality planners should reach agreement on the model inputs and outputs necessary to provide measures of progress in meeting California Clean Air Act transportation performance standards.
- Adapting or using existing models
CMAs should first determine if the most appropriate existing model for their county may be adapted to their purposes. Potential options include using the regional transportation planning agency's model, adapting the Caltrans' state-wide model, or aggregating local models.
- Length of time involved in model development
Because of the considerable data and calibration requirements models may take up to two years to develop.
- Resource constraints
Development and maintenance of a transportation model can require a large amount of time for collecting, collating, and entering data; calibrating the model; and updating the model's database. CMAs will need to consider the availability of

funding and staff resources (either their own, a consultant's, or another agency's) to develop and maintain the model.

- Statutory level of service measurement exceptions

Some of the requirements of the CMP allow for certain exemptions which can affect modeling requirements. The land use analysis program requires that impacts of interregional travel be excluded from estimates of mitigation costs (consequently, it should be excluded from model impacts). Deficiency plans allow cities and counties to deduct impacts caused by interregional travel, provision of low and very low income housing, construction, ramp metering, and traffic signal coordination. It may not be possible, or it may be very expensive to develop modeling algorithms that can accommodate these exceptions. Therefore, it is recommended that these exemptions be applied to the output of the model and not included in its composition.

3.7 Land Use Analysis Program

3.7.1 What are the statutory requirements?

California Government Code 65089(b)(4) (see Appendix A, page A-3) requires that the CMP contain a program to analyze the impacts of land use decisions made by local jurisdictions on regional transportation systems. The program must also be able to estimate the costs associated with mitigating those impacts. However, costs for mitigating interregional travel impacts are excluded.

The program must be able to provide credits for local public and private contributions to improvements to regional transportation systems. In the case of toll road facilities, credit shall only be allowed for local public and private contributions which are not reimbursed from toll revenues or other state or federal sources. The CMA is responsible for calculating the amount of credit to be provided.

California Government Code 65089(c) (see Appendix A, page A-3) requires that the CMA approve models that are used by local governments for determining the impacts of development on the circulation system.

The creation of a CMA does not change the role of local jurisdictions in making land use decisions and in determining the responsibility of project proponents to mitigate the impacts.

3.7.2 How can this program be accomplished?

The CMA must develop a program, for implementation by local agencies, which will analyze the impacts and mitigation costs of land use decisions on the regional system. There are many alternatives for developing this program. The CMA could develop a county-wide program, it could develop guidelines and criteria for individual or groups of local agencies to develop their own programs or a combination of the above approaches.

One alternative, that could use the CEQA process, would focus on individual project review. Local governments would have lead agency responsibility for informing the CMA of the project, performing the EIR, conducting the transportation analysis subject to CMP program guidelines, and proposing and analyzing mitigations. The CMA would determine if a significant impact to the CMP system is likely, notify the local government, and comment throughout the EIR process keeping local governments informed about the adequacy of the review; and approving mitigations and transportation models that may be used.

Another alternative, that could also be used in conjunction with the CEQA process, would be to focus on the cumulative impacts of proposed city and county land use decisions. The CMA could evaluate these impacts in terms of level of service standards and identify

mitigation needs. The CMA would use a county-wide/large scale model to assist in this analysis. In particular, the impacts of one jurisdiction's land use decisions on an adjoining jurisdiction can be evaluated and appropriate mitigations (and assigned responsibilities to implement the mitigations) can be developed.

A third alternative could be for the CMA and local governments to establish criteria for review, impact analysis, and mitigations. Local governments would be responsible for reviewing land use decisions, determining impacts on the CMP system, and requiring appropriate mitigations. Local governments would keep the CMA informed of the process as part of the annual monitoring.

A fourth alternative would combine these approaches. The CMA and local governments could use CEQA threshold criteria to establish the need for individual project review and to determine whether direct input from the CMA is necessary, while cumulative impacts would be reviewed annually.

However the program is implemented, local governments will remain responsible for approving, disallowing, or altering projects and land use decisions. Regardless of the method of implementation for this program, it must be able to determine land use impacts to the CMP system, and develop appropriate mitigations. Some attention may have to be given to developing a process for resolving the regional impacts of local land use decisions which negatively impact adjacent jurisdictions. The CMA might even act as a mediator to resolve land use impacts by achieving consensus on the impact and sorting out responsibilities to mitigate the impact.

3.7.3 What kinds of mitigations are possible?

The program is required to provide an estimate of the costs of mitigating the impacts of land use decisions. The type of mitigation required will be dependent upon the nature of the impact of the project. Mitigations should focus on the improvement of the performance of the identified system. The land use program is an opportunity for local agencies to encourage the implementation of system mitigations (i.e., improvements to public transit services and facilities, improvements to ridesharing services, improved non-motorized facilities, and high-occupancy vehicle facilities) and non-capital mitigations (i.e. parking policies, transit passes, etc.). Traditional capital improvements may also be necessary in combination with system and non-capital improvements, including highway, roadway and interchange improvements.

There are a number of options for implementing mitigations including developer exactions and other state or local funding sources. Regardless of the funding source, capital improvements identified as mitigations should be included in the CMP capital improvement program.

3.7.4 How can the land use analysis program affect conformance?

California Government Code 65089.3 (a) (see Appendix A, page A-4) states that city and county adoption and implementation of the land use analysis program is a conformance requirement.

California Government Code 65089.6 (see Appendix A, page A-6) states that a proposed development specified in a development agreement entered into prior to July 10,1989, shall not be subject to any action taken to comply with the CMP. The statute provides an exemption for actions required with respect to the trip reduction and travel demand element of a CMP.

3.7.5 What other issues and opportunities exist for this program?

Land use patterns, including type, density, and location have a direct impact on the generation of traffic. In addition, the impacts of land use decisions affect traffic often well beyond the boundaries of that local jurisdiction. While the statute does not give CMAs a land use regulatory responsibility, it does offer the opportunity to influence decisions to minimize traffic impacts of future land uses.

Air quality management/air pollution control districts in urban areas may be developing indirect source control programs to minimize the mobile source emissions of current and future land uses. Although the California Clean Air Act does not give air quality management/air pollution control districts a land use regulatory responsibility, it does provide an opportunity for the CMA and the air quality management/air pollution control districts to work together to create an integrated program which addresses both the air quality and traffic congestion impacts of new development. Such an integrated approach would make a cost effective use of local resources involved in traffic congestion relief and air quality control.

Land use analysis programs offer the opportunity to assess the impacts in terms of the standards of the CMP. This program can also be used to assess impacts in terms of overall system characteristics, continuity, and balance.

3.8 Capital Improvement Program

3.8.1 What are the statutory requirements?

California Government Code 65089(b)(5) (see Appendix A, page A-3) requires that the CMA develop a seven year capital improvement program to maintain or improve the traffic level of service and transit performance standards that have been adopted in the CMP (see Sections 3.3 and 3.4) and to mitigate regional transportation impacts identified through the land use analysis program. Capital improvement projects must conform to transportation related air quality mitigation measures. These measures are contained in the respective air quality attainment plans applicable to each county.

3.8.2 How is the capital improvement program developed?

The program should be developed in consultation with the following agencies:

- **Local Governments**
Local governments identify projects through their planning process. Capital projects identified through approved deficiency plans may be included in the capital improvement program.
- **Transit Providers**
Transit providers identify projects that are necessary to maintain or improve the adopted transit standards. These projects may need to be coordinated with the local governments.
- **Air Quality Management/Air Pollution Control Districts**
The transportation control measures contained in adopted air quality attainment plans must be considered by the CMA when developing their capital improvement program. The CMA should coordinate the capital improvement program development with the air quality management/air pollution control district and the transportation components of the air quality attainment plan.
- **Regional Transportation Planning Agencies**
The regional transportation planning agency will ultimately review the capital improvement program and incorporate it into the regional transportation improvement program (see Section 4.2.3, page 45). It may be helpful to obtain regional transportation planning agency input early in the process to smooth the capital improvement program incorporation into the regional transportation improvement program.

- Caltrans

Projects selected for the capital improvement program will have an impact on the defined CMP system. Because this system includes state highways, Caltrans should be consulted during capital improvement program development. Caltrans has specific project and cost information for state highway projects that will be useful to the CMA in preparing the capital improvement program. The CMA will want to work closely with Caltrans to ensure that Project Study Reports (PSRs) or their equivalent are prepared by Caltrans or local agencies. PSRs are required to be prepared before state highway projects are programmed into the State Transportation Improvement Program.

3.8.3 How should the capital improvement program be formatted?

The capital improvement program should be formatted in a manner that is compatible with the regional transportation improvement program. Projects should be ranked in priority order, list project cost, and expected delivery year. For more information concerning capital improvement program/regional transportation improvement program requirements refer to the State Transportation Improvement Program/Regional Transportation Improvement Program Guidelines, Flexible Congestion Relief Program Guidelines, and the Commuter and Urban Rail Transit Program Guidelines.

