

The ARB assumes that by 2010, locomotive fleets in the SCAB will be required to emit on average no more than the EPA-established 2005 emission level for new locomotives. This compliance requirement would be met by the use of only the cleanest engines within the SCAB non-attainment area by an aggressive phase-in of these engines over five years. It would lead to an overall emission reduction of 67 percent by 2010. The ARB would consider operational controls, such as reduced idling and use of California diesel fuel, if, based on the EPA final rule, additional emission reductions are needed.

The construction of the Alameda Consolidated Transportation Corridor is expected to provide sufficient rail capacity to eliminate the need for trains to idle on tracks near neighborhoods. In the meantime, Union Pacific has agreed to shut down the cars that are waiting for space at the port. Although the trains won't be idling, it can take up to three hours for a train to power up to the point of having sufficient pressure in the air brake system.

A 1992 agreement among the Port of Los Angeles, the Port of Long Beach, the City of Long Beach and the Union Pacific Railroad Company set forth a number of improvements in a Rail Line Improvements Package to be completed by each of the parties to allow for and mitigate the impact of increased rail activity during the interim period prior to the construction of the Alameda Corridor. The improvements included the installation of welded rail along all of Union Pacific's main track within Long Beach to reduce noise, the construction of fencing and soundwalls, and grade separations including one at South Street.

Trucks which serve the ports, the west side industrial area, and other businesses in the greater Long Beach area, emit pollutants which can impact Long Beach residents. The impact of light-, medium-, and heavy-duty trucks on the city is aggravated by the fact that Long Beach is bounded and transected by five freeways: the 710, the 405, the 91, the 47 and the 605.

The ARB and the EPA have primary authority to control mobile source emissions. The Draft 1997 AQMP notes that the ARB proposes to apply emission control technology to gasoline powered engines on heavy-duty vehicles, specifically, the utilization of three-way catalytic converters, to reduce Nox and VOC emissions. This technology is already well established for light-duty vehicles. For diesel-powered heavy-duty vehicles, ARB is proposing a combination of strategies, including the adoption of more stringent Nox emission standards post-2002, as well as EPA adoption of correspondingly stringent nationwide standards for post-2004. EPA action in this area is particularly important since a significant amount of diesel-fueled heavy-duty trucks operating in California are powered with federally certified engines.

Storage and Handling

The Ports of Los Angeles and Long Beach are among the largest in the world, and process a great variety of shipments. Some of the products which are stored at the Ports prior to being shipped are sources of particulate pollution. Of special concern are the storage piles of petroleum coke and coal. The coke storage facility at the Port of Long Beach is an enclosed shed. The source of the product is local refineries, and it is transported to the Port of Long Beach via covered trucks. The storage shed utilizes an underground conveyor system to transport the coke to the ship loader and the telescoping arm which dumps the product into the ships hold.

The proposed LAXT Pier 300 terminal at the Port of Los Angeles will be a much larger facility. Since the petroleum coke will be stored outdoors, control measures were agreed to as a result of the challenge to the EIR, combined with a comprehensive monitoring system to ensure that no visible fugitive dust from the project shall enter into the City of Long Beach.

Downtown Marina - Particulate Impact Study

The Port of Long Beach contracted Radian Incorporated, an environmental consultant, to determine the composition of the particulate matter in the Downtown Marina, convention center, and at the Alamitos Bay Marina. The "Marina Fallout Study" used deposition plates to identify the composition and, by inference, the general sources of particulates in the range of 15 to 59 microns in size. The results of the study indicate 59% of the particulates were the result of road dust, 21% the result of Petroleum Coke dust, and 16% rubber tire dust. Oil soot from boilers on steamships resulted in 3% of the particulates, and biological materials made up 1% of the total. Coal particulates were not found in significant amounts. This compares with a recent study completed by the AQMD, that determined that 55% of the particulates are from road dust, 15% from petroleum coke, and 30% from other (undetermined) sources.

The size and the weight of the particles were such that they could have been carried from either the Port of Long Beach or the Port of Los Angeles to the subject sites, under most wind conditions. Surprisingly, the Alamitos Bay Marina experienced similar particulate conditions as the downtown Marina. The composition of the material tested at the Downtown Marina and other locations suggested that the greatest source of particulate matter is transportation, specifically roadway dust, rubber tire particles, steamship and other ship emissions, and the transportation of particulate based products.

Potential mitigation measures are identified in the study, including:

- Require regular inspection and maintenance of truck beds and seals to eliminate leakage;

- Increase the use of wheel washers at loading sites to decrease dust on the tires;
- Increase the street sweeping frequency on roads carrying coke trucks;
- Require trucks hauling coke to be covered;
- Cover any open portions of the conveyor systems and transition points;
- Clean highway spills of coke promptly;
- Cover all open piles of coke and coal (one coke pile in the Port of Long Beach, although enclosed by walls, has no roof, and all of the Port of Los Angeles piles are open);
- Lower speed limits in the vicinity of the Downtown Marina, particularly on Shoreline Drive, to reduce tire wear;
- Require radial tires, which wear more slowly, to reduce the quality of tire particles emitted (most tires today are already of radial construction);
- Spray more water while loading material onto piles or distribution piles;
- Provide high-pressure washing equipment to the boat owners in the Downtown Marina, so they can more effectively remove accumulated particle matter;
- Require steamships to conduct soot-blowing operations outside the harbor breakwater, which should reduce the fallout impacts on the Marina; and
- Require steamships to adequately preheat fuel prior to lighting their boilers, since inadequately heated fuel burns poorly and can result in fallout episodes.

The report recognizes that many of these abatement recommendations involve substantial administrative adjustments and/or economic impacts. The Tidelands and Harbor Committee of the City Council requested that the Port of Long Beach return with a plan to address the implementation of the mitigation measures cited in the Radian report.

Other City Departments

The City's Southeast Resource Recovery Facility, a refuse incinerator, reduces vehicle miles travelled to landfills at the urban periphery. The City's curbside recycling program also reduces vehicle miles travelled for the purpose of bringing household recyclables to collection centers.

Telecommuting

Los Angeles County has more companies with telecommuting programs than any other county in the country. While eighty-five percent of telecommuters work from their homes, the remainder use "telecenters" offering cubicles and private offices equipped with computers, fax machines, photocopiers, and other workplace amenities. The City has invested in the Long Beach Telebusiness Center, a telecommuting center with office space available to businesses who have employees located in the greater Long Beach area who would benefit from a reduced commute. The center is fully leased with ten private offices and thirty work stations, teleconferencing, and video capabilities. The space is fully furnished and is staffed with administrative support personnel. The City of Long Beach instituted its own employee telecommuting program in 1992.

GOALS AND POLICIES

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Principles

The following principles are included to provide overall direction to the goals, policies, and programs of this Element.

1. Achieve air quality improvements in such a manner that sustains current economic development while encouraging future growth.
2. Improve the quality of life for our citizens by providing greater opportunities, convenience, and choices.
3. Reinforce local mobility goals by reducing peak-hour traffic congestion.
4. Foster behavior change through public information and education, incentives and pricing that reflects total societal costs for administration and enforcement.

GOALS, POLICIES AND ACTIONS

The *Air Quality Element* is divided into seven topical areas: 1) Government Organization, Roles and Responsibilities; 2) Ground Transportation; 3) Air Transportation; 4) Land Use; 5) Particulate Emission; 6) Energy Conservation and 7) Education. A general goal statement for each topic expresses the general, long-range condition toward which effort is being directed. Each goal is reinforced by a series of policies that provide guidance for decision-making that will advance the goal.

Topic 1: Governmental Organization, Roles, and Responsibilities

Goal 1.0 Effective coordination of air quality improvement efforts in the South Coast Air Basin, the Southeast Los Angeles County (SELAC) subregion of SCAG, and other agencies.

Intent: Federal and state legislation require a plan for achieving air quality targets in the South Coast Air Basin. That plan establishes local government requirements for reducing pollutants to specified levels. Since air pollutants do not respect political boundaries and the policies of each community may affect others, coordination is essential. That is why strategies to improve air quality must be coordinated at all levels: federal, state, regional, and local. In responding to these mandates, Long Beach feels it is imperative to seek the most cost-effective methods of reducing pollutants, balancing air quality, economic vitality, and mobility.

Policy 1.1 *Establish a Coordinated Approach*

Coordinate with other jurisdictions in the Air Basin a continuation of the consortium to establish air quality plans and implementation programs where practical.

Actions:

- 1.1.1 Participate with the SELAC Consortium and other local governments in seeking state and federal legislation that would expand sources of funding for energy conservation technology and programs.
- 1.1.2 Participate with other local governments, state officials, and federal representatives as necessary to seek state and federal legislation expanding sources of funding for programs that result in reduced emissions, monitor emissions and their health effects, and promote efficient land use patterns and transportation demand management.
- 1.1.3 Explore the feasibility of a consortium process to integrate the development, implementation, monitoring, verification of cost-effectiveness, and reporting of related programs.
- 1.1.4 Continue to support SCAG and AQMD efforts that facilitate a coordinated approach to air quality implementation actions taken by local governments, and which advocate the availability of funding in proportion to the mandated requirements placed on local governments to reduce pollutant emissions. (*Regional Comprehensive Plan & Guidelines, or RCP & G*)
- 1.1.5 Participate with SCAG in the consensus processes regarding changes in technical assumptions (such as updating emission factors) through SCAG's Transportation Conformity Working Group and the Modeling Task Force. (*RCP & G*)
- 1.1.6 Continue to support implementation of the Alameda Corridor to minimize truck trips and facilitate goods movements.

Policy 1.2 *Encourage Community Participation*

Involve environmental groups, the business community, special interests and the general public in the formulation and implementation of programs that effectively reduce airborne pollutants.

Actions:

- 1.2.1 Design and implement efforts to involve the public and affected/interested parties in the adoption of local air quality plans, and to utilize the expertise of identifiable groups to assist in the implementation of air quality improvement programs through:
- Conducting local forums
 - Making written briefs available locally
 - Conducting City Council/Planning Commission public workshops
 - Employing a variety of media forms to maximize citizen involvement
- 1.2.2 Continue the efforts of local and state elected officials in the pursuit of needed air quality monitoring, changes in state and federal legislation, and the co-operative quest for solutions to local air quality problems.

Topic 2: Ground Transportation

Goal 2 A diverse and efficient ground transportation system that minimizes air pollutant emissions.

Intent: Both stationary and mobile sources generate air pollutants. In the South Coast Air Basin, vehicles and mobile equipment powered by the internal combustion engine contribute more pollutants than any other single source. The mode of travel offering the greatest potential for pollutant reduction is the single occupant automobile. The intent of the Ground Transportation Goals is therefore to reduce the number of vehicle trips, reduce the vehicle miles traveled, increase the number of persons per vehicle, and convert to alternative fuels wherever possible. These efforts can best be accomplished through modes of travel other than the single occupant automobile, beginning with those that are practical now and leading to more effective modes as soon as they become cost-effective.

Subtopic 2.1 Auto Use

Policy 2.1.1 Reduce Vehicle Trips

Use incentives, regulations, and transportation demand management techniques, in cooperation with other jurisdictions in the South Coast Air Basin to eliminate vehicle trips that would otherwise occur.