3.8.4 What criteria should be used for project selection?

CMP statutes stipulate three criteria for projects selected for the capital improvement program as follows:

- To maintain or improve the traffic level of service and transit performance standards
- Mitigate land use impacts
- Conform to vehicle emissions air quality mitigations

3.8.5 What is the capital improvement program's relationship to the regional transportation plan?

Note: For additional information concerning the capital improvement program and the regional transportation plan see Chapter 4, Section 4.2, page 44; and Appendix A, California Government Code 65081 (b), page A-1.

The CMP is incorporated into the regional transportation plan action element. Therefore, projects selected for the capital improvement program will need to be consistent with the

assumptions, goals, policies, actions, and projects identified in the regional transportation plan. Regional transportation planning agencies will need to participate in the capital improvement program development process to be alert for problems arising from inconsistencies.

In terms of air quality, the regional transportation plan must conform with the state implementation plan. For the CMP capital improvement program to be adopted into the regional transportation plan, it must also conform to the state implementation plan. It may be efficient to determine conformity by using the same process established for the regional transportation improvement program. The Federal Clean Air Act of 1990 contains new conformity requirements that are currently unreviewed by the regional transportation planning agencies. New conformity guidance from the Environmental Protection Agency is required by November 1991.

3.8.6 What is the capital improvement program's relationship to the regional transportation improvement program?

Note: For additional information concerning the capital improvement program and the regional transportation improvement program see Chapter 4, Section 4.2, page 44.

The capital improvement program becomes the basis of projects from which the regional transportation improvement program is developed. Projects that are to be included in the regional transportation improvement program must first be included in a capital improvement program. However, it is important to note that regional transportation planning agencies are responsible for assembling the regional transportation improvement program and that the regional transportation improvement program is a funding constrained document. Therefore, inclusion into the capital improvement program does not guarantee a project's funding. In areas where the regional transportation planning agency is incorporating more than one capital improvement program into the regional transportation improvement program, there will be a need for the regional transportation planning agency to be more selective.

The CMA can facilitate the merging of the two documents by formatting the capital improvement program in the same manner as the regional transportation improvement program. The development of the CMP (including the capital improvement program element) should be timed to meet the biennial December 1 deadline for submittal of the regional transportation improvement program to the California Transportation Commission.

In even numbered years when a regional transportation improvement program is not required, capital improvement program projects could be reviewed and re-ranked if necessary.

It should be noted that projects that are included in the regional transportation improvement program are also required to have a completed PSR or its equivalent before they can be considered by the CTC for State Transportation Improvement Program inclusion.

4.0 CMP REVIEW AND ADOPTION

4.1 Local Review and Adoption

4.1.1 What are the CEQA review requirements for the CMP?

Because there is not yet a definite consensus on the CEQA status of the CMP, it is recommended that each CMA obtain the advice of their own legal counsel.

4.1.2 What are the CMP statutory requirements for public review?

California Government Code Section 65089(a) requires that the CMP shall be adopted at a noticed public hearing. Although the CMP statute does not define adequate notice, it is recommended that a reasonable time before the hearing be allowed. General notice requirements for public hearings are set forth in California Government Code 65090 which requires public notice at least 10 days before the hearing.

4.2 Regional Review and Adoption

4.2.1 What are the statutory requirements?

Regional transportation planning agency review and adoption requirements are contained within California Government Code Sections 65081(b), 65082(b), and 65089.2(a) and (b) (see Appendix A). These Sections require the regional transportation planning agency to evaluate the consistency of the CMP with the regional transportation plan; and if it is consistent, incorporate the CMP into the regional transportation plan action element and into the regional transportation improvement program. The statute allows the regional transportation planning agency to exclude CMP projects from the regional transportation improvement program if they have found the CMP to be inconsistent with the regional transportation plan.

4.2.2 What constitutes consistency with the regional transportation plan?

The regional transportation planning agency's review of the elements of the CMP will determine if it is consistent with the assumptions, goals, policies, actions, and projects of the regional transportation plan. Regional transportation planning agencies that are also metropolitan planning organizations (MPOs) are required to ensure that all proposed transportation programs conform to the state implementation plan (SIP) prior to incorporating them into the regional transportation plan.

On-going coordination between the regional transportation planning agency and the CMA during the CMP development process will assist in resolving issues that could be a barrier to regional consistency while they can still be addressed through the consultation process.

Because the development of the first CMP will take place before the next regional transportation plan update, there may be differences between the two documents that may be caused by the more recent information available in the CMP and its integrated approach to transportation planning and programming. Therefore, it may necessary for the regional transportation planning agency to consider updating the regional transportation plan to reflect this new information.

However, in later years there should be fewer inconsistencies because the CMP and the regional transportation plan will share the same databases and travel demand forecasting methodologies. At that point, given the more regional and longer term outlook of the regional transportation plan, the regional transportation plan information will influence the CMP and require CMAs to more closely consider regional transportation plan policies and actions in developing the CMP.

4.2.3 How is the capital improvement program incorporated in the regional transportation improvement program?

Because there is no statutory deadline for completing the CMP, the regional transportation planning agency should coordinate with the CMA(s) to establish a reasonable deadline for CMP adoption which ensures that CMP projects will be incorporated in the regional transportation improvement program. The regional transportation improvement program is due to the California Transportation Commission on December 1 of odd-numbered years. State Transportation Improvement Program/Regional Transportation Improvement Program Guidelines state that projects must be selected from a CMP to be eligible for inclusion into the regional transportation improvement program. Regional transportation planning agencies are required to incorporate into the regional transportation improvement program only those CMP projects found to be consistent with the regional transportation plan.

Regional transportation planning agencies that are also metropolitan planning organizations (MPOs) are required to ensure that all proposed transportation projects conform to the state implementation plan (SIP) prior to incorporating them into the regional transportation improvement program.

Program incorporation can be facilitated if the CMP capital improvement program is developed in a manner that is consistent with the regional transportation improvement program. The regional transportation planning agency should also provide assistance in developing the CMP capital improvement program. This assistance could include providing appropriate format information, supplying regional project priority development criteria, developing time lines, and providing funding information.

4.2.4 Are there any review requirements for databases?

The statutes do not require that the regional transportation planning agencies review or approve databases used in the models. However, they do require that the databases be consistent with those of the regional transportation planning agency. Therefore, the regional transportation planning agency should coordinate with the CMA to ensure database and model consistency.

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5.0 CMP MONITORING, DEFICIENCY PLANS, & CONFORMANCE

5.1 Monitoring

5.1.1 What are the statutory monitoring requirements?

California Government Code 65089.3(a) (see Appendix A, page A-4) requires the CMA to monitor the implementation of all elements of the CMP. The agency is also required annually to determine if the county and cities are conforming to the congestion management program.

It is important to note that most of the elements of the CMP are not implemented by the CMA. Maintenance of level of service and transit standards, adoption of trip reduction and travel demand ordinances, implementation of land use analysis programs, and implementation of transportation demand management measures are usually a function of local governments. The CMA is required only to monitor local governments to ensure that the CMP requirements are being met.

5.1.2 What is the significance of monitoring?

Monitoring provides feedback to determine whether the CMP's objectives are being met. The system performance data can be used to adjust either the CMP or the actions of the local governments to meet legislative requirements. It does this by providing information that can be used to update the county-wide model and database, adjust transportation demand management measures, transit standards, and level of service standards, and to determine whether it will be necessary for a local government to develop a deficiency plan. The CMA and local governments can use the information to focus on strengthening the CMP.

5.1.3 How is monitoring implemented?

The CMA is responsible for monitoring the implementation of the CMP including performance of local governments in terms of the requirements of the CMP. The CMA should coordinate with local governments and transportation providers including the State to determine data requirements to assess system and CMP performance. The CMA and local governments should also develop a method for reporting monitoring data to the CMA and establish deadlines for data submission.

In developing monitoring standards, the CMA will need to ensure that local governments provide monitoring data that is consistent with the format of the adopted level of service

standard (see Section 3.3.4 page 19), and that the monitoring information includes all portions of the defined CMP system. Implementing the monitoring requirement will require cooperation between local governments, Caltrans, and the CMA to guarantee that is possible to produce the required information.

5.1.4 How often is the CMP monitored?

All elements of the CMP should be monitored on an on-going basis. Monitoring of the system should include a periodic review of all portions of the system. Frequency and scope of program review should be agreed upon by the CMA and local governments and a schedule should be developed.

There are a variety of factors that should be considered when discussing frequency of monitoring. These factors include the amount of change and the complexity of the area, size of the systems, and the cost and resources available for monitoring.