Actions:

- 2.1.1.1 Establish and implement Transportation Demand Management Programs as they become economically feasible.
- 2.1.1.2 Promote the formation of transportation management associations to assist employers in achieving the goal of a twenty percent reduction in peak-hour automobiles by the year 2010.
- 2.1.1.3 Participate with and influence the County transportation commissions and applicable local governments to expeditiously expand bus, rail, and other forms of transit along major transportation corridors in Southeast Los Angeles County that provide connections between: residential areas; regional employment and commercial centers; special activity centers such as airports; public/quasi-public centers, such as health care facilities; and major recreation areas.

Policy 2.1.2 Reduce Vehicle Miles Traveled

Use incentives, regulations, and transportation demand management in cooperation with other jurisdictions in the South Coast Air Basin, to reduce vehicle miles traveled.

Actions:

- 2.1.2.1 Encourage the use of telecommuting and/or teleconferencing systems by business employers where operational costs are acceptable.
- 2.1.2.2 Promote trip reduction programs, such as carpool incentives, vanpools, telecommuting, and free transit passes, among City employees to set an example for private employers.
- 2.1.2.3 Promote the creation of, and develop incentives for, sector committees consisting of local establishments providing consumer services and goods (e.g., utilities, grocery stores, educational, health, and hospitality facilities) to offer and distribute those services and goods in a manner that will reduce overall automobile travel.
- 2.1.2.4 Establish programs and incentives for the provision of shuttle and delivery services where market demand and cost effectiveness can be demonstrated.

- 2.1.2.5 Encourage City employee participation in the Telework Facilities Exchange Program, sponsored by the League of California Cities, Institute of Self Government.
- 2.1.2.6 Add transportation demand management considerations to the criteria for Site Plan Review, including a parking space reduction incentive for the provision of employee bicycle parking and shower/locker rooms, and other incentives.
- 2.1.2.7 Regularly update the City's "Home Page" on the World Wide Web, and use other features of the Internet to provide information about City programs and, eventually, allow for an interactive environment with customers for applications and requests for information.

Policy 2.1.3

Increase cost-effectiveness of transportation and parking systems.

Make cost-effective improvements to the transportation and parking systems that will reduce traffic congestion and resulting emissions.

Actions:

- 2.1.3.1 Apply system management techniques specified in the City's *Transportation Element*, such as traffic signal synchronization or computerization, parking prohibitions, left-hand turn pockets, and recessed bus bays where appropriate to optimize existing capacity on regional corridors, and major and minor arterials.
- 2.1.3.2 Apply parking policies specified in the *Transportation Element* that facilitate vehicular flow on regional corridors, major, and minor arterials.
- 2.1.3.3 Promote the development of on-dock inter-modal rail yards by the Port of Long Beach, and the development of the Consolidated Transportation Corridor ("Alameda Corridor") to facilitate goods movement, and to mitigate adverse impacts of truck and train traffic.
- 2.1.3.4 Increase enforcement of existing no-stopping restrictions to eliminate curbside truck deliveries on heavily traveled streets during peak hours.
- 2.1.3.5 Consider options for establishing off-peak hour truck delivery schedules, working in conjunction with trucking and delivery firms.

- 2.1.3.6 Invest in capital improvements intended to eliminate traffic bottlenecks, such as grade separations, street widenings, intersection improvements, and new or realigned roadways.
- 2.1.3.7 Participate with other local governments in seeking state and federal legislation that would continue to expand sources of funding for transportation demand management strategies and comprehensive transportation system improvements.

Subtopic 2.2 Congestion Management

Policy 2.2.1 Modify Work Schedules

Promote and establish modified work schedules that reduce peak period auto travel.

- 2.2.1.1 Establish programs and incentives for governmental and business employers to implement alternative work schedules for employees where economic and operational impacts are acceptable.
- 2.2.1.2 Recognize non-work trips as a significant contributor to peak period congestion and introduce innovative techniques, such as congestion management, pricing, and flexible scheduling of non-work activities, to reduce peak-period, non-work trip demand. (*Transportation Element, TDM 5.1.4, Policy 6*)

Subtopic 2.3 Expanded Transit Systems and Services

Policy 2.3.1 Expand Transit in the City and the Region

Cooperate in efforts to expand all forms of mass transit within the City and the Southern California Air Basin.

Actions

- 2.3.1.1 Promote the expansion, marketing, and improved quality of service of Long Beach Transit to double transit ridership by 2010.
- 2.3.1.2 Invest in the planning and construction of a new fleet maintenance facility providing enhanced service to the City's bus fleet.
- 2.3.1.3 Promote the operation and expansion of the Runabout shuttle system in the downtown area.

- 2.3.1.4 Promote park-and-ride programs through public information campaigns and the development of appropriate facilities as fiscal and economic conditions permit.
- 2.3.1.5 Ensure that transit services are convenient, safe, and aesthetically appealing so transit use can become a viable transportation mode. (*Transportation Element*, TDM 5.1.5, Objective 1)
- 2.3.1.6 Promote ridership on the new shuttle service, similar to the Runabout system in the downtown area, for the Belmont Shore and Second Street commercial area, providing a link with Naples, the Market Place, Marina Pacifica, and Downtown. (*Transportation Element*, TDM 5.111.5 F, p. 123 and Policy 15)
- 2.3.1.7 Improve linkages with other transit systems and help establish an integrated regional transit system throughout Southern California. (*Transportation Element*, TDM 5.1.5, Objective 2)
- 2.3.1.8 Explore the concept of using smaller buses (vans) to serve local neighborhoods and feed into a community transit center, in order to increase acceptance of transit in neighborhoods and improve ridership. (*Transportation Element*, TDM 5.1.5 E)
- 2.3.1.9 Use incentive programs to increase transit use, including: fare reductions and free rides for off-peak usage; a transit token or transit validation for shoppers when they make retail purchases; the use of "fare-free zones;" and special event shuttles. (*Transportation Element*, TDM 5.1.5 G)
- 2.3.1.10 Promote employer participation in a regional transit voucher system where employee benefit options may include provision of vouchers to be accepted on all Southern California transit systems. (*Transportation Element*, TDM 5.1.5 H, Policy 4)
- 2.3.1.11 Support expanded regional bus services without jurisdictional barriers. (*Transportation Element*, TDM 5.1.5 H, Policy 2)
- 2.3.1.12 Build park-and-ride facilities at appropriate locations on the periphery of the city and provide frequent, dependable, safe, clean, and economical transit service from those locations to downtown and other activity centers. (*Transportation Element*, TDM 5.1.5H, Policy 9)

- 2.3.1.13 Promote cooperative efforts between the City and Long Beach Transit to create additional, stable revenue sources to fund expanded transit operations and enhance capital investments for the regional transit system.

Subtopic 2.4 Non-Motorized Means of Transport

Policy 2.4.1 Promote Non-Motorized Transportation

Promote convenient and continuous bicycle paths and pleasant pedestrian environments that will encourage non-motorized travel within the City.

Actions:

- 2.4.1.1 Promote the fulfillment of the City bicycle plan and capital improvement program.
- 2.4.1.2 Promote downtown pedestrian facilities and movements.
- 2.4.1.3 Insure that all new development is designed and constructed to facilitate and encourage travel by carpool, vanpool, transit, bicycle, and foot.
- 2.4.1.4 Seek regional funding to construct the Carson/Bixby bicycle route connecting residential neighborhoods with employment and commuting opportunities.
- 2.4.1.5 Monitor the effectiveness of the Downtown Bicycle Station, located near the Long Beach transit mall and providing bicycle parking, storage, rental and repair.
- 2.4.1.6 Construct park-and-ride facilities for intermodal transfers between bicycles and public transportation modes. (*Transportation Element, TDM 5.1.6, Policy 5*)
- 2.4.1.7 Encourage public transit to accommodate bicycle transport, provided that such usage will not unreasonably impede transit operations. (*Transportation Element, TDM 5.1.6, Policy 6*)
- 2.4.1.8 Provide convenient, secure bicycle parking facilities at public buildings, shopping centers, employment and activity centers, and multi-family developments (*Transportation Element, TDM 5.1.6, Policy 7*)

- 2.4.1.9 Provide clear bike route information to cyclists by installing adequate signs along bike routes in order to provide proper traffic direction, and by publishing bikeway system maps. (*Transportation Element, TDM 5.1.6, Policy 8*)
- 2.4.1.10 Ensure that pedestrian walkways are safe, convenient, and aesthetically appealing, especially at major activity centers. (*Transportation Element, TDM 5.1.6, Policy 10*)
- 2.4.1.11 Establish parking policies at employment centers consistent with the demand management provisions of this Element and of the Trip Reduction Ordinance. (*Transportation Element, TDM 5.1.4, Policy 2*)

Subtopic 2.5 Parking

Policy 2.5.1 Manage the Parking Supply

Manage the City's parking supply to inhibit auto use, while ensuring that economic development goals are not sacrificed.

Actions:

- 2.5.1.1 Coordinate with the Department of Community Development in the continued development, implementation, and monitoring of an effective downtown parking management plan.
- 2.5.1.2 Participate with other jurisdictions in developing a regional strategy for parking pricing relating parking costs to availability of alternative transportation modes to increase vehicle occupancy while not placing any single jurisdiction at a competitive disadvantage.
- 2.5.1.3 Consider and evaluate possible changes to parking supply requirements that would encourage the convenient use of alternative modes of transportation.

Subtopic 2.6 Cleaner Fuels

Policy 2.6.1 Support Legislation

Participate with other local governments in seeking state and federal legislation to improve vehicle/transportation technology and establish a direct link between the true cost of emissions and the sources of pollution.

Actions:

- 2.6.1.1 Support legislation to stimulate the development of practical electric and other alternatively fueled vehicles.
- 2.6.1.2 Support legislation that tightens the existing vehicle inspection program, both in terms of standards to be met and requirements for compliance.

Policy 2.6.2 Fleet Conversion to Clean Fuels

Play a leadership role in the conversion to clean fuels by promoting the increased use of compressed natural gas (CNG), electric vehicles, and other alternative fuels.

Actions:

- 2.6.2.1 Purchase additional dedicated CNG vehicles to supplement the City's existing fleet of CNG vehicles.
- 2.6.2.2 Seek a federal grant to develop a "Natural Gas Vehicle (NGV) Fleet Refueling Station Business Plan" to assist local governments, businesses, and associations in the successful implementation of a CNG infrastructure.
- 2.6.2.3 Support legislation to promote the expanded use of CNG vehicles and stimulate the development of practical electric vehicles.
- 2.6.2.4 Investigate methods of supporting future widespread use of electric vehicles through Code changes that promote or require the availability of electric "re-charge" outlets in new garages, additional Fire Department training regarding the batteries in electric vehicles, and participation in the infrastructure planning for the I-405 Freeway "EV Corridor."
- 2.6.2.5 Continue to convert the fleet of heavy equipment at the port, airport, and for street sweeping, among other uses, to cleaner fuels.

Topic 3: Air Transportation

Goal 3.0 Minimum feasible emissions from Long Beach Airport.

Intent: Reduce current emissions through use of new technologies and the conversion to cleaner fuels.

Policy 3.1 *Promote Improved Technology*

Promote the use of the best available technology to reduce emissions from aircraft frequenting the Long Beach Airport.

Actions:

- 3.1.1.1 Consider the use of incentives to promote the adoption of the best available technology and operational measures for aircraft frequenting Long Beach Airport and other airports in the South Coast Air Basin.
- 3.1.1.2 Use alternative fuel vehicles for ground transportation purposes on the airfield and within the airport whenever feasible.
- 3.1.1.3 Promote the use of shuttles and other alternatives to reduce per passenger vehicle trips originating from or terminating at the airport.
- 3.1.1.4 Pursue funding for centralized power and air conditioning systems at all aircraft gates, and encourage their use by air carriers to reduce usage of on-board power units while aircraft are at terminal gates.
- 3.1.1.5 Pursue opportunities to re-establish a Park-and-Ride facility at the Airport, in cooperation with MTA routing decisions.

Topic 4: **The Port of Long Beach**

Goal 4.0 *Minimum feasible emissions from the Ports of Long Beach and Los Angeles*

Intent: The fleet of ocean-going ships calling at the Ports is composed of many foreign ships using engines produced outside the United States. The international nature of port operations makes it difficult for the Cities of Long Beach and Los Angeles to make effective air emissions changes without a world-wide agreement on new standards and technologies for ships. The intent of this section is to support efforts by the Ports in adopting operational changes that reduce air emission impacts on the residents of Long Beach, and to support the EPA in its efforts to develop international standards for maritime engine technologies and fuels.

Policy 4.1 *Minimize emissions from ships*

Actions:

- 4.1.1 Support the location of shipping lanes on the other side of the international water line rather than closer to shore.

- 4.1.2 Encourage decreased throttle settings and reduced speeds near shore to reduce ship cruising emissions.
- 4.1.3 Support the use of cleaner fuels and engine technologies as they become viable and adopted industry-wide.

Policy 4.2 Reduce the impacts of rail-related emissions on Long Beach neighborhoods and the downtown.

Actions

- 4.2.1 Request that the railroad companies adhere to their promise to eliminate train idling adjacent to the West side neighborhoods.
- 4.2.2 Encourage the conversion of the rail fleet to cleaner burning fuels and cleaner engine technologies.
- 4.2.3 Investigate the feasibility of treating products in open cars to reduce particulate emissions, including chemical treatment of the exposed surface of the product, using tarps, and other methods of covering products such as coal.
- 4.2.4 Promote industry co-operation and the adoption of standards at the federal level to control particulate emissions from products transported by rail.
- 4.2.5 Support the realization of the Alameda Corridor and promote the use of alternative fuels where feasible, including rail electrification.
- 4.2.6 Support the development of national and state standards for improved emissions from new and existing locomotive engines.

Policy 4.3 Monitor particulate pollution at the Ports and locations downwind, and pursue methods of reducing emissions while accommodating needed growth.

- 4.3.1 Actively enforce the Mitigation Monitoring and Reporting Program as specified in the settlement agreement for the Pier 300/LAXT dry bulk terminal development in the Port of Los Angeles.
- 4.3.2 Identify and mitigate potential air quality impacts from the handling and storage of products at the ports.
- 4.3.3 Utilize the 1-800-CUT-SMOG line to alert AQMD inspectors to air quality incidents, and establish other effective mechanisms as necessary to transmit information about

potential local air quality problems to the AQMD for quick and effective enforcement.

- 4.3.4 Work with the AQMD to establish additional monitoring stations in Long Beach, conduct studies of Total Suspended Particulates in different areas of the City, and perform other studies as needed, to identify localized air quality problems, perform risk assessments, and develop quantitative methods of reducing negative air quality impacts.
- 4.3.5 Encourage trucks transporting petroleum coke to the Ports to cover the product in the trucks and to maintain the hopper seals on trucks to minimize product loss and particulate emission.
- 4.3.6 Increase the frequency of street sweeping, especially wet sweeping at and in the vicinity of the Ports.
- 4.3.7 Encourage the Ports of Long Beach and Los Angeles to provide opportunities for truck operators to clean the trucks prior to departing the Port.
- 4.3.8 Encourage both the Port of Los Angeles and the Port of Long Beach to work with tenants to enclose any conveyor system where particulate product is handled and which are not already enclosed.
- 4.3.9 Encourage aggressive enforcement of air quality regulations by the AQMD.

Topic 5: Land Use

Goal 5.0 A pattern of land uses that can be efficiently served by a diversified transportation system and that directly and indirectly minimizes air pollutants.

Intent: The amount, location, type, and design of land uses in Long Beach have long-term air quality implications. Over time, the intent is to achieve a pattern of land uses that facilitates a reduction in mobile emissions through the availability of alternative transportation modes. This efforts can make significant contributions to improving and maintaining air quality. New development has the opportunity to incorporate project design features that decrease vehicle trips and vehicle miles traveled. Retrofitting and revitalization of existing development can be accompanied by techniques to directly or indirectly reduce emissions. By conditioning projects to address air quality measures along with other public health and welfare concerns, Long Beach can make progress towards achieving pollution reduction targets at reasonable economic

costs. The intent of this section of the *Element* is to seek a balance between land uses and the total transportation system serving the City, given the limitations imposed by being an almost totally developed urban environment. Furthermore, the intent is to encourage and facilitate a closer home-to-work relationship.

Policy 5.1 Manage Growth

Regulate land use and promote development in a manner that will support established transit services and reduce the need for the automobile.

Actions:

- 5.1.1 Increase residential densities and commercial intensities close to transit stations to improve the effectiveness and usage of transit and other non-automotive forms of transportation.
- 5.1.2 Where an imbalance exists or is projected, seek new development that provides employment opportunities for City residents to improve the balance of jobs relative to housing.
- 5.1.3 Provide incentives for establishing a complementary mix of uses within a project to reduce the number and length of trips and promote a shift from automobile use to transit, pedestrian, and bicycle modes of travel.
- 5.1.4 Develop an evaluation process to ensure that when making land use decisions, adequate consideration is given to minimizing conflicts between emission sources and sensitive receptors (schools, hospitals, residential areas).
- 5.1.5 Develop incentives to encourage in-fill development near activity centers and along transportation corridors to increase participation in alternative modes of travel.
- 5.1.6 Adopt a downtown development plan allowing that area to develop and renew itself as a high intensity activity center of mixed residential, commercial, and institutional uses, that encourages pedestrian activities and an increased use of transit.

- 5.1.7 Promote the use of telecommuting/teleconferencing systems by business employers.
- 5.1.8 Participate with other local governments in seeking state and federal legislation that will expand sources of consistent funding for coordinated planning programs addressing efficient land use patterns and compact development.

Policy 5.1 Balance Growth

Improve the balance between jobs and housing to create a more efficient urban form.

Actions:

- 5.2.1 Improve the jobs/housing balance through new development and redevelopment project reviews and actions.
- 5.2.2 Improve the jobs/housing balance at the SELAC subregional level in relation to major activity centers as new development occurs.

Topic 6: Particulate Emissions

Goal 6.0 Minimize particulate emissions from the construction and operation of roads and buildings, from mobile sources, and from the transportation, handling and storage of materials.

Intent: Although the City's roads are all paved, sources of fugitive dust emissions including accumulated debris on paved roads and dirt lots are susceptible to wind erosion that creates visibility and air quality degradation. Other sources include sites where particulate-based materials are stored, and corridors through which such materials are transported. The intent is to reduce particulate emissions through stricter enforcement of current regulations.

Policy 6.1 Control Dust

Further reduce particulate emissions from roads, parking lots, construction sites, unpaved alleys, and port operations and related uses.

Actions:

- 6.1.1 Evaluate current efforts to regulate construction and renovation methods minimizing emissions from building

materials and the construction process to ensure their maximum effectiveness, taking into consideration public and private costs.

- 6.1.2 Develop public education programs focused on the nature and effects of particulate emissions and what individuals, businesses and cities should do to minimize particulate emissions.
- 6.1.3 Promote the application of surfacing or landscaping materials to unpaved roadway "shoulders" to aid in the suppression of dust.
- 6.1.4 Promote the completion of all necessary alley paving in the City.
- 6.1.5 Support the use of shed enclosures and automatic sprinkler systems for the storage of particulate-based materials at the Ports.
- 6.1.6 Encourage the implementation of programs intended to reduce particulate emissions from sources outside the City of Long Beach.
- 6.1.7 Increase air quality monitoring at key locations throughout the city to better assess local conditions and identify potential problem areas and their sources.
- 6.1.8 Once sources of particulate pollution have been identified, the City shall pursue potential mitigation measures through private/public collaborations, or through other available means.

Topic 7: Energy Conservation

GOAL 7.0 Reduce emissions through reduced energy consumption.

Intent: Most energy generation results in the emission of air pollutants. Through energy conservation, the demand for energy generation is reduced, thereby decreasing the emission of pollutants. The California Energy Commission, Public Utilities Commission, and local utilities are continuing to develop and implement numerous programs to reduce energy consumption, including rebate programs for retrofitting, public education campaigns, revisions to building standards, and other programs. The intent of their goals is not to duplicate these efforts, but to enhance them where feasible and appropriate. Recycling efforts also

reduce emissions, as the amount of energy required for the production of goods and materials decreases over time.

Policy 7.1 Energy Conservation

Reduce energy consumption through conservation improvements and requirements.

Actions:

- 7.1.1 Promote the adoption of the best available technology and operational measures for aircraft frequenting Long Beach Airport.
- 7.1.2 Reduce overall energy use in local government facilities.
- 7.1.4 Encourage the incorporation of energy conservation features in the design of all new construction.
- 7.1.5 Encourage the installation of conservation devices and low energy using/water consuming appliances in new and existing development.
- 7.1.6 Encourage energy audits of existing structures, identifying levels of existing energy use, and potential conservation measures.
- 7.1.7 Support efforts to reduce greenhouse gas emissions that diminish the stratospheric ozone layer.

Policy 7.2 Recycle Wastes

Promote local recycling of wastes and the use of recycled materials.

Actions:

- 7.2.1 Invest in the expansion of feasible recycling programs for all residents and businesses.
- 7.2.2 Encourage participation by other jurisdictions and private industry in locating or developing markets for recycled products to facilitate implementation of the City's source reduction and recycling programs to conserve energy resources and achieve a corresponding reduction in air pollution.
- 7.2.3 Continue to promote recycling of waste glass and paper, which, when used by local glass and paper manufacturers, lowers air emission as a result of decreased energy consumption.

- 7.2.4 Encourage the City and other governmental and private organizations to purchase products manufactured in part from recycled materials.

Topic 8: Education

GOAL 8.0 Education of City residents concerning air quality, energy, and congestion issues, and the need to modify present travel behavior and energy consumption patterns.

Intent: Modification of travel behavior, which in the South Coast Air Basin currently emphasizes the use of private automobiles, is one of the most important factors in developing a long-term solution to air quality, energy consumption, and congestion problems. The best method of accomplishing this objective is through the development and implementation of effective educational programs. The intent of this goal is to facilitate that process.

Policy 8.1 Promote public education programs at the local, subregional, and regional level to encourage residents to modify their behavior to reduce automobile trips.

Coordinate with the Long Beach Unified School District, the Long Beach City College, California State University Long Beach, the American Lung Association, other jurisdictions and agencies, and environmental groups in the development of programs and campaigns to increase awareness of, and the number of stakeholders in, air quality, energy, and congestion issues.

Actions:

- 8.1.1 Develop, within fiscal capabilities, public education programs highlighting economic and health implications of poor air quality, and demonstrate what individuals need to do to improve air quality.
- 8.1.2 Develop public education information explaining the benefits of efficient land use patterns and compact development.
- 8.1.3 Advocate and support, where appropriate and feasible, new or accelerated approaches to improving air quality, including market-based strategies and other direct measures.
- 8.1.4 Promote state and federal legislation that would provide adequate sources of funding for air quality planning, coordination, implementation, and public education programs.