5.1.5 What is done with the monitoring data?

By statute, the CMA is required to use the data to determine whether local governments are complying with the requirements of the CMP (see Section 5.3, page 56). However, the data also has other uses. The CMA should use the monitoring data to assess the effectiveness of capital improvements to the system, transportation demand management measures, transit system performance, land use mitigation measures, and to determine where potential deficiency problems may be occurring. This information should be then used to modify future CMPs to increase their effectiveness.

There are a number of monitoring activities that relate to this effort. These include reasonable further progress requirements for air quality, plan and project review activities of regional councils of governments, and AB 3180 CEQA monitoring requirements. CMAs should work with these other responsible agencies to develop a coordinated, consolidated reporting system.

5.1.6 What happens if measured level of service falls below standard?

California Government Code Section 65089.3 (c) (see Appendix A, page A-5) provides for exceptions in determining consistency with levels of service and performance standards. This section of code states that the CMA, after consultation with the regional transportation planning agency, the department, and the local air quality management/air pollution control district, shall exclude from the determination of conformance with level of service standards, the impacts of any of the following:

- (1) Interregional travel.
- (2) Construction, rehabilitation, or maintenance of facilities that impact the system.
- (3) Freeway ramp metering.
- (4) Traffic signal coordination by the state or multi-jurisdictional agencies.
- (5) Traffic generated by the provision of low and very low income housing.
- (6) The impacts of a trip which originates in one county and which terminates in another county shall be included in the determination of conformance with level of service standards with respect to the originating county only. A roundtrip is considered to consist of two individual trips.

If measured level of service falls below the adopted standard, local governments will need to analyze the cause for the nonconformance with the adopted level of service standard. Local governments and CMAs will need to determine whether the above-mentioned impacts are beneficial or detrimental to the measured level of service and therefore should be excluded from, or included into, the analysis determining conformance with the adopted level of service. The analysis may be difficult to complete and will require the cooperation of all local agencies involved.

If the level of service minus these exclusions rises to a level equal or above standard, no further action is needed by the local government other than to document its analysis. For each exclusion requested, the documentation should identify the type of exclusion requested, its source(s), and its direct impact in terms of the level of service methodology chosen by the CMA (Highway Capacity Manual or Circular 212).

If the level of service minus these exemptions remains below the adopted standard, then the local government will need to develop a plan to either improve the deficient segment or to improve the level of service of the system and air quality. This type of plan is termed a deficiency plan (see Section 5.2, page 51).

5.1.7 What are the effects of exclusions?

The impacts of exclusions do not disappear by excluding them from level of service measurements. With interregional travel in particular, it is critical to the success of a comprehensive congestion management strategy that the impacts of this travel are addressed in some forum. The CMA should work with the regional transportation planning agency, the State, or other relevant agencies to identify ways that these "excluded" impacts will be adequately dealt with.

5.1.8 How do local agencies and the CMA know if mitigations work?

The effectiveness of proposed mitigations would be determined through system monitoring (see Section 5.1.1, page 47). If the measured level of service of the system does not change, then it can be assumed that the mitigations are achieving the desired results. If the measured level of service falls, an analysis would be required to determine the cause of the reduction. If the analysis links the level of service reduction to the project and the required mitigations were developed with a flexible approach to include such a contingency, the project proponents could be required to provide additional mitigation. If not, and the level of service had dropped below standard, the city or county would be required to develop a deficiency plan.

5.2 Deficiency Plans

5.2.1 What are the statutory requirements?

California Government Code Section 65089.3 (b) (see Appendix A, page A-4) provides for the development of deficiency plans. This section states that a city or county may designate individual deficient segments or intersections which do not meet the established level of service standards, if prior to the designation, at a noticed public hearing, the city or county has adopted a deficiency plan. The section also states the minimum requirements for deficiency plan content.

5.2.2 What are deficiency plans?

Deficiency plans provide a method for local governments to focus on areas where congestion problems are suppressing system performance below adopted standards. They provide an opportunity to analyze the causes of the problems and determine whether they can be fixed by local improvements or if it would be best to employ measures that will improve overall system efficiency and air quality. Deficiency plans also provide local governments with the opportunity to give priority to system and non-capital mitigation methods to relieve congestion. Statute specifically points to improved public transit service and facilities, improved non-motorized transportation facilities, high occupancy vehicle facilities, and transportation control measures.

At a minimum, deficiency plans must include the following:

- An analysis of the causes of the deficiency.
- A list of improvements necessary for the deficient segment or intersection to maintain the minimum level of service otherwise required and the estimated costs of the improvements.
- A list of improvements, programs, or actions, and estimates of costs, that will:
 - Measurably improve the level of service of the system
 - Contribute to significant improvements in air quality
- An action plan implementing either the improvements necessary to maintain the minimum LOS standards at the deficient segment or intersection or the improvements necessary to improve the LOS of the system and contribute to significant air quality improvements. The action plan is required to include a specific implementation schedule and should also include a description of its funding. Special

considerations for state or federal requirements must be considered when determining the feasibility of the action plan. Improvements funded through the CMP capital improvement program, whether having local or system impact, must not degrade air quality.

Improvements and programs that have a system impact and contribute to improved air quality must be obtained from a list developed by the local air quality management/air pollution control district. Improvements that are not on the list are not considered acceptable (unless they are approved by the air quality management/air pollution control district).

5.2.3 What agencies develop deficiency plans?

Local governments are responsible for preparing and adopting deficiency plans. However, the development of the deficiency plan will require consultation with the CMA, Caltrans, local transit providers, and the air quality management/air pollution control district. Local public interest agencies and members of the private sector may also have an interest in the development of deficiency plans.

CMAs, and the agency responsible for the deficiency should also coordinate the development of the deficiency plans with other local agencies, the air pollution control/air quality management districts, regional transportation planning agencies, and other interested agencies.

If the local government is considering a deficiency plan it should consult with the air quality management/air pollution control district. Air quality management/air pollution control districts are required to develop and maintain lists of improvements, programs, and actions which can improve the LOS of the system and air quality. The lists should conform with the adopted air quality attainment plans. They should also be realistic in the assessment of mitigating capability. It may be helpful if programs, improvements and actions are categorized as to their applicability to a specific type of deficiency (e.g. localized, regional, applicable to intersections, arterials, etc.); some TCMs may appear in more than one category.

CMAs will also need to coordinate deficiency plans for intersections and segments that span jurisdictional boundaries. The CMA should ensure that neighboring jurisdictions recognize the deficiency and develop compatible plans for its mitigation. The cost of such mitigation may become a significant issue that CMAs and neighboring jurisdictions need to address.

5.2.4 When are deficiency plans required?

Deficiency plans should be developed prior to the annual conformance determination. Deficiency plans are required once it is recognized that a CMP system segment or intersection is not meeting the adopted LOS standard after allowable exemptions. To identify when a deficiency plan is needed, the local government should maintain an adequate method of monitoring their portion of the identified system and frequently review the results of the monitoring process. Local models should also be of sufficient detail to adequately describe the regional system segments and intersections within the scope of the local government and to be able to predict future impacts to these sections. Upon identification of a future impact, local governments should begin preparation of a deficiency plan, if necessary. This will provide for the development of deficiency plans for segments that will be impacted by cumulative land use decisions that cannot be mitigated through the land use analysis program.

5.2.5 What should be considered in developing a deficiency plan?

During the process of developing the plan, the local agency will need to consider whether it is possible to actually improve the deficiency. It may not be possible to do so for a number of reasons including cost, availability of real estate, public opposition, and air quality plan conflicts. However, in developing the deficiency plan both "local" and "system" alternatives must be considered and described. Local governments and the CMA should consider the impact of the proposed deficiency plan on the CMP system. An action plan to implement the chosen alternative must also be provided. The selection of either alternative is subject to approval by the CMA, which must find the action plan in the interest of the public's health, safety, and welfare.

5.2.6 How are deficiency plans approved?

Local governments are required to adopt deficiency plans at a noticed public hearing. Local governments should provide sufficient notice of their intention to adopt deficiency plans to allow for adequate public review. Copies of the plans should be made available for review by interested agencies, groups, and citizens.

After the local government has adopted the deficiency plan, it is forwarded to the CMA. The CMA is required to hold another noticed public hearing within 60 days of receiving the deficiency plan. CMAs may either accept or reject the deficiency plan in its entirety. The CMA cannot modify the deficiency plan. If the CMA rejects the plan, it is required to notify the city or county of the reasons for that rejection.

CMAAs should provide sufficient notice of their intention to adopt deficiency plans to allow for adequate public review. Copies of the plans should be made available for review by interested agencies, groups, and citizens.