- 8.1.5 Coordinate with the Long Beach Unified School District in the development and implementation of effective educational materials and programs for elementary, middle, and high school students.
- 8.1.6 Promote effective coverage of City air quality and congestion management campaigns and programs by the local media.
- 8.1.7 Encourage the involvement of environmental groups, community organizations, businesses, business organizations, labor groups, and the general public in the formulation and implementation of air quality improvement programs.
- 8.1.8 Develop air quality public education programs illustrating the benefits of energy conservation.
- 8.1.9 Develop public education programs concerning the nature and effects of particulate emissions and what individuals, businesses, and cities should do to minimize particulate emissions.
- 8.1.10 Recognize trip reduction efforts by private individuals, companies, and organizations through a City-sponsored award program.

IMPLEMENTATION

IMPLEMENTATION

Overall Strategy

The implementation strategy of the *Air Quality Element* is to continue and enhance efforts that reduce vehicle miles travelled, and reduce emissions overall within the City. This strategy depends on the perseverance of the City Council, Planning Commission, residents, and staff to explore new technologies, foster behavioral changes, and create a flexible working and living environment facilitating the changes needed to improve air quality.

Principles

The following principles are included to provide overall direction to the goals, policies and programs of this *Element*.

1. Achieve air quality improvements in such a manner that continued economic growth can be sustained.
2. Improve the quality of life for City residents, by providing greater opportunities, convenience, and choices.
3. Reinforce local mobility goals by reducing peak hour traffic congestion.
4. Foster behavioral changes through incentives and pricing that reflect total societal costs for administration and enforcement.

Priorities

The implementation priorities are:

1. Work with other cities at the regional and sub-regional level to develop policies and regulations that balance the environmental and economic needs of the region, use innovative incentive strategies to promote travel behavior that reduces vehicle miles travelled, and explore the benefits of new technologies.
2. Consider policy changes and the employment of technologies that will enhance telecommuting abilities, flexible delivery schedules, and other changes reducing total and peak hour vehicle miles travelled.
3. Build upon the existing demonstrated leadership with regard to CNG fleet conversion by continuing to seek out dedicated CNG and dual fuel vehicles for the City's fleet;

4. Evaluate and take necessary steps toward becoming an electric vehicle-ready community, including Building Code changes and additional staff training, as applicable;
5. Explore new technologies as they become available and cost-effective in a variety of areas in the City, including the Port and the Airport.

Funding

The implementation of most of the goals and policies of the *Air Quality Element* will rely primarily on the City's dedication to devote staff time and effort to pursuing inter-agency planning, to increasing public awareness, and to setting an example for the community through its decisions and policies.

State Assembly Bill (AB) 2766 Subvention Fund offers some funding to local Governments for air quality improvements, based on the number of vehicle registrations recorded locally each year. The City's allotment of funds is distributed through a Request for Proposals procedure administered by the Inter-Departmental Air Quality Committee and approved by the City Manager. Additional AB 2766 discretionary funds are available through a grant program for local projects designed to reduce air pollution from vehicles such as cars, truck, and buses. Local governments, private sector businesses, and research institutions are eligible for discretionary AB 2766 funding. Funding priorities include the commercialization of low emission vehicle technologies, transportation demand management, and research on transportation control measures and land use measures.

Other sources of funding include sales tax revenues collected county-wide as a result of Propositions A and C, which are then disbursed to local governments. The local return portions of these revenues are to be used for transportation improvements to transit, or for transit-related purposes. The gas tax funds, collected as a result of Proposition 111, also supplement available capital funding and focus on projects reducing congestion and improving air quality. The federal Intermodal Surface Transportation Efficiency Act can also be used to fund projects improving air quality through the development of a balanced transportation program.

GOALS

Goal 1.0 Effective coordination of air quality improvement efforts in the South Coast Air Basin, the Southeast Los Angeles County (SELAC) subregion of SCAG, and other agencies.

This goal will continue to be implemented through continued Planning Bureau representation on, and leadership in, the SELAC Consortium and other regional and sub-regional air quality planning efforts. The cost is primarily staff time and

commitment to furthering the goal of improving air quality through innovative policy planning and the streamlining of implementation measures.

Citizen awareness efforts include community meetings and public hearing notices during the preparation of the *Element* in order to solicit input, and a summary brochure on the *Air Quality Element* to be distributed through the Department's Development Services Center.

Responsible Agency: Department of Planning and Building

Goal 2.0 A diverse and efficient ground transportation system that minimizes air pollutant emissions.

The City of Long Beach is committed to persist in its efforts to improve air quality, through fleet conversion and use of alternative fuels, bicycle path improvements and extensions, pedestrian-friendly development, efficient and effective transit service, parking and transportation demand management programs, and flexibility with regard to work and deliveries schedules.

Responsible Agencies: General Services Department, Department of Planning and Building, Department of Public Works

Goal 3.0 Minimum feasible emissions from Long Beach Airport.

Commercial airliners operating at the Long Beach Airport are required to be the quieter, more fuel efficient Stage III aircraft. The fleet of General Aviation aircraft is becoming cleaner and more efficient as newer aircraft are utilized. There are a number of ground vehicles that are dual fuel, Compressed Natural Gas (CNG) and gasoline powered, and a street sweeper that is a dedicated CNG vehicle. Continued conversion of ground vehicles, including the use of electric vehicles, will be pursued in the coming years.

Responsible Agency: Department of Public Works

Goal 4.0 Minimum feasible emissions from the Ports of Long Beach and Los Angeles

Reductions in emissions from the Ports will require strong efforts to find collaborative solutions. The federal government has jurisdiction over train and ship emissions, while local efforts can focus on improved monitoring and site-specific mitigation measures.

Goal 5.0 A pattern of land uses that can be efficiently served by a diversified transportation system and that directly, and indirectly, minimizes air pollutants.

Opportunities to influence the land use pattern of the City occur both incrementally, through specific project applications, and through long-term efforts, including policies established in the *General Plan*.

Responsible Agency: Department of Planning and Building

Goal 6.0 Minimize particulate emissions from the construction and operation of roads and buildings, from mobile sources, and from the transportation, handling and storage of materials.

The City of Long Beach will continue to pursue assessment districts or other sources of funding to complete alley paving projects. The Building Bureau will evaluate new efforts to regulate construction and renovation methods which could minimize particulate emissions.

Responsible Agencies: Department of Public Works, Department of Planning and Building

Goal 7.0 Reduced emissions through reduced energy consumption.

The City of Long Beach is committed to continuing to seek ways of reducing energy consumption at its facilities, promote energy conservation through its public outreach programs, and purchase products manufactured in part from recycled materials. Although there may be short-term costs to these actions, long-term benefits would include reduced energy consumption and an overall cost savings for the City.

Responsible Agencies: General Services Department, Department of Public Works

Goal 8.0 Education of City residents concerning air quality, energy and congestion issues and the need to modify present travel behavior and energy consumption patterns.

One of the functions of the *Air Quality Element* is to increase awareness of the air quality impacts of individual actions. A summary brochure of the *Air Quality Element* will be available at the Development Services Center in City Hall, and will be used by Community Planners at neighborhood and community meetings throughout the year. The City will continue to monitor state and federal legislative proposals, and support funding for air quality planning and public education programs. Inter-departmental efforts include the proposed trip reduction awards program for private individuals and companies, and the curriculum coordination with Long Beach Unified School District. The costs of these efforts would be limited to staff time and resources, along with some reproduction costs for brochures and materials.

Responsible Agencies: Department of Planning and Building, City Manager's Office (Public Information Officer)

FOOTNOTES

¹Air Quality Table 1991; South Coast Air Quality Management District.

²*Final Air Quality Management Plan, 1991 Revision, Technical Appendix V-I.*

³*Air Quality Digest, Winter 1991/1992.*

⁴California Health and Safety Code Section 39655.

⁵Pursuant to Section 7412 of Title 42 of the United States Code.

⁶SCAQMD, Final 1991 AQMP.

⁷Hall, Jane V., *Science*, "Valuing the Health Benefits of Clean Air," February 14, 1992.

⁸*Ibid.*

⁹SCAQMD. *Socio-Economic Report for 1991 Air Quality Management Plan, March 1991.*

¹⁰*Ibid.*

¹¹*Ibid.*

¹²*Draft Appendix IV-D Energy Conservation Measures and Energy Analysis for Control Strategies, December 1990.*

APPENDIX A

GLOSSARY OF TERMS AND ACRONYMS

- AAQS** Ambient Air Quality Standards. Health and welfare based standards for clean outdoor air which identify the maximum acceptable average concentrations of air pollutants during a specified period of time. (See NAAQS).
- Acute Health Effect:** An adverse health effect which occurs over a relatively short period of time (e.g., minutes or hours).
- Aerosol:** Particles of solid or liquid matter that can remain suspended in air for long periods of time because of extremely small size and light weight.
- Air Pollutants:** Amounts of foreign and/or natural substances occurring in the atmosphere that may result in adverse effects on humans, animals, vegetation, and/or materials.
- Air Quality Simulation Model:** A mathematical relationship between emissions and air quality which simulates the transport, dispersion, and transformation of compounds emitted into the air.
- Air Quality Standard:** A numerical limit of the allowable concentration of a specific pollutant in the ambient air, as established by the federal Environmental Protection Agency and/or the state Air Resources Board. Primary standards set by these agencies are based on the levels required to protect public health of the general population and sensitive groups (such as the young and the elderly). Federal secondary standards are based on levels required to protect public welfare (including preventing deterioration of crops, landscaping, natural resources, visibility, and building materials).
- Air Toxics:** A generic term referring to a harmful chemical or group of chemicals in the air. Typically, substances that are especially harmful to health, such as those considered under EPA's hazardous air pollutant program or California's AB 1807 toxic air contaminant program,

are considered to be air toxics. Technically, any compound that is in the air and has the potential to produce adverse health effects is an air toxic.

Alternative Fuels:

Fuels such as methanol, ethanol, natural gas, electricity, and liquid propane gas that are cleaner burning and help to meet ARB's mobile and stationary emission standards.

Ambient Air:

The air occurring at a particular time and place outside of structures. Often used interchangeably with "outdoor" air.

APCD:

Air Pollution Control District. A county agency with authority to regulate stationary, indirect, and area sources of air pollution (e.g., power plants, highway construction, and housing developments) within a given county, and governed by a district air pollution control board composed of the elected county supervisors. (Compare AQMD.)

AQMD:

Air Quality Management District. A group or portions of counties, or an individual county specified in law with authority to regulate stationary, indirect, and area sources of air pollution within the region and governed by a regional air pollution control board comprised mostly of elected officials from within the region. (Compare APCD.)

AQMP:

Air Quality Management Plan. A Plan prepared by an APCD/AQMD, for a county or region designated as a non-attainment area, for the purpose of bringing the area into compliance with the requirements of the national and/or California Ambient Air Quality Standards. AQMPs are incorporated into the State Implementation Plan (SIP).

ARB:

California Air Resources Board. The State's lead air quality agency, consisting of a nine-member Governor-appointed board. It is responsible for attainment and maintenance of the State and federal air quality standards, and is fully responsible for motor vehicle pollution control. It oversees county and regional air pollution management programs.

Area-wide Sources:	Also known as "area" sources, these are stationary sources of pollution (e.g., water heaters, gas furnaces, fireplaces, and wood stoves) that are typically associated with homes and non-industrial sources. The CCAA requires districts to include area sources in the development and implementation of the AQMPS.
ATCM:	Airborne Toxic Control Measure. A type of control measure, adopted by the ARB (Health and Safety Code Section 39666 et seq.), which reduces emissions of toxic air contaminants from non-vehicular sources.
Atmosphere:	The gaseous mass or envelope surrounding the earth.
ATSAC:	Automated traffic surveillance and control.
Attainment Area:	A geographic area which is in compliance with the National and/or California Ambient Air Quality Standards (NAAQS OR CAAQS).
AVR:	Average Vehicle Ridership
BACT:	Best Available Control Technology. The most up-to-date methods, systems, techniques, and production processes available to achieve the greatest feasible emission reductions for given regulated air pollutants and processes. BACT is a requirement of NSR (New Source Review) and PSD (Prevention of Significant Deterioration).
BAR:	Bureau of Automotive Repair. An agency of the California Department of Consumer Affairs that manages the implementation of the motor vehicle Inspection and Maintenance Program.
CAA:	Federal Clean Air Act. A federal law passed in 1970 and amended in 1977 and 1990 which forms the basis for the national air pollution control effort. Basic elements of the act include national ambient air quality standards for major air pollutants, air toxics standards, acid rain control measures, and enforcement provisions.

- CCAA:** California Clean Air Act. A California law passed in 1988 which provides the basis for air quality planning and regulation independent of federal regulations. A major element of the Act is the requirement that local APCDs/AQMDs in violation of state ambient air quality standards must prepare attainment plans which identify air quality problems, causes, trends, and actions to be taken to attain and maintain California's air quality standards by the earliest practicable date.
- CEQA:** California Environmental Quality Act. A California law which sets forth a process for public agencies to make informed decisions on discretionary project approvals. The process aids decision makers to determine whether any environmental impacts are associated with a proposed project. It requires environmental impacts associated with a proposed project to be eliminated or reduced, and that air quality mitigation measures have been implemented.
- CFCs:** Chlorofluorocarbons; any of a number of substances consisting of chlorine, fluorine, and carbon. CFCs are used for refrigeration, foam packaging, solvents, and propellants. They are proven to cause depletion of the atmosphere's ozone layer.
- Chronic Health Effect:** An adverse health effect which occurs over a relatively long of time (e.g., months or years).
- CMP:** Congestion Management Program. A state mandated program (Government Code Section 65089a) that requires each county to prepare a plan to relieve congestion and reduce air pollution.
- CO:** Carbon Monoxide. A colorless, odorless gas resulting from the incomplete combustion of fossil fuels. Over 80 percent of the CO emitted in urban areas is contributed by motor vehicles. CO interferes with the blood's ability to carry oxygen to the body's tissues and results in numerous adverse health effects. CO is a criteria air pollutant.
- Consumer Products:** Products such as detergents, cleaning compounds, polishes, lawn and garden products, personal care

products, and automotive specialty products which are part of our everyday lives and, through consumer use, may produce air emissions which contribute to air pollution.

Criteria Pollutants: The six air pollutants regulated by federal standards, including ozone, carbon monoxide, particulates, nitrogen dioxide, sulfur dioxide and lead.

Dustfall: Dust and fumes emitted by steel factories, refineries, smaller industry, household activity and dumps (stationary sources).

Electric Motor Vehicle: A motor vehicle which uses a battery-powered electric motor as the basis of its operation. Such vehicles emit virtually no air pollutants. Hybrid electric motor vehicles may operate using both electric and gasoline powered motors. Emissions from hybrid electric motor vehicles are also substantially lower than conventionally powered motor vehicles.

Emission Inventory: An estimate of the amount of pollutants emitted from mobile and stationary sources into the atmosphere over a specific period such as a day or a year.

Emission Offset: Also known as an emission trade-off, this is a rule-making concept whereby approval of a new or modified stationary source of air pollution is conditional on the reduction of emissions from other existing stationary sources of air pollution. These reductions are required in addition to reductions required by BACT.

Emission Standard: The maximum amount of a pollutant that is allowed to be from a polluting source such as an automobile or smoke stack.

EPA: Environmental Protection Agency. The United States agency charged with setting policy and guidelines, and carrying out legal mandates for the protection of national interests in environmental resources.

FIP: Federal Implementation Plan. In the past, a plan prepared by the EPA which provided measures that

non-attainment areas must take to meet the requirements of the Federal Clean Air Act, in the absence of an approved State Implementation Plan.

- Fugitive Dust:** Dust particles which are introduced into the air through certain activities such as soil cultivation, off-road vehicles, or any vehicles operating on open fields or dirt roadways.
- Growth Management Plan:** A plan for a given geographical region containing demographic projections (i.e., housing units, employment, and population) through some specified point in time, and which provides recommendations for local governments to better manage growth and reduce projected environmental impacts.
- Headway:** The time between two successive public transit (bus or rail) vehicles. A headway of 20 minutes means a frequency of three buses per hour.
- HOV:** High Occupancy Vehicle. A vehicle that is transporting several people, such as a bus or carpool.
- Hydrocarbon:** Any of a large number of compounds containing various combinations of hydrogen and carbon atoms. They may be emitted into the air as a result of fossil fuel combustion, fuel volatilization, and solvent use, and are a major contributor to smog. (Also see VOC.)
- Hydrogen sulfide:** A hazardous air pollutant regulated by the state Air Resources Board through air quality standards in a manner similar to the criteria pollutants. It is emitted by mining, refining, manufacturing and decomposition of organic matter, and results in acute effects on the nervous and respiratory systems.
- Indirect Source Control Program:** Rules, regulations, local ordinances and land use controls, and other regulatory strategies of air pollution control districts or local governments used to control or reduce emissions associated with new and existing indirect sources. Indirect source control programs include regulatory strategies such as transportation

control measures; parking charges; land use controls that reduce the need for vehicle travel and increase transit, bicycle, and pedestrian access; and source-specific regulations such as truck idling and travel schedule requirements.

Indirect Source Review:

A major component of an indirect source control program which applies to new and modified indirect sources. Strategies for indirect source review include permit programs, review and comment on new and modified indirect source projects through the California Environmental Quality Act (CEQA) process, and coordination of air quality, transportation and land use policies through local government general plans. Indirect source review reduces emissions from new and modified sources through best available mitigation measures and additional offsite mitigation such as offsets and mitigation fees.

Indirect Source:

Any facility, building, structure, or installation, or combination thereof, which generates or attracts mobile source activity that results in emissions of any pollutant (or precursor) for which there is a state ambient air quality standard. Examples of indirect sources include employment sites, shopping centers, sports facilities, housing developments, airports, commercial and industrial development, and parking lots and garages.

**Inspection and
Maintenance Program:**

A motor vehicle inspection program implemented by the ARB. It is designed to identify vehicles in need of maintenance and to assure the effectiveness of their emission control systems on a biennial basis. Enacted in 1979 and strengthened in 1990. (Also known as the "Smog Check" program).

ISTEA:

Intermodal Surface Transportation Efficiency Act. Replaces Federal Aid Urban funds for transportation improvements.

LACMTA:

Los Angeles County Metropolitan Transportation Authority

- Lead (Pb):** A criteria air pollutant emitted from leaded gasoline and diesel combustion and metal smelting and processing facilities. Lead affects the formation of blood cells, the kidneys, and central nervous system, especially in young children less than 5 years old. Requirements for sale of unleaded gasoline vehicles have resulted in attainment of air quality standards for lead for many years.
- LEV:** Low Emission Vehicle. A vehicle which is certified to meet the ARB 1994 emission standards for low emission vehicles.
- Mobile Sources:** Sources of air pollution such as automobiles, motorcycles, trucks, offroad vehicles, boats and airplanes. (Contrast with stationary sources.)
- NAAQS:** National Ambient Air Quality Standards. Standards set by the federal EPA for the maximum levels of air pollutants which can exist in the outdoor air without unacceptable effects on human health or the public welfare.
- Nitrogen Oxides
(Oxides of Nitrogen, NO_x):** A general term pertaining to compounds of nitric acid (NO), nitrogen dioxide (NO₂), and other oxides of nitrogen. Nitrogen oxides are typically created during combustion processes, and are major contributors to smog formation and acid deposition. NO₂ is a criteria air pollutant, and may result in numerous adverse health effects.
- Non-Attainment Area:** A geographic area identified by the EPA and/or ARB as not meeting either NAAQS or CAAQS standards for a given pollutant.
- NSR:** New Source Review. A program used in development of permits for new or modified industrial facilities which are in a non-attainment area, and which emit nonattainment criteria air pollutants. The two major requirements of NSR are Best Available Control Technology and Emission Offset.

- Ozone:** A strong smelling, pale blue, reactive toxic chemical gas consisting of three oxygen atoms. It is a product of the photochemical process involving the sun's energy. Ozone exists in the upper atmosphere ozone layer as well as at the earth's surface. Ozone at the earth's surface causes numerous adverse health effects and is a criteria air pollutant. It is a major component of smog.
- Ozone Precursors:** Chemicals such as hydrocarbons and oxides of nitrogen, occurring either naturally or as a result of human activities, which contribute to the formation of ozone, a major component of smog.
- Permit:** Written authorization from a government agency (e.g., an air quality management district) that allows for the construction and/or operation of an emissions generating facility or its equipment within certain specified limits.
- PM10:** Particulate Matter. A major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and mists. The size of the particles (10 microns or smaller, about 0.0004 inches or less) allows them to easily enter the air sacs deep in the lungs where they may be deposited to result in adverse health effects. PM10 also causes visibility reduction and is a criteria air pollutant.
- Proposition A:** The half-cent sales tax approved by voters in Los Angeles County in 1980 for public transit. Of the Proposition A revenues, 25 percent is returned to local jurisdictions for local transit services, 35 percent is used by LACMTA to develop the county-wide rail system, and 40 percent is allocated at the discretion of LACMTA.
- Proposition C:** Voter approved legislation, administered by Los Angeles County, which raises additional sales tax revenues for funding of transportation projects.
- PSD:** Prevention of Significant Deterioration. A program used in development of permits for new or modified industrial facilities in an area that is already in attainment. The intent is to prevent an attainment area from becoming a nonattainment area. This program, like NSR, can require BACT and, if an AAQS is projected to be exceeded, Emission Offsets.

Public Workshop:	A workshop held by a public agency for the purpose of informing the public and obtaining its input on the development of a regulatory action or control measure by that agency.
RCP & G:	Regional Comprehensive Plan and Guidelines prepared and adopted by Southern California Association of Governments. The plan contains policies and guidelines to plan for managing growth and resources in the region.
RECLAIM:	Regional Clean Air Incentives Market. A program adopted by the SCAQMD in 1993 which allows certain stationary source industrial firms which reduce pollutants beyond target levels to sell "pollution credits" to other firms unable to attain pollution reduction targets, as well as increased flexibility in other areas of point source regulation.
Regulation XV:	This set of rules was adopted and administered by the SCAQMD and required employers with work sites in the South Coast Air Basin of 100 employees or more to submit and implement TDM plans designed to increase the Average Vehicle Ridership. This regulation was replaced with Rule 2202.
ROG:	Reactive Organic Gas. A reactive chemical gas, composed of hydrocarbons, that may contribute to the formation of smog. Also sometimes referred to as Non-Methane Organic Compounds (NMOCs). (Also see VOC.)
RTIP:	Regional Transportation Improvement Program.
SCAB:	South Coast Air Basin
SCAG:	Southern California Association of Governments, the metropolitan planning organization for the six-county region which includes Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties.
SCAQMD:	South Coast Air Quality Management District, the air pollution control district to the area which includes

the County of Orange and the urbanized portions of Los Angeles, Riverside and San Bernardino Counties.