The CMAA should use the information provided by the program monitoring reports and consider the following items when reviewing deficiency plans:

- Consistency of the deficiency plan with the regional transportation plan, regional transportation improvement program, general plans, and air quality plans.
- Adequacy of the deficiency analysis.
- Effectiveness of proposed improvements.
- Linkage of proposed improvements to level of service change.
- Impacts of proposed plans to other segments of the regional system.

CMAAs should seek the input of local and consulting agencies during the review of deficiency plans. If the agency chooses to reject a deficiency plan, it is required to give a clear statement as to its reasons for rejection and should also provide its recommendations for improvements.

5.2.7 How are they linked to the land use analysis program?

The need for a deficiency plan may be predicted by a model done under the land use analysis program. Local governments may use this prediction to develop mitigations that can offset the need for the deficiency plan and pay for its implementation. However, deficiency plans themselves are not required to be executed until the segment or intersection falls below standard.

5.2.8 How are they linked to transit standards and transportation demand management elements?

Because deficiency plans may require more rigorous transit standards or additional transportation demand management measures beyond those identified in the CMP. It may become necessary to review those elements to determine if they need to be upgraded.

5.2.9 What other linkages may exist?

Deficiency plans may require local governments to consider changes in the circulation or land use elements of their general plans. They may also require that the regional transportation plan be updated to include Transportation System Management, and High Occupancy Vehicle elements.

5.3 Conformance

5.3.1 What is conformance?

California Government Code Section 65089.4 (a) and (b) (see Appendix A, page A-6) govern the conformance process. These sections require that, based on the information obtained through monitoring, the CMA must annually determine that the county and the city are conforming to the requirements of the CMP. If the agency believes that a local government is not conforming to CMP requirements it must then hold a noticed public hearing to determine areas of nonconformance. If after the public hearing the CMA still believes that the local government is not conforming to CMP requirements, it must provide written notice citing the specific instances of nonconformance. The local government then has ninety days to remedy the instances of nonconformance. If after ninety days, the local government has not remedied the nonconformance instances, the CMA makes a finding of nonconformance and notifies the State Controller to withhold the increased portions of the subventions from the gas tax made available by passage of Propositions 111 and 108.

5.3.2 Who is required to conform?

Local agencies are responsible for conforming to the requirements of the CMP. If a local agency is determined to be in nonconformance with the CMP, it has ninety days from the receipt of notice of nonconformance to conform with CMP requirements. Nonconforming local agencies should consult with, and seek the assistance of, the CMA and other local agencies to develop a program for conformance.

5.3.3 How is conformance determined?

The CMA is responsible for determining conformance. This determination should be made on the basis of the monitoring information provided by local governments and comparison to the requirements of the adopted CMP. Reasons for nonconformance could include the following:

- Inadequate monitoring information.
- Inadequate deficiency plan development.
- Failure to follow through with program requirements including the statutory minimums as follows:

- Consistency with levels of service on those portions of the CMP system within the local government's boundaries (this includes state highways and excepts those segments that are designated deficient).
- Consistency with adopted transit standards.
- Adoption and implementation of a trip reduction and travel demand ordinance.
- Adoption of a program to analyze the impacts of land use decisions.

5.3.4 What happens if a local government does not conform?

If the CMA makes a determination of nonconformance, it should provide corrective recommendations to the local agency. The local government should then develop a plan for corrective action and submit it to the CMA. If after ninety days the local agency is still in nonconformance, the CMA is required to provide notice to the California Transportation Commission and the State Controller. The notice should include the reasons for the finding and evidence that the CMA correctly followed the procedures for making the determination.

The State Controller withholds the increased portions of the subventions from the gas tax made available by Streets and Highways Code 2105 (Statutes of 1990).

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CONTENT OF REGIONAL TRANSPORTATION PLAN (Added AB 471)

65081 (b) ...The (Regional Transportation Plan) action element shall include all congestion management programs adopted by the commission pursuant to Chapter 2.6 (commencing with Section 65088)

CONTENT OF REGIONAL TRANSPORTATION IMPROVEMENT PROGRAM (Added AB 471)

65082 (b) For purposes of the regional transportation improvement program submitted to the commission on December 1, 1991, and every two years thereafter, congestion management programs adopted pursuant to Section 65089 shall be incorporated into the regional transportation improvement program. Local projects not included in a congestion management program shall not be included in the regional transportation improvement program. Projects and programs adopted pursuant to subdivision (a) shall be consistent with the seven-year capital improvement program adopted pursuant to paragraph (5) of subdivision (b) of Section 65089, and the guidelines adopted pursuant to Section 14530.1.

LEGISLATIVE FINDINGS AND DECLARATIONS (Added AB 471)

65088. The Legislature finds and declares all of the following:

(a) Although California's economy is critically dependent upon transportation, its current transportation system relies primarily upon a street and highway system designed to accommodate far fewer vehicles than are currently using the system.

(b) California's transportation system is characterized by fragmented planning, both among jurisdictions involved and among the means of available transport.

(c) The lack of an integrated system and the increase in the number of vehicles are causing traffic congestion that each day results in 400,000 hours lost in traffic, 200 tons of pollutants released into the air we breathe, and three million one hundred thousand dollars (\$3,100,000) added costs to the motoring public.

(d) To keep California moving, all methods and means of transport between major destinations must be coordinated to connect our vital economic and population centers.

(e) In order to develop the California economy to its full potential, it is intended that federal, state, and local agencies join with transit districts, business, private and

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environmental interests to develop and implement comprehensive strategies needed to develop appropriate responses to transportation needs.

DEFINITIONS (Amended AB 1791)

65088.1 As used in this chapter the following terms have the following meanings:

(a) Unless the context requires otherwise, "regional agency" means the agency responsible for preparation of the regional transportation improvement program.

(b) Unless the context requires otherwise, "agency" means the agency responsible for the preparation and adoption of the congestion management program.

(c) "City" includes a city and county.

(d) "Commission" means the California Transportation Commission.

(e) "Department" means the Department of Transportation.

(f) "Urbanized area" has the same meaning as is defined in the 1990 federal census for urbanized areas of more than 50,000 population.

(g) "Interregional travel" means trips that have neither origin nor destination within the boundary of the congestion management program.

CONGESTION MANAGEMENT PROGRAM (Amended AB 1791)

65089. (a) A congestion management program shall be developed, adopted, and annually updated for every county that includes an urbanized area, and shall include every city and the county. The program shall be adopted at a noticed public hearing of the agency. The Program shall be developed in consultation with, and with the cooperation of, the transportation planning agency, regional transportation providers, local governments, the department, and the air pollution control district or the air quality management district, either by the county transportation commission, or by another public agency, as designated by resolutions adopted by the county board of supervisors and the city councils of a majority of the cities representing a majority of the population in the incorporated area of the county.

(b) The program shall contain all of the following elements:

(1) (A) Traffic level of service standards established for a system of highways and roadways designated by the agency. The system shall include at a minimum all state highways and principal arterials. No highway or roadway designated as a part of the system shall be removed from the system. All new state highways and principal arterials shall be

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designated as part of the system. Level of service (LOS) shall be measured by Circular 212, (or by the most recent version of the Highway Capacity Manual), or by a uniform methodology adopted by the agency which is consistent with the Highway Capacity Manual. The determination as to whether an alternative method is consistent with the Highway Capacity Manual shall be made by the regional agency, except that the department shall make this determination instead if either (i) the regional agency is also the agency, as those terms are defined in Section 65088.1, or (ii) the department is responsible for preparing the regional transportation improvement plan for the county.

(B) In no case shall the LOS standards established be below the level of service E or the current level, whichever is farthest from level of service A, except where a segment or intersection had been designated as deficient and a deficiency plan has been adopted pursuant to Section 65089.3.

(2) Standards established for the frequency and routing of public transit, and for the coordination of transit service provided by separate operators.

(3) A trip reduction and travel demand element that promotes alternative transportation methods, such as carpools, vanpools, transit, bicycles, and park-and-ride lots; improvements in the balance between jobs and housing; and other strategies, including flexible work hours and parking management programs.

(4) A program to analyze the impacts of land use decisions made by local jurisdictions on regional transportation systems, including an estimate of the costs associated with mitigating those impacts. In no case shall the program include an estimate of the costs of mitigating the impacts of interregional travel. The program shall provide credit for local public and private contributions to improvements to regional transportation systems. However, in the case of toll road facilities, credit shall only be allowed for local public and private contributions which are unreimbursed from toll revenues or other state or federal sources. The agency shall calculate the amount of the credit to be provided.

(5) A seven year capital improvement program to maintain or improve the traffic level of service and transit performance standards developed pursuant to paragraphs (1) and (2), and to mitigate regional transportation impacts identified pursuant to paragraph (4), which conforms to transportation-related vehicle emissions air quality mitigation measures.