SIP: State Implementation Plan. A document prepared by each state describing existing air quality conditions and measures which will be taken to attain and maintain national ambient air quality standards.

Smart Corridor: A transportation corridor designed to coordinate between a freeway and parallel arterial streets, to focus through-traffic into the freeway corridors. Certain mechanisms such as computerized and centrally controlled traffic signalization, electronic traffic advisories and higher traffic speeds are implemented to facilitate use of these corridors.

Smog Check Program: (See Inspection and Maintenance Program.)

Smog: A combination of smoke, ozone, hydrocarbons, nitrogen oxides, and other chemically reactive compounds which, under certain conditions of weather and sunlight, may result in a murky brown haze that causes adverse health effects. The primary source of smog in California is motor vehicles.

Smoke: A form of air pollution consisting primarily of particulate matter (i.e., particles). Other components of smoke include gaseous air pollutants such as hydrocarbons, oxides of nitrogen, and carbon monoxide. Sources of smoke may include fossil fuel combustion, agricultural burning, and other combustion processes.

S02: Sulfur Dioxide. A strong smelling, colorless gas that is formed by the combustion of fossil fuels. Power plants, which may use coal or oil high in sulfur content, can be major sources of S0₂. S0₂ and other sulfur oxides contribute to the problem of acid deposition. S0₂ is a criteria pollutant.

Stationary Sources: Non-mobile sources such as power plants, refineries, and manufacturing facilities which emit air pollutants. (Contrast with mobile sources).

Telecommuting: Working at home, through the use of a computer or other means, to avoid traveling to work during peak congestion periods.

TAC: Toxic Air Contaminant. An air pollutant, identified in regulation by the ARB, which may cause or contribute to an increase in deaths or in serious illness, or which may pose a present or potential hazard to human health. TACs are considered under a different regulatory process (California Health and Safety Code Section 39650 et seq.) than pollutants subject to CAAQS. Health effects from TACs may occur at extremely low levels, and it is typically difficult to identify levels of exposure which do not produce adverse health effects.

TCM: Transportation Control Measure. Any control measure to reduce vehicle trips, vehicle use, vehicle miles traveled, vehicle idling, or traffic congestion for the purpose of reducing motor vehicle emissions. TCMs can include encouraging the use of carpools and mass transit.

TMA: Transportation Management Association, a parent organization of TMOs, used to monitor and coordinate TMOs throughout the City. A group of people and/or employers joined together in a legal agreement, whose purpose includes the sharing of TDM information.

TMO: Transportation Management Organization, an organization of an employer or group of employers to facilitate the use of TDM measures to reduce traffic. A group of people and/or employers joined together in a legal agreement, whose purpose includes the sharing of TDM information.

Transportation Control Measures (TCM): Any demand management, systems management, facilities improvement, or technology-based measures (or combination thereof) intended to influence choices of mode, time of day, or decision whether to travel at all.

Transportation Demand Management (TDM): A program of specific measures designed to encourage alternatives to private automobile use

and thereby reduce transportation demand. Such measures include carpool and vanpool matching, preferential parking, transit ridership incentives and subsidies, guaranteed ride home, parking charges, bicycle facilities and amenities staggered work hours and alternative work week programs.

- TRO: Trip Reduction Ordinance. An ordinance adopted at the local level to require improvements and programs that reduce the number of trips generated at a site. A TRO may be limited to new, large-scale development, or may require or provide incentives to employers to implement TDM measures.
- TSM: Transportation Systems Management, a catchall term for methods used to improve the operation of roadways and intersections by low-cost measures within the existing right-of-way. TSM includes both TDM and TCMs.
- UAM: Urban Airshed Model. The three-dimensional photochemical grid model used to simulate ozone formation. (See also air quality simulation model.)
- VMT: Vehicle Miles Traveled. The total miles traveled by all vehicles in a particular geographic area measured over a 24-hour period.
- Visibility: The distance that atmospheric conditions allow a person to see at a given time and location. Visibility reduction from air pollution is often due to the presence of sulfur and nitrogen oxides, as well as particulate matter.
- VT: Vehicle Trips.
- VOCs: Volatile Organic Compounds. Hydrocarbon compounds which exist in the ambient air. VOCs contribute to the formation of smog and/or may themselves be toxic. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints.
- ZEV: Zero emission vehicles. Currently, only electric vehicles are zero emission.

APPENDIX B

Chapter 21.64

TRANSPORTATION DEMAND AND TRIP REDUCTION MEASURES

Sections:

21.64.010	Purpose and intent.
21.64.020	Definitions.
21.64.030	Transportation demand and trip reduction measures.

21.64.010 Purpose and intent.

- A. The Legislature of the state of California has found that the lack of an integrated transportation system and the increase in the number of vehicles are causing traffic congestion that each day results in hundreds of thousands of hours lost in traffic, tons of pollutants released into the air and millions of dollars of added costs to the motoring public. It has, therefore, adopted legislation requiring the preparation and implementation of a Congestion Management Program ("CMP") by county transportation commissions or other public agencies of every county that includes an urbanized area.
 - B. The Los Angeles County Metropolitan Transportation Authority ("MTA") is responsible for the preparation of the CMP for Los Angeles County ("county").
 - C. The CMP must contain a trip reduction and travel demand management element that promotes alternative transportation methods, such as carpools, vanpools, transit, bicycles, walking and park-and-ride lots, improvement in the balance between jobs and housing, and other strategies, including flexible work hours, telecommuting and parking management programs.
 - D. The county and every city within the county is required by state law to adopt and implement a Transportation Demand Management ("TDM") ordinance as an important element of the CMP to improve both congestion and air quality.
 - E. LACTC must determine annually whether the county and cities within the county are conforming to the CMP, including the requirement to adopt and implement a TDM ordinance.
 - F. The State Clean Air Act requires regions to attain a 1.5 vehicle occupancy during the commute period by the year 1999.
 - G. This Chapter 21.64 is intended to comply with the CMP's requirements for a TDM ordinance. The requirements of South Coast Air Quality Management District ("District") Regulation XV, are separate from this chapter, and administered by the District. Nothing herein is intended, nor shall it be construed, to limit or otherwise preclude employers from offering or providing additional inducements to use alternatives to single-occupant vehicles to their employees necessary to meet Regulation XV requirements.
 - H. In order to use the existing and planned transportation infrastructure more efficiently, maintain or improve traffic levels of service, and lower motor vehicle emissions, it is the policy of the city to minimize the number of peak period vehicle trips generated by additional development, promote the use of alternative transportation, improve air quality and participate in regional and county-wide efforts to improve transportation demand management.
- (Ord. C-7092 § 2 (part), 1993).

21.64.020 Definitions.

The following words or phrases shall have the following meanings when used in this chapter:

- A. "Alternative transportation" means the use of modes of transportation other than the single passenger motor vehicle, including but not limited to carpools, vanpools, buspools, public transit, walking and bicycling.
- B. "Applicable development" means any development project that is determined to meet or exceed the project size threshold criteria contained in Section 21.64.030.
- C. "Buspool" means a vehicle carrying sixteen or more passengers commuting on a regular basis to and from work with a fixed route, according to a fixed schedule.
- D. "Carpool" means a vehicle carrying two to six persons commuting together to and from work on a regular basis.
- E. "California Environmental Quality Act (CEQA)" is a statute that requires all jurisdictions in the state of California to evaluate the extent of environmental degradation posed by proposed development.
- F. "Developer" shall mean the builder who is responsible for the planning, design and construction of an applicable development project. A developer may be responsible for implementing the provisions of this chapter as determined by the property owner.
- G. "Employee parking area" means the portion of total required parking at a development used by on-site employees. Employee parking shall be calculated as follows:

Type of Use	Percent of Total Required Parking Devoted to Employees
Commercial	30%
Office/professional	85%
Industrial/manufacturing	90%

- H. "Preferential parking" means parking spaces designated or assigned, through use of a sign or painted space markings, for carpool and vanpool vehicles carrying commute passengers on a regular basis that are provided in a location more convenient to a place of employment than parking spaces provided for single-occupant vehicles.
- I. "Property owner" means the legal owner of a development who serves as the lessor to a tenant. The property owner shall be responsible for complying with the provisions of this chapter either directly or by delegating such responsibility as appropriate to a tenant and/or his agent.
- J. "South Coast Air Quality Management District (SCAQMD)" is the regional authority appointed by the California State Legislature to meet federal standards and otherwise improve air quality in the South Coast Air Basin (the nondesert portions of Los Angeles, Orange, Riverside, and San Bernardino Counties).
- K. "Tenant" means the lessee of facility space at an applicable development project.

- L. "Transportation Demand Management (TDM)" means the alteration of travel behavior, usually on the part of commuters, through programs of incentives, services, and policies. TDM addresses alternatives to single occupant vehicles such as carpooling and vanpooling, and changes in work schedules that move trips out of the peak period or eliminate them altogether (as is the case in telecommuting or compressed work weeks).
- M. "Trip reduction" means reduction in the number of work-related trips made by single-occupant vehicles.
- N. "Vanpool" means a vehicle carrying seven or more persons commuting together to and from work on a regular basis, usually in a vehicle with a seating arrangement designed to carry seven to fifteen adult passengers and on a prepaid subscription basis.
- O. "Vehicle" means any motorized form of transportation, including but not limited to automobiles, vans, buses and motorcycles. (Also see the definition for "recreational vehicle" in Section 21.15.2270.)

(Ord. C-7092 § 2 (part), 1993).

21.64.030 Transportation demand and trip reduction measures.

- A. Applicability. Prior to approval of any development project, the applicant shall make provision for, as a minimum, all of the following applicable transportation demand management and trip reduction measures.
 - 1. This chapter shall not apply to projects for which a development application has been deemed "complete" by the city pursuant to Government Code Section 65943, or for which a NOP for a draft EIR has been circulated or for which an application for a building permit has been received prior to the effective date of this chapter.
 - 2. All facilities and improvements constructed or otherwise required shall be maintained in a state of good repair.
 - 3. Additions to buildings which existed prior to April 1, 1993 and which exceed the thresholds defined in this section shall comply with the applicable requirements but shall not be added cumulatively with existing square footage; existing square footage shall be exempt from these requirements. All calculations shall be based on gross square footage.
- B. Development Standards.
 - 1. Nonresidential development of twenty-five thousand square feet or more shall provide the following to the satisfaction of the city:
 - a. A bulletin board, display case, or kiosk displaying transportation information located where the greatest number of employees are likely to see it. Information in the area shall include, but is not limited to the following:
 - i. Current maps, routes and schedules for public transit routes serving the site;
 - ii. Telephone numbers for referrals on transportation information including numbers for the regional ridesharing agency and local transit operators;
 - iii. Ridesharing promotional material supplied by commuter-oriented organizations;
 - iv. Bicycle route and facility information, including regional/local bicycle maps and bicycle safety information; and