(c) The agency, 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 and shall approve transportation computer models of specific areas within the county that will be used by local jurisdictions to determine the quantitative impacts of development on the circulation system that are based on the countywide model and standardized modeling assumptions and conventions. The computer models shall be

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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.

REGIONAL AGENCY REVIEW (Added AB 471)

Section 65089.2 (a) Congestion management programs shall be submitted to the regional agency. The regional agency shall evaluate the consistency between the program and the regional transportation plans required pursuant to Section 65080. In the case of multicounty regional agency, that agency shall evaluate the consistency and compatibility of the programs within the region.

(b) 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.

MONITORING OF CMP IMPLEMENTATION (Amended AB 1791)

65089.3 (a) The agency shall monitor the implementation of all elements of the congestion management program. Annually, the agency shall determine if the county and cities are conforming to the congestion management program, including, but not limited to, all of the following:

(1) Consistency with levels of service and performance standards, except as provided in subdivisions (b) and (c).

(2) Adoption and implementation of a trip reduction and travel demand ordinance.

(3) Adoption and implementation of a program to analyze the impacts of land use decisions, including the estimate of the costs associated with mitigating these impacts.

(b) (1) A city or county may designate individual deficient segments or intersections which do not meet the established level of service standards if, prior to the designation, at a noticed public hearing, the city or county has adopted a deficiency plan which shall include all of the following:

(A) An analysis of the causes of the deficiency.

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(B) A list of improvements necessary for the deficient segment or intersection to maintain the minimum level of service otherwise required and the estimated costs of the improvements.

(C) A list of improvements, programs, or actions, and estimates of costs, that will (i) measurably improve the level of service of the system, as defined in subdivision (b) of Section 65089, and (ii) contribute to significant improvements in air quality, such as improved public transit service and facilities, improved nonmotorized transportation facilities, high occupancy vehicle facilities, and transportation control measures. The air quality management district or the air pollution control district shall establish and periodically revise a list of approved improvements, programs, and actions which meet the scope of this paragraph. If an improvement, program, or action is on the approved list and has not yet been fully implemented, it shall be deemed to contribute to significant improvements in air quality. If an improvement, program, or action is not on the approved list, it shall not be implemented unless approved by the local air quality management district or air pollution control district.

(D) An action plan, consistent with the provisions of Chapter 5 (commencing with Section 66000) of Division 1 of Title 7, that shall be implemented, consisting of improvements identified in paragraph (B), or improvements, programs, or actions identified in paragraph (C), that are found by the agency to be in the interest of the public's health, safety and welfare. The action plan shall include a specific implementation schedule.

(2) A city or county shall forward its adopted deficiency plan to the agency. The agency shall hold a noticed public hearing within 60 days of receiving the deficiency plan. Following the hearing, the agency shall either accept or reject the deficiency plan in its entirety, but the agency may not modify the deficiency plan. If the agency rejects the plan, it shall notify the city or county of the reasons for that rejection.

(c) The agency, after consultation with the regional agency, the department, and the local air quality management district or air pollution control district, shall exclude from the determination of conformance with level of service standards, the impacts of any of the following:

- (1) Interregional travel.
- (2) Construction, rehabilitation, or maintenance of facilities that impact the system.
- (3) Freeway ramp metering.
- (4) Traffic signal coordination by the state or multijurisdictional agencies.
- (5) Traffic generated by the provision of low and very low income housing.

(d) For the purposes of this chapter, the impacts of a trip which originates in one county and which terminates in another county shall be included in the determination of

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conformance with level of service standards with respect to the originating county only. A roundtrip shall be considered to consist of two individual trips.

DETERMINATION OF NONCONFORMANCE (Amended AB 1791)

65089.4 (a) If, pursuant to the annual monitoring provided for in Section 65089.3, the agency determines, following a noticed public hearing, that a city or county is not conforming with the requirements of the congestion management program, the agency shall notify the city or county in writing of the specific areas of nonconformance. If, within 90 days of the receipt of the written notice of nonconformance, the city or county has not come into conformance with the congestion management program, the governing body of the agency shall make a finding of nonconformance and shall submit the finding to the commission and to the Controller.

(b) Upon receiving notice from the agency of nonconformance, the Controller shall withhold apportionments of funds required to be apportioned to that nonconforming city or county by Section 2105 of the Streets and Highways Code, until the Controller is notified by the agency that the city or county is in conformance.

RELATION OF CMP AND GENERAL PLAN CONFORMITY (Added AB 1791)

65089.5 Failure to complete or implement a congestion management program shall not give rise to a cause of action against a city or county for failing to conform with its general plan, unless the city or county incorporates the congestion management program into the transportation element of its general plan.

AFFECTED DEVELOPMENTS (Added AB 1791)

65089.6 A proposed development specified in a development agreement entered into prior to July 10, 1989, shall not be subject to any action taken to comply with this chapter, except actions required to be taken with respect the trip reduction and travel demand element of a congestion management program pursuant to paragraph (3) of subdivision (b) of Section 65089.

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TECHNICAL RESOURCES

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TMA Handbook, A Guide to Forming Transportation Management Associations. SCAG & Commuter Transportation Services, August 1989, P.64, 9 Appendices.

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Air Quality Attainment Plan	The plan for attainment of state air quality standards, as required by the California Clean Air Act of 1988. It is adopted by air quality districts and subject to approval by the State Air Resources Board.
Air Pollution Control District - (APCD)	A county agency which adopts and enforces regulations to achieve and maintain state and federal air quality standards. Some counties have joined to form regional Air Quality Management Districts.
Air Quality Management District - (AQMD)	A regional agency which adopts and enforces regulations to achieve and maintain state and federal air quality standards.
Average Daily Traffic - (ADT)	The average number of vehicles passing a specified point during a 24 hour period.
California State Department of Transportation - (Caltrans)	Responsible, as the owner/operator of the state highway system for its safe operation and maintenance. Proposes projects for Intercity Rail, Interregional Roads, and sound walls in the PSTIP. Also responsible for the HSOPP, Toll Bridge, and Aeronautics programs. The TSM and State/Local Partnership Programs are administered by Caltrans. Caltrans is the implementing agency for most state highway projects, regardless of program, and for the Intercity Rail program.
California Transportation Commission - (CTC)	A body appointed by the Governor and confirmed by the legislature that reviews Regional Transportation Improvement Programs (RTIPs) and the PSTIP. This qualifies the projects for state funding. The CTC also has financial oversight over the major programs authorized by Propositions 111 and 108.

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<p>Capital Improvement Program - (CIP)</p>	<p>As used in this handbook: A seven year program of projects to maintain or improve the traffic level of service and transit performance standards developed by the CMP, and to mitigate regional transportation impacts identified by the CMP Land Use Analysis Program, which conforms to transportation-related vehicle emissions air quality mitigation measures. See Appendix A, CGC 65089(b)(5).</p>
<p>Combined Road Program</p>	<p>A locally controlled program of federally funded projects on the defined Federal Aid Urban (FAU) and Federal Aid Secondary (FAS) systems. Also included are bridge replacement projects.</p>
<p>Council of Governments - (COG)</p>	<p>A voluntary consortium of local government representatives, from contiguous communities, meeting on a regular basis, and formed to cooperate on common planning and solve common development problems of their area. COGs can function as the RTPAs and MPOs in urbanized areas.</p>
<p>Congestion Management Agency - (CMA)</p>	<p>The agency responsible for developing the Congestion Management Program and coordinating and monitoring its implementation.</p>
<p>Congestion Management Program - (CMP)</p>	<p>A Legislatively required county-wide program which addresses congestion problems.</p>
<p>County Minimums</p>	<p>The minimum share of programming each county should receive. According to statute, 70% of the capital outlay funds must be expended in each county according to a formula based 75% on county population and 25% on state highway miles in the county. The county minimum is accounted for over a fixed five year period called a quinquennium.</p>
<p>Database</p>	<ol style="list-style-type: none"> 1. A collection of data from which information is derived and from which decisions can be made. 2. A non-redundant collection of data items that can be processed by one or more computer applications.

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Federal Aid Secondary - (FAS)	Roads eligible for federal aid that are considered to be of most significance within and between counties. These roads carry substantial regional and intercounty traffic as well as connecting the major populated places within each county.
Federal Aid Urban - (FAU)	Roads eligible for federal aid that are located in urbanized or designated urban areas and consist of arterial routes and collector routes which serve major centers of activity.
Federal Highway Administration - (FHWA)	A component of the U.S. Department of Transportation, established to ensure development of an effective national road and highway transportation system. It assists states in constructing highways and roads, and provides financial aid at the local level.
Flexible Congestion Relief Program - (FCR)	One of the state funding programs for local or regional transportation projects that will reduce congestion. State highway projects, local roads, and rail guideway projects are all eligible for FCR funds.
High Occupancy Vehicle Lane - (HOV)	A lane of freeway reserved for the use of vehicles with more than a preset number of occupants; such vehicles often include buses, taxis, and carpools.
Highway System Operation and Protection Plan - (HSOPP)	A program created by state legislation that includes projects related to state highway safety and rehabilitation, seismic safety, and traffic operational improvements. HSOPP is a four year program of projects adopted separately from the STIP.
Indirect Source Control Measure	The Federal Clean Air Act defines indirect source as "... a facility, building, structure, installation, real property, road, or highway which attracts, or may attract mobile sources of pollution." An indirect source control measure is a rule or ordinance established to reduce the mobile source emissions associated with specific activity centers such as those noted above.

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Interregional Road System Plan - (IRRS)	A series of interregional state highway routes, outside the urbanized areas, that provides access to, and links between, the state's economic centers, major recreational areas, and urban and rural regions. Streets and Highways Codes 164.10 through 164.20 list the roads included in the IRRS plan.
Level Of Service - (LOS)	A qualitative measure describing operational conditions within a traffic stream; generally described in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety.
Metropolitan Planning Organization - (MPO)	According to U.S. Code, the organization designated by the governor and local elected officials as responsible, together with the state, for transportation planning in an urbanized area. It serves as the forum for cooperative decision making by principal elected officials of general local government.
Model	<ol style="list-style-type: none"> 1. A mathematical or conceptual presentation of relationships and actions within a system. It is used for analysis of the system or its evaluation under various conditions. 2. A mathematical description of a real-life situation that uses data on past and present conditions to make a projection about the future.
Model - Aggregate Demand	A model calibrated by combining observations of travel by individuals into geographic or demographic units that are used to estimate new flows when service attributes or unit sizes change.
Model - Disaggregate Demand	A model that is calibrated by using the observations of travel choice behavior of individuals directly and is usually set up as a probabilistic model (the model's algorithm uses probabilities to predict travel).

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Model - Gravity	A mathematical trip distribution model that is based on the premise that the amount of travel between two zones is proportional to the amount of activity in each of the two zones and inversely proportional to the impedance to travel between the two zones. In other words, trips produced in any given area will distribute themselves in accordance with the accessibility of other areas and the opportunities.
Model - Land Use	A model used to predict the future spatial allocation of urban activities (land use), given total regional growth, the future transportation system, and other factors.
Model - Mode Choice	A model used to forecast the proportion of total person trips on each of the available transportation modes.
Model - Regional Growth	A model used to estimate land uses in a region.
Model - Traffic	A mathematical equation or graphic technique used to simulate traffic movements, particularly those in urban areas or on a freeway.
Peak - (Peak Period, Rush Hours)	<ol style="list-style-type: none">1. The period during which the maximum amount of travel occurs. It may be specified as the morning (a.m.) or afternoon or evening (p.m.) peak.2. The period when demand for transportation service is the heaviest.
Project Study Report - (PSR)	Chapter 878 of Statutes of 1987 requires that any capacity increasing project on the state highway system, prior to programming in the STIP, have a completed PSR. The PSR must include a detailed description of the project scope and estimated costs.

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<p>Proposed State Transportation Improvement Program - (PSTIP)</p>	<p>This seven-year program is based on the adopted STIP and the most recent Project Delivery Report. It is developed by Caltrans for CTC approval and includes projects developed through the IRRS, Intercity Rail, Sound Wall, Toll Bridge, and Aeronautics programs.</p>
<p>Public Transit (Mass Transit)</p>	<p>Passenger transportation service, usually local in scope, that is available to any person who pays a prescribed fare. It operates on established schedules along designated routes or lines with specific stops and is designed to move relatively large numbers of people at one time. Examples include bus, light rail, and rapid transit.</p>
<p>Public Transportation</p>	<p>Transportation service to the public on a regular basis using vehicles that transport more than one person for compensation, usually but not exclusively over a set route or routes from one fixed point to another. Routes and schedules may be determined through a cooperative arrangement. Subcategories include public transit service, and paratransit services that are available to the general public.</p>
<p>Regional Transportation Improvement Program - (RTIP)</p>	<p>A list of proposed transportation projects submitted to the CTC by the regional transportation planning agency, as a request for state funding through the FCR and Urban and Commuter Rail Programs. The individual projects are first proposed by local jurisdictions (CMAs in urbanized counties), then evaluated and prioritized by the RTPA for submission to the CTC. The RTIP has a seven year planning horizon, and is updated every two years.</p>
<p>Regional Transportation Plan - (RTP)</p>	<p>A comprehensive 20 year plan for the region, updated every two years by the regional transportation planning agency. The RTP includes goals, objectives, and policies, and recommends specific transportation improvements.</p>

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<p>Regional Transportation Planning Agency - (RTPA)</p>	<p>The agency responsible for the preparation of RTPs and RTIPs and designated by the State Business Transportation and Housing Agency to allocate transit funds. RTPAs can be local transportation commissions, COGs, MPOs, or statutorily created agencies.</p>
<p>Ridesharing</p>	<p>Two or more persons traveling by any mode, including but not limited to, carpooling, vanpooling, buspooling, taxipooling, jitney, and public transit.</p>
<p>Short Range Transit Plan - (SRTP)</p>	<p>A five year comprehensive plan required by UMTA for all transit operators receiving federal funds. The plans establish the operator's goals, policies, and objectives, analyze current and past performance, and describe short term operational and capital improvement plans.</p>
<p>State Implementation Plan - (SIP)</p>	<p>State plan required by the Federal Clean Air Act of 1990 to attain and maintain national ambient air quality standards. It is adopted by local air quality districts and the State Air Resources Board.</p>
<p>State Transportation Improvement Program - (STIP)</p>	<p>A list of transportation projects, proposed in RTIPs and the PSTIP, which are approved for funding by the CTC.</p>
<p>Transportation Control Measure - (TCM)</p>	<p>A measure intended to reduce pollutant emissions from motor vehicles. Examples of TCMs include programs to encourage ridesharing or public transit usage, city or county trip reduction ordinances, and the use of cleaner burning fuels in motor vehicles.</p>
<p>Transportation Demand Management - (TDM)</p>	<p>Demand based techniques for reducing traffic congestion, such as ridesharing programs and flexible work schedules enabling employees to commute to and from work outside of peak hours.</p>

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<p>Transportation System Management - (TSM)</p>	<p>That part of the urban transportation planning process undertaken to improve the efficiency of the existing transportation system. The intent is to make better use of the existing transportation system by using short-term, low-capital transportation improvements that generally cost less and can be implemented more quickly than system development actions.</p>
<p>Traffic Systems Management Program - (TSM Program or TSM Funds)</p>	<p>A state-wide program intended to provide for effective traffic management systems in major urbanized areas. To be eligible for TSM Program funding, projects must be designed to increase the number of person-trips which can be carried on the highway system in a peak period without significantly increasing the designed capacity of the highway system. Projects are selected by the CTC from a list of projects developed by Caltrans. Projects may be proposed by Caltrans or by local public agencies through the CMP.</p>
<p>Vehicle Miles of Travel - (VMT)</p>	<p>1. On highways, a measurement of the total miles traveled in all vehicles in the area for a specified time period. It is calculated by the number of vehicles multiplied by the miles traveled in a given area or on a given highway during the time period. 2. In transit, the number of vehicle miles operated on a given route or line or network during a specified time period.</p>
<p>Vehicle Occupancy</p>	<p>The number of people aboard a vehicle at a given time; also known as auto or automobile occupancy when the reference is to automobile travel only.</p>
<p>Vehicle Trip</p>	<p>A one-way movement of a vehicle between two points.</p>
<p>United States Department of Transportation - (U.S. DOT)</p>	<p>The cabinet level federal agency responsible for the planning, safety, and system and technology development of nation transportation, including highways, mass transit, aircraft, and ports.</p>

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Urban Mass Transportation Administration - (UMTA)	A component of the U.S. Department of Transportation, delegated by the Secretary of Transportation to administer the federal transit program under the Urban Mass Transportation Act of 1964, as amended, and various other statutes.
Urbanized Area	As defined by the Bureau of the Census, a population concentration of at least 50,000 inhabitants, generally consisting of a central city and the surrounding, closely settled, contiguous territory (suburbs). The boundary is based primarily on a population density of 1000 people/mile ² but also includes some less densely settled areas, as well as such areas as industrial parks and railroad yards, if they are within areas of dense urban development. The boundaries of urbanized areas, the specific criteria used to determine urbanized areas, or both may change in subsequent censuses.
Urban and Commuter Rail Program	A state funding program financed by the sales of bonds authorized by Proposition 108 (1990). Projects are proposed to RTPAs through the CMP process. RTPAs may then include them in their RTIPs.
Urban Transportation Planning System - (UTPS)	A tool for multimodal transportation planning developed by the Urban Mass Transportation Administration and the Federal Highway Administration. It is used for both long and short-range planning, particularly system analysis and covers both computerized and manual planning methods. UTPS consists of computer programs, attendant documentation, user guides, and manuals that cover one or more of five analytical categories: highway network analysis, transit network analysis, demand estimation, data capture and manipulation, and sketch planning.