- v. A listing of facilities available for carpoolers, vanpoolers, bicyclists, transit riders and pedestrians at the site.
2. Nonresidential development of fifty thousand square feet or more shall comply with subsection B1 of this section and shall provide all of the following measures to the satisfaction of the city:
 - a. Not less than ten percent of employee parking area shall be located as close as is practical to the employee entrance(s), and shall be reserved for use by potential carpool/vanpool vehicles, without displacing handicapped and customer parking needs. This preferential carpool/vanpool parking area shall be identified on the site plan upon application for building permit, to the satisfaction of the city. A statement that preferential carpool/vanpool spaces for employees are available and a description of the method for obtaining such spaces must be included on the required transportation information board. Spaces will be signed/striped as demand warrants; provided, that at all times at least one space for projects of fifty thousand square feet to one hundred thousand square feet and two spaces for projects over one hundred thousand square feet will be signed/striped for carpool/vanpool vehicles.
 - b. Preferential parking spaces reserved for vanpools must be accessible to vanpool vehicles. When located within a parking structure, a minimum vertical interior clearance of seven feet two inches shall be provided for those spaces and accessways to be used by such vehicles. Adequate turning radii and parking space dimensions shall also be included in vanpool parking areas.
 - c. Bicycle racks or other secure bicycle parking shall be provided to accommodate four bicycles per the first fifty thousand square feet of nonresidential development and one bicycle per each additional fifty thousand square feet of nonresidential development. Calculations which result in a fraction of 0.5 or higher shall be rounded up to the nearest whole number. A bicycle parking facility may also be a fully enclosed space or locker accessible only to the owner or operator of the bicycle, which protects the bike from inclement weather. Specific facilities and location (e.g., provision of racks, lockers, or locked room) shall be to the satisfaction of the city.
 3. Nonresidential development of one hundred thousand square feet or more shall comply with subsection B1 and 2 of this section, and shall provide all of the following measures to the satisfaction of the City:
 - a. A safe and convenient zone in which vanpool and carpool vehicles may deliver or board their passengers;
 - b. Sidewalks or other designated pathways following direct and safe routes from the external pedestrian circulation system to each building in the development;
 - c. If determined necessary by the city to mitigate the project impact, bus stop improvements must be provided. The city will consult with the local bus service providers in determining appropriate improvements. When locating bus stops and/or planning building entrances, entrances must be designed to provide safe and efficient access to nearby transit stations/stops;
 - d. Safe and convenient access from the external circulation system to bicycle parking facilities on site.

(Ord. C-7092 § 2 (part), 1993).

APPENDIX C

CONGESTION MANAGEMENT PROGRAM
LOCAL IMPLEMENTATION REPORT

1994-1995

CITY OF LONG BEACH

EXECUTIVE SUMMARY

The Congestion Management Program is a state-mandated program that Cities are required to comply with in order to qualify for receipt of state gas tax revenues, and well as some sources of federal funding. The cities in Los Angeles county demonstrate compliance by preparing Local Implementation Reports on an annual basis which record CMP "debits" as a result of new development offset by CMP "credits" for programs, improvements and strategies that reduce congestion. The City of Long Beach established a large credit bank of 212,974 credits, as a result of a five year report submitted last year and approved by the Metropolitan Transportation Authority this year. For reporting year June 1, 1994 through May 31, 1995, the City increased its net credits by 912 points, because the credits for that reporting year (3,233) exceeded our debits (2,321). It is possible that additional credits may be realized from on-dock rail, curbside recycling, and other programs which we haven't yet received a final ruling on. The City of Long Beach maintains its strong position of having substantially more credits than will be needed in the immediate future, thereby protecting our qualification for gas tax revenue and safeguarding the ability to develop land in the long-term.

INTRODUCTION

CONGESTION MANAGEMENT PROGRAM: BACKGROUND

The Congestion Management Program (CMP) is a state-mandated program enacted by the state legislature in order to address the negative impacts of increasing urban congestion on the State's economic vitality and quality of life. The CMP statute became effective with voter approval of Proposition 111 in June, 1990, which increased the State gas tax by nine cents per gallon. The CMP requires that cities address increased traffic and air pollution created as a result of new development, before receiving their share of the Proposition 111 statewide gas tax funds.

Los Angeles County is one of thirty-two urbanized counties in the state that are required to develop a CMP. The Metropolitan Transportation Authority (MTA) is the designated Congestion Management Agency for Los Angeles County, and has the responsibility of preparing and updating the CMP. By utilizing a regional approach, the Congestion Management Program seeks to maximize the effectiveness of local efforts to reduce congestion and air pollution. In addition to the quality of life issues, the region's economy may suffer increasingly severe federal sanctions unless air quality targets are achieved.

The goals of the CMP are to:

1. Link land use, transportation and air quality decisions;
2. Develop a partnership among transportation decision makers to devise appropriate transportation solutions that include all modes of travel; and
3. Propose transportation projects which are eligible to compete for state gas tax funds.

The ultimate goal of the CMP is to aid in analyzing and selecting the best mix of projects and strategies for addressing the County's mobility needs, as well as to improve coordination of land use and transportation decisions.

The required components of the CMP include: minimum level of service performance standards for highway segments and key roadway intersections, transit standards for frequency and routing of transit service, trip reduction and travel demand management, an analysis of the impacts of local land use decisions of the regional transportation system, and a seven year capital improvement program of projects that benefit the CMP system.

The CMP is one of many important tools used to address transportation needs throughout Los Angeles County. Other planning efforts include the Long Range Transportation Plan (MTA), the Congested Corridor Progress Report (MTA), the Regional Mobility Element of the Regional Comprehensive Plan and Guidelines (Southern California Association of Governments, or SCAG), and the Air Quality Management Plan (South Coast Air Quality Management District, or SCAQMD).

CITY OF LONG BEACH CONGESTION MANAGEMENT EFFORTS

The City of Long Beach has been active in the Congestion Management Program since its inception. In 1992, the City submitted traffic counts and Level of Service (LOS) determinations for selected arterial intersections on the CMP system. In 1993, the City adopted a Transportation Demand Management (TDM) and Trip Reduction Ordinance to encourage carpooling, vanpooling, transit ridership and non-motorized transportation. A Land Use Analysis Program (LUAP) was also submitted in 1993, which analyzes the impacts of new development on the CMP system. And finally, the City of Long Beach submitted its first Local Implementation Report in 1994.

The current work program of the Advance Planning Division includes the development and adoption of an Air Quality Element of the City's General Plan. The Air Quality Element will reflect many of the objectives of the Congestion Management Program with regard to reduced vehicular emissions.

LOCAL IMPLEMENTATION REPORT

The 88 cities and the County of Los Angeles in the MTA jurisdiction are responsible for implementing mitigation strategies that address regional traffic congestion. In order to demonstrate compliance with the CMP, each city prepares an annual Local Implementation Report. Compliance is required for continued receipt of gas tax revenue from the state and for Federal Intermodal Surface Transportation Efficiency Act (ISTEA) allocations, as well as other state congestion and traffic funds.

The following Local Implementation Report is the first under the 1993 CMP to include a "deficiency plan," prepared by tracking new development activity and reporting mitigation efforts implemented. Under the deficiency plan, local jurisdictions accrue "debits" when they issue new building permits, and earn "credits" for implementing projects, programs and strategies that improve transportation. The CMP contains standard debit values for 12 land use categories, and standard credit values for over 50 transportation improvement strategies.

The City submitted its credit claims report earlier this year, and has been approved for 212,974 credits. These credits result from a five year compilation of congestion reducing projects including traffic signal synchronization, grade separations, parking restrictions, and transit and vanpool programs, among others. Additional credits may be awarded for on-dock rail systems at the port and for the curbside recycling program. These credits establish a substantial "credit bank" for the City to draw upon for future development projects.

The 1995 Local Implementation Report will incorporate the first accounting of debits against our 212,974 credits. Development activity between June 1, 1994 and May 31, 1995 resulted in 3,561 debits, which were offset by 1,240 adjustments. The total number of debits for 1994-1995 was 2,321.

DEFICIENCY PLAN STATUS SUMMARY

NEW DEVELOPMENT ACTIVITY REPORT

NEW DEVELOPMENT ACTIVITY

New development activity includes all building permits issued for new construction or additions during the reporting period of June 1, 1994 through May 31, 1995. Activity is measured by permits issued, not permits receiving final approval or certificates of occupancy. Withdrawn, expired or revoked permits during the same time period are counted as adjustments which reduce the total number of debits. Residential construction is tabulated by number of units only; additions to residences which do not result in the creation of a new unit are not counted for CMP purposes. Non-residential construction activity is tabulated by square footage, and is classified into nine use categories, which have different values with regard to CMP calculations. The attached spreadsheets provide more

detailed information regarding debits and credits, in the format required by MTA.

New residential permits were issued for 41 single family units and 112 multi-family units, excluding exempted units. The total number of debits, or "impact", as calculated by CMP formulas is 812.

The largest traffic impact from non-residential development was a value of 1,200 for 197,000 square feet of permitted industrial space. Commercial permits resulted in a traffic impact of 993 points, for 45,000 square feet of permitted development. Office, medical and institutional use permits totalled 34,000 square feet of development, for an impact value of 556. There were no building permits issued during the reporting year in the categories of commercial development exceeding 300,000 square feet, office development exceeding 50,000 square feet, lodging or government.

The total traffic impact value for 1994-1995 permits totalled 3,561.

NEW DEVELOPMENT ADJUSTMENTS

The City of Long Beach Building Bureau tracks demolitions by address and number of units for residential projects. In the 1994-1995 reporting year, 45 single family units and 76 multi-family units were demolished. Of the 36 non-residential buildings which were demolished (not including accessory garages, which are not counted for CMP purposes), building area was recorded for only 16 structures. Building Bureau records were cross checked with information available through the Harbor Department through their Harbor Development Permit (HDP) Process. Harbor Development Permits are required for development and demolition in the Port area, but do not substitute for required building or demolition permits issued by the Building Bureau.

New Development Adjustments offset the total impact values by approximately one-third. New development activity resulted in 3,561 points, minus the 1,240 points credited by the demolition permits. In summary, the demolition records for 1994-1995 are:

RESIDENTIAL DEMOLITIONS	
Single Family	45 Units
Multi-Family	76 Units

COMMERCIAL DEMOLITIONS	
Commercial (Less than 300,000 square feet)	9,000 sq. ft.

Freestanding Eating and Drinking	3,000 sq. ft.
Industrial	19,000
Institutional/Educational	7,000

There are no demolition records specific to lodging, medical, office or governmental uses. Current tracking procedures do not allow for an accounting of permits which were issued but later revoked, expired, or withdrawn during the reporting period, therefore no adjustments are realized in those areas.

EXEMPTED DEVELOPMENT ACTIVITY

There are six types of development activity which are not included in new development activity totals:

- 1) Low/Very Low Income Housing
- 2) High Density Residential near Rail Stations
- 3) Mixed Use Developments near Rail Stations
- 4) Development Agreements entered into prior to July 10, 1989
- 5) Reconstruction of buildings damaged in the April 1992 Civil Unrest
- 6) Reconstruction of buildings damaged in the January 1994 earthquake

There were two projects which received building permits in 1994-1995 which included low income residential units. Twenty-four of twenty-five units at 408 Elm and seven units at 838 Pine were designated for low income households. The low income units reduced the total number of multi-family units from 143 to 112. A third project at 1855 Atlantic was constructed this year, but the permits were issued in May of 1994 prior to the beginning of the reporting year, and the 15 units are not reflected in the total number of exempted units.

There were no development permits issued in the other categories in reporting year 1994-1995. For example, Long Beach did not experience any loss of structures as a result of the Northridge earthquake in 1994, therefore no permits for earthquake rebuilds were issued.

Although approximately 200 buildings were destroyed in the City during the Civil Unrest of 1992, many re-build permits were issued in the first and second year after the destruction, and no re-build permits were issued last year.