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APPENDIX D

CALIFORNIA CLEAN AIR ACT SECTIONS RELATED TO TRANSPORTATION AND INDIRECT SOURCE CONTROL

Legislative intent is expressed in Section 1(b)(5) of the California Clean Air Act:

(5) That in order to ensure the future health and welfare of the people of the State of California, and the state's environment and economy, are protected despite lack of action or direction from the federal government, it is necessary for the State of California to develop and implement its own program to attain air quality standards through the application of best available control technology and operating methods, improved motor vehicle maintenance and inspection, control of indirect and areawide sources of emissions, the required use of cleaner burning fuels, the implementation of stricter new vehicle emission standards and warranty requirements, the design and implementation of transportation control and vehicle fleet management measures, and the incorporation of air quality considerations into local land use planning decisions.

Legislative intent is also expressed in Health and Safety Code Section 40910:

40910. It is the intent of the Legislature in enacting this chapter that districts shall endeavor to achieve and maintain state ambient air quality standards for ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide by the earliest practicable date. In developing attainment plans and regulations to achieve this objective, districts shall consider the full spectrum of emission sources and focus particular attention on reducing the emissions from transportation and areawide emission sources. Districts shall also consider the cost effectiveness of their air quality programs, rules, regulations, and enforcement practices in addition to other relevant factors, and shall strive to achieve the most efficient methods of air pollution control. However, priority shall be placed upon expeditious progress toward the goal of healthful air.

Indirect sources of pollution are addressed under Health and Safety Code Section 40716:

40716. (a) In carrying out its responsibilities pursuant to this division with respect to the attainment of state ambient air quality standards, a district may adopt and implement regulations to accomplish both of the following:

- (1) Reduce or mitigate emissions from indirect and areawide sources of air pollution.
- (2) Encourage or require the use of ridesharing, vanpooling, flexible work hours, or other measures which reduce the number or length of vehicle trips.

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(b) Nothing in this section constitutes and infringement on the existing authority of counties and cities to plan or control land use, and nothing in this section provides or transfers new authority over such land use to a district.

Health and Safety Code Section 40717 specifies air district responsibility to implement TCMs, and the provisions under which this responsibility may be delegated:

40717. (a) A district shall adopt, implement, and enforce transportation control measures for the attainment of state or federal ambient air quality standards to the extent necessary to comply with Section 40918, 40919, or 40920.

[Subsection (b) specifies the provisions for joint TCM plan development by a district and a council of governments or regional transportation planning agency.]

[Subsections (c) and (d) apply provisions specific to Sacramento and San Diego.]

(e) A district may delegate any function with respect to implementation of transportation control measures to any local agency, if all of the following conditions are met:

(1) The local agency submits to the district an implementation plan which provides adequate resources to adopt and enforce the measures, and the district approves the plan.

(2) The local agency adopts and implements measures at least as stringent as those in the district plan.

(3) The district adopts procedures to review the performance of the local agency in implementing the measures to ensure compliance with the district plan.

(f) A district may revoke an authority granted under this section if it determines that the performance of the local agency is in violation of this section or otherwise inadequate to implement the district plan.

(g) For purposes of this section, "transportation control measures" means any strategy to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions.

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CALIFORNIA CLEAN AIR ACT SECTIONS RELATED TO TRANSPORTATION AND INDIRECT SOURCE CONTROL

Air quality attainment plan requirements for moderate areas:

40918. (a) Each district with moderate air pollution shall, to the extent necessary to meet the requirements of the plan developed pursuant to Section 40913, include the following measures in its attainment plan:

(1) A permitting program designed to achieve no net increase in emissions of nonattainment pollutants or their precursors from new or modified stationary sources which emit or have the potential to emit 25 tons per year or more of nonattainment pollutants or their precursors.

(2) Reasonably available control technology for all existing sources.

(3) Reasonably available transportation control measures.

(4) Provisions to develop area source and indirect source control programs.

(5) Provisions to develop and maintain an emissions inventory system to enable analysis and progress reporting and a commitment to develop other analytical techniques to carry out its responsibilities pursuant to subdivision (b) of Section 40924.

(6) Provisions for public education programs to promote actions to reduce emissions from transportation and areawide sources.

(b) A district's air pollution is moderate if the state board finds and determines that the district can attain and maintain the applicable state standard by not later than December 31, 1994.

Air quality attainment plan requirements for serious areas:

40919. (a) Each district with serious air pollution shall, to the extent necessary to meet the requirements of the plan adopted pursuant to Section 40913, include the following measures in its attainment plan:

(1) All measures required for moderate nonattainment areas, as specified in Section 40918.

(2) A permitting program designed to achieve no net increase in emissions of nonattainment pollutants or their precursors from all permitted new or modified stationary sources.

(3) Transportation control measures to substantially reduce the rate of increase in passenger vehicle trips and miles traveled per trip.

(4) A requirement for the application of the best available retrofit control technology, as defined in Section 40406, to existing stationary sources.

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**CALIFORNIA CLEAN AIR ACT SECTIONS RELATED TO
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(b) A district's air pollution is serious if the state board finds and determines that the district cannot attain and maintain the applicable state standard until after December 31, 1994, but can attain and maintain the standard by not later than December 31, 1997.

Air quality attainment plan requirements for severe areas:

40920. (a) Each district with severe air pollution shall, to the extent necessary to meet the requirements of Section 40913, include the following measures in its attainment plan:

(1) All measures required for moderate and serious nonattainment areas, as specified in Sections 40918 and 40919.

(2) Transportation control measures to achieve an average during weekday commute hours of 1.5 or more persons per passenger vehicle by 1999, and no net increase in vehicle emissions after 1997.

(3) Measures to achieve the use of a significant number of low- emission motor vehicles by operators of motor vehicle fleets.

(4) Measures sufficient to reduce overall population exposure to ambient pollutant levels in excess of the standard by at least 25 percent by December 31, 1994, 40 percent by December 31, 1997, and 50 percent by December 31, 2000, based on average per capita exposure and the severity of the exceedances, so as to minimize health impacts, using the average level of exposure experienced during 1986 through 1988 as the baseline.

(b) A district's air pollution is severe if the state board finds and determines that the district cannot attain and maintain the applicable state standard until after December 31, 1997, or is unable to identify an attainment date.

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**LEGISLATIVE COUNSEL OPINION REGARDING
FUNDING OF CONGESTION MANAGEMENT PROGRAMS**

Sacramento, California
November 3, 1990

Honorable Richard Katz
3146 State Capitol

Congestion Management Programs: Funding - #23161

Dear Mr. Katz:

QUESTION NO. 1

May a county use revenues allocated to it pursuant to Section 2105 of the Streets and Highways Code for the preparation of a congestion management program?

OPINION AND ANALYSIS NO. 1

"Chapter 2.6 (commencing with Section 65088) of Division 1 of Title 7 of the Government Code requires the adoption of a congestion management program for each county. In this connection, Section 65089 of the Government Code, which is a part of that Chapter 2.6, reads as follows:

65089. (a) A congestion management program shall be developed, adopted, and annually updated for every county that includes an urbanized area, and shall include every city and the county. The program shall be adopted at a noticed public hearing of the agency. The Program shall be developed in consultation with, and with the cooperation of, the transportation planning agency, regional transportation providers, local governments, the department [Department of Transportation (subd. (e), Sec. 65088, Gov. C.)], and the air pollution control district or the air quality management district, either by the county transportation commission, or by another public agency, as designated by resolutions adopted by the county board of supervisors and the city councils of a majority of the cities representing a majority of the population in the incorporated area of the county.

(b) The program shall contain all of the following elements:

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(1) (A) Traffic level of service standards established for a system of highways and roadways designated by the agency. The system shall include at a minimum all state highways and principal arterials. No highway or roadway designated as a part of the system shall be removed from the system. All new state highways and principal arterials shall be designated as part of the system. Level of service (LOS) shall be measured by Circular 212, (or by the most recent version of the Highway Capacity Manual), or by a uniform methodology adopted by the agency which is consistent with the Highway Capacity Manual. The determination as to whether an alternative method is consistent with the Highway Capacity Manual shall be made by the regional agency, except that the department shall make this determination instead if either (i) the regional agency is also the agency, as those terms are defined in Section 65088.1, or (ii) the department is responsible for preparing the regional transportation improvement plan for the county.

(B) In no case shall the LOS standards established be below the level of service E or the current level, whichever is farthest from level of service A, except where a segment or intersection had been designated as deficient and a deficiency plan has been adopted pursuant to Section 65089.3.

(2) Standards established for the frequency and routing of public transit, and for the coordination of transit service provided by separate operators.

(3) A trip reduction and travel demand element that promotes alternative transportation methods, such as carpools, vanpools, transit, bicycles, and park-and-ride lots; improvements in the balance between jobs and housing; and other strategies, including flexible work hours and parking management programs.

(4) A program to analyze the impacts of land use decisions made by local jurisdictions on regional transportation systems, including an estimate of the costs associated with mitigating those impacts. In no case shall the program include an estimate of the costs of mitigating the impacts of interregional travel. The program shall provide credit for local public and private contributions to improvements to regional transportation systems. However, in the case of toll road facilities, credit shall only be allowed for local public and private contributions which are unreimbursed from toll revenues or other state or federal sources. The agency shall calculate the amount of the credit to be provided.

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(5) A seven year capital improvement program to maintain or improve the traffic level of service and transit performance standards developed pursuant to paragraphs (1) and (2), and to mitigate regional transportation impacts identified pursuant to paragraph (4), which conforms to transportation-related vehicle emissions air quality mitigation measures.

(c) The agency, 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 and shall approve transportation computer models of specific areas within the county that will be used by local jurisdictions to determine the quantitative impacts of development on the circulation system that are based on the countywide model and standardized modeling assumptions and conventions. 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."

As can be seen, the elements of the program include matters which relate not only to highway capacity and congestion but also to alternatives to highway transportation, including land use considerations.

The tax imposed on motor vehicle fuel under the Motor Vehicle Fuel License Tax Law (Pt. 2 (commencing with Sec. 7301), Div. 2, R.& T.C., known as the "gas tax") and the Use Fuel Tax Law (Pt. 3 (commencing with Sec.8601), Div. 2, R.& T.C., known as the "diesel tax") was increased from 9 cents to 14 cents per gallon, effective August 1, 1990, to be followed by additional one cent increases each January 1 thereafter until the rate becomes 18 cents per gallon on January 1, 1994 (Secs. 7351 and 8651, R.& T.C., as added by Chs. 105 and 106, Stats. 1989, respectively, and amended by Ch. 627, Stats. 1990). Section 2105 of the Streets and Highways Code requires that 23 percent of the revenues from the tax so imposed which exceeds the rate of 9 cents per gallon be allocated to counties and cities equally pursuant to an apportionment formula.

Under Article XIX of the California Constitution (hereafter Article XIX), revenues from the state-imposed gas tax and diesel tax may only be expended for the research, planning, construction, improvement, maintenance, and operation of public streets

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and highways (including related public facilities for nonmotorized traffic) and for the acquisition of property and administrative costs therefor, and for the mitigation of public street and highway environmental effects (subd. (a), Sec. 1, Art. XIX; Secs. 7351, 8351, 8352, 8353, 8651, 9301, and 9303, R.& T.C.; Sec. 2101, S.& H.C.; see Kizziah v. Department of Transportation, 121 Cal. App. 3d 11, 16).

The gas tax and diesel tax revenues may also be used for similar purposes for exclusive public mass transit guideways, and related fixed facilities, except for the maintenance and operation of mass transit power systems and mass transit passenger facilities, vehicles, equipment, and services (subd. (b), Sec. 1, Art. XIX; Sec. 2101, S.& H.C.). However, before the highway revenues may be used for guideway purposes, except for research and planning on guideways, in any area, a proposition authorizing that use of the highway revenues must be approved by a majority of the votes cast on the proposition in the area (Sec. 4, Art. XIX; Secs. 199 and 2101, S.& H.C.).

As indicated above, a congestion management program is required to consist of five elements (subd. (b), Sec. 65089, Gov. C.). Under Article XIX, the validity of the expenditure of gas tax and diesel tax revenues on any element of a congestion management program in the preparation of the program would depend on the purpose of that element.

The first element requires the establishment of traffic level of service standards for specific land use intensities in accordance with Circular 212 of the Highway Capacity Manual. This element is related to both the planning and operation of streets and highways within the meaning of Article XIX, and therefore the expenditure by a county of its gas tax and diesel tax apportionments for purposes of this element is valid.

The second element requires the establishment of standards for the frequency, routing, and coordination of transit service. This element involves the operation of transit systems. Expenditures of gas tax and diesel tax revenues for these purposes are not valid under Article XIX.

The third element involves a decrease in highway usage through the promotion of transportation methods which are alternatives to transportation by privately owned vehicles, including carpools, vanpools, transit bicycles, and park-and-ride lots; improvements in the balance between jobs and housing; and other strategies such as flexible work hours and parking management programs. Since the activities of this element are not

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authorized highway purposes for which gas tax and diesel tax revenues may be expended under Article XIX, it is not valid to use those tax revenues for purposes of this element.

The fourth element requires an analysis of the impacts of local land use decisions on regional transportation systems, including the costs of mitigating those impacts. This element relates to regional transportation systems and, thus, would include more than the planning, construction, and operation of streets and highways and exclusive public mass transit guideways. However, the study of the impact of land use decisions (for example, decisions which will lead to the establishment of new shopping centers and centers of employment), on regional transportation systems will directly affect the future needs, within the area covered by the congestion management program, for highways and exclusive public mass transit guideways. Thus, this element is related to the planning of future highways and exclusive mass transit guideways, and the expenditure of gas tax and diesel tax revenues for these purposes is valid under Article XIX.

The last element requires the development of a seven-year capital improvement program to maintain or improve traffic level of service and transit performance standards developed under the first and second elements of the program and to mitigate the transportation impacts identified in the study conducted under the fourth element. However, without a specific capital improvement program to consider under this element, it is not possible to render a categorical opinion of the extent to which that program conforms to Article XIX for purposes of the expenditure of gas tax and diesel tax revenues to carry out this element. To the extent that a capital improvement program under this element would include the construction of streets and highways and exclusive public mass transit guideways, the use of gas tax and diesel tax revenues for purposes of this element to that extent is valid.

QUESTION NO. 2

May a county use the increase in sales tax revenues resulting from the increase in the gas tax and diesel tax on and after August 1, 1990, for the preparation of a congestion management program?

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OPINION NO. 2

A county may use the increase in the 1 percent portion of sales tax revenues resulting from the increase in the gas tax and diesel tax on and after August 1, 1990, for the preparation of a congestion management program.

ANALYSIS NO. 2

The state sales and use tax is imposed pursuant to the Sales and Use Tax Law (Pt. 1 (commencing with Sec. 6001), Div. 2, R.& T.C.). The sales tax is imposed on a retailer's gross receipts (Sec. 6051, R.& T.C.). Under the Bradley-Burns Uniform Local Sales and Use Tax Law (Pt. 1.5 (commencing with Sec. 7200), Div. 2, R.& T.C.), a county may impose a similar tax upon every retailer in the county at the rate of not more than 1 1/4 percent of the retailers gross receipts, with provision for a retailer within a city to deduct the amount of sales tax revenues, which is derived from the city imposing a sales tax at a rate not to exceed 1 percent, that is paid to the city pursuant to a city sales and use tax ordinance (subd. (a), Sec. 7202, R.& T.C.).

If the county imposes a tax at the 1 1/4 percent rate, the revenues derived from the 1/4 percent portion is required to be deposited in the county's local transportation fund (Sec. 29530, Gov. C.; Sec. 99206, P.U.C.), and the revenues may be expended only for specified transportation purposes pursuant to the Mills-Alquist-Deddeh Act (Ch. 4 (commencing with Sec. 99200), Pt. 11, Div. 10, P.U.C.; Sec 99233 and following, P.U.C.). Except for the restrictions imposed on the use of this 1/4 percent portion of the county's sales and use tax revenues, the revenues from the remaining 1 percent portion may be used for any county purpose.

As stated, the sales tax is imposed on the gross receipts of a retailer. In the case of a retailer of gas or diesel fuel, those gross receipts include the gas tax and diesel tax (see Sec. 6012, R.& T.C.). As a result of the increase in the gas tax and diesel tax from 9 cents to 14 cents per gallon effective August 1, 1990, and the four additional one cent increases to be imposed, sales tax revenues to the county will be increased by the amount of 1 percent of those increases for each gallon of gas and diesel fuel sold in the unincorporated areas of the county. The amount of this increase will be a new source of general fund revenues for the county.

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Thus, we conclude that the county may sue the increase in the 1 percent portion of sales tax revenues resulting from the increase in the gas tax and diesel tax on and after August 1, 1990, for the preparation of a congestion management program.

Very truly yours,

Bion M. Gregory
Legislative Counsel

(Original Signed By)
John Fossette
Deputy Legal Counsel

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