The CMP defines high density residential development at that which is equal to or greater than 120% of the maximum residential density allowed under the local General Plan and Zoning ordinance. The only type of development in Long Beach which falls into this category are residential projects for senior citizens and/or the handicapped. These projects are able to achieve increased density through a Conditional Use Permit process. No permits were issued for either type of development in the past year.

TRANSPORTATION IMPROVEMENTS CREDIT CLAIMS

Transportation improvements implemented by the City of Long Beach during the period of June 1, 1994 to May 31, 1995 primarily involved the completion of traffic signal synchronizations, grade separations on non-CMP arterials, a freeway ramp addition within the Harbor area and the Telebusiness Center. Projects qualify for credits as specified percentages of the project are completed, or "milestones" are reached. Credits claimed for improvements included in last year's Local Implementation Report total 1,434 (see attached spreadsheet).

New improvements the City is claiming for credit during the reporting period include a grade separated interchange connector ramp involving Ocean Boulevard (future I-710 Freeway) to Terminal Island in the harbor area, increased ridership on Long Beach Transit between 1993 and 1994, and traffic signal control at Bellflower Boulevard and Los Coyotes Diagonal. Credit claimed for new improvements total 1,799. (See attached spreadsheet.)

Credits claimed for all projects during the reporting period total 3,233. Upon approval of these credits by the MTA the "credit bank" for the City will total 216,207, less offsetting debits. This total does not include credits claimed in the 1994 Local Implementation Report submitted last year for on-dock rail systems as referenced earlier in the report, pending a final ruling by the MTA. Also, there were additional "special" credits submitted this year for MTA approval that are not reflected in the attached spreadsheet, including the City's Police Bicycle Patrol program. These proposed credit claims are currently being reviewed by the MTA.

IMPACT OF FUTURE MAJOR DEVELOPMENTS

Improvement strategies that the City intends to submit in the near future include a grade separation at Pier J Avenue and Harbor Scenic Drive generating over 1,400 credits. Another planned submittal to the MTA is Planned Development #29 (PD-29), a mixed use commercial and residential land use plan and zoning ordinance for future development along the Blue Line rail corridor on Long Beach Boulevard. The City is requesting MTA's assistance in calculating an initial credit for the land use plan/ordinance.

Planned developments which are expected to begin implementation within the next few years include the 605 Power Retail and Entertainment Center and the Queensway Bay commercial waterfront project. The debits and credits generated by these two projects can only be estimated at this time using certain assumptions.

The Power Center project is planned to be a 615,900 square foot retail and entertainment complex. Using CMP criteria and assuming 6.5% of the space designated as freestanding restaurant usage and that the remainder (93.5%) is designated as retail and entertainment uses, the project is expected to generate approximately 12,900 debits. Mitigation measures which are recommended in the Draft Environmental Impact Report include lane additions to the I-605 south bound and north bound ramps at Carson Street and traffic signal synchronization on Carson Street. These mitigation measures are expected to generate approximately 3,200 credits.

The Queensway Bay project is expected to exceed 1,390,000 square feet of new development activity. Using CMP criteria and assuming that the planned development space consists of 21% retail, 52% lodging, 18% office, 9% institutional/education and an entertainment center generating more than 300 daily trips, the project is expected to generate approximately 15,600 debits. Some of the mitigation measures proposed for this project include the creation of a traffic and parking management association and intersection improvements on CMP arterials involving Alamitos Boulevard, Seventh Street, and Shoreline Drive. These mitigation measures are expected to generate approximately 3,800 credits.

It is important to note that under the CMP, individual developments need not balance debits and credits. The balance requirement applies only to the City as a whole. With the City's sizable current credit balance, the developments noted above can be easily accommodated without risking CMP compliance.

CONCLUSION

Long Beach is in the enviable position of having substantially more CMP credits than we expect to need in the immediate future. Continued active participation in the program to

maintain a high level of credits is necessary, however in order to protect our qualification for State Gas and some sources of federal funds, to reduce the ill effects of traffic and air pollution in our community, and to protect the ability of property owners in the City to develop projects in the future.

C:CMPLIR

Contact: **Edward K. Shikada, Transportation Planning Officer**
 Phone Number: **(310) 570-6331**

**CONGESTION MANAGEMENT PROGRAM
 FOR LOS ANGELES COUNTY**

1995 DEFICIENCY PLAN STATUS SUMMARY

1. Total Current Congestion Mitigation Goal [from Section I]	(2,321)
2. Transportation Improvements Credit Claims [from Section II]	3,233
Subtotal Current Credit (Goal)	912
3. Carryover Credit from Last Year's (1994) Local Implementation Report	212,974
Net Deficiency Plan Credit Balance:	213,886

SECTION I – NEW DEVELOPMENT ACTIVITY REPORT

PART 1: NEW DEVELOPMENT ACTIVITY			
RESIDENTIAL DEVELOPMENT ACTIVITY			
Category	Dwelling Units	Debit Value	Subtotal
Single Family Residential	41	x 6.80 =	(279)
Multi-Family Residential	112	x 4.76 =	(533)
Group Quarters	0	x 1.98 =	0
COMMERCIAL DEVELOPMENT ACTIVITY			
Category	1000 Gross Square Feet	Debit Value	Subtotal
Commercial (less than 300,000 sq.ft.)	45	x 22.23 =	(993)
Commercial (300,000 sq.ft. or more)	0	x 17.80 =	0
Freestanding Eating & Drinking	0	x 66.99 =	0
NON-RETAIL DEVELOPMENT ACTIVITY			
Category	1000 Gross Square Feet	Debit Value	Subtotal
Lodging	0	x 7.21 =	0
Industrial	197	x 6.08 =	(1,200)
Office (less than 50,000 sq.ft.)	20	x 16.16 =	(329)
Office (50,000–299,999 sq.ft.)	0	x 10.50 =	0
Office (300,000 sq.ft. or more)	0	x 7.35 =	0
Medical	13	x 16.90 =	(221)
Government	0	x 20.95 =	0
Institutional/Educational	1	x 7.68 =	(6)
OTHER DEVELOPMENT ACTIVITY			
Description (Attach additional sheets if necessary)	Daily Trips	Debit Value	Subtotal
ENTER IF APPLICABLE	0	x 0.71 =	0
ENTER IF APPLICABLE	0	x 0.71 =	0
Subtotal New Development Activity		=	(3,561)
Adjustments (Optional) – Complete Part 2		=	1,240
Total Current Congestion Mitigation Goal (Points)		=	(2,321)

SECTION I – NEW DEVELOPMENT ACTIVITY REPORT (Continued)

PART 2: NEW DEVELOPMENT ADJUSTMENTS				
IMPORTANT: Adjustments may be claimed only for 1) development permits that were both issued and revoked, expired or withdrawn during the reporting period, and 2) demolition of any structure within the reporting period.				
RESIDENTIAL DEVELOPMENT ADJUSTMENTS				
Category	Dwelling Units	Adjustment Value		Subtotal
Single Family Residential	45	x	6.80 =	306
Multi-Family Residential	76	x	4.76 =	362
Group Quarters	0	x	1.98 =	0
COMMERCIAL DEVELOPMENT ACTIVITY				
Category	1000 Gross Square Feet	Adjustment Value		Subtotal
Commercial (less than 300,000 sq.ft.)	9	x	22.23 =	190
Commercial (300,000 sq.ft. or more)	0	x	17.80 =	0
Freestanding Eating & Drinking	3	x	66.99 =	214
NON-RETAIL DEVELOPMENT ACTIVITY				
Category	1000 Gross Square Feet	Adjustment Value		Subtotal
Lodging	0	x	7.21 =	0
Industrial	19	x	6.08 =	112
Office (less than 50,000 sq.ft.)	0	x	16.16 =	0
Office (50,000–299,999 sq.ft.)	0	x	10.50 =	0
Office (300,000 sq.ft. or more)	0	x	7.35 =	0
Medical	0	x	16.90 =	0
Government	0	x	20.95 =	0
Institutional/Educational	7	x	7.68 =	56
OTHER DEVELOPMENT ADJUSTMENTS				
Description (Attach add'l sheets if necessary)	Daily Trips	Impact Value		Subtotal
ENTER HERE IF APPLICABLE	0	x	0.71 =	0
ENTER HERE IF APPLICABLE	0	x	0.71 =	0
Total Mitigation Goal Adjustments (Points)				= 1,240

SECTION I – NEW DEVELOPMENT ACTIVITY REPORT (Continued)

PART 3: EXEMPTED DEVELOPMENT ACTIVITY

(NOT INCLUDED IN NEW DEVELOPMENT ACTIVITY TOTALS)

Low/Very Low Income Housing	31	Dwelling Units
High Density Residential near Rail Stations	0	Dwelling Units
Mixed Use Developments near Rail Stations	0	1000 Gross Square Feet
	0	Dwelling Units
Development Agreements entered into Prior to July 10, 1989	0	1000 Gross Square Feet
	0	Dwelling Units
Reconstruction of Buildings damaged in April 1992 Civil Unrest	0	1000 Gross Square Feet
	0	Dwelling Units
Reconstruction of Buildings damaged in Jan 1994 Earthquake	0	1000 Gross Square Feet
	0	Dwelling Units

Exempted Development Definitions:

1. Low/Very Low Income Housing: as defined by the California Department of Housing and Community Development as follows:
Low-Income: equal to or less than 80% of the median income, with adjustments for family size.
Very Low-Income: equal to or less than 50% of the median income, with adjustments for family size.
2. High Density Residential Near Rail Stations: development located within 1/4 mile of a fixed rail passenger station and that is equal to or greater than 120 percent of the maximum residential density allowed under the local general plan and zoning ordinance.
3. Mixed Uses Near Rail Stations: mixed use development located within 1/4 mile of a fixed rail passenger station, if more than half of the land area, or floor area, of the mixed use development is used for high density residential housing.
4. Development Agreements: projects that entered into a development agreement (as specified under Section 65864 of the California Government Code) with a local jurisdiction prior to July 10, 1989.
5. April 1992 Civil Unrest Reconstruction: until June 1, 1995, buildings and structures damaged or destroyed in Los Angeles County as a result of civil unrest during the state of emergency declared by the Governor on April 29, 1992.
6. January 1994 Earthquake Reconstruction: until June 1, 1997, buildings and structures damaged or destroyed in Los Angeles County as a result of the Northridge Earthquake.
7. Any project of a federal, state or county agency that is exempt from local jurisdiction zoning regulations and where the local jurisdiction is precluded from exercising any approval/disapproval authority. These locally precluded projects do not have to be reported in the LIR.

SECTION II – TRANSPORTATION IMPROVEMENT CREDIT CLAIMS

Total Number of Projects:	8	Total Credit (Points):	3,233
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Enter the Following Information for each project/program:

1. Proj. No.	2. CMP Strategy	3. CMP Strategy Name Project Description & Reference Documentation						4. Project Scope			
		5. Credit Factor	6. Project Value	7. Expect. Compl. Date	8. Project Cost in \$1000s	9. Local Participation	10a. Current Mile-stone	10b. Credit'd in 1994 LIR?	11. Mile-stone Factor	12. Net Current Value	
1	306.0	CMP TDM Ordinance Non-Residential building permits issued, as reported in Section I						276 1000 gsf			
		0.3	83	n/a	n/a	100%	3	NO	100%	83	
2	323.0	Business/Eductn Videoconferencing Cntr Telebusiness Center – Providing public interfacing with distant central offices via data, voice, video and/or imaging; video-conferencing; (w/Discretionary-40%)						80 daily user			
		7.8	624	1996	\$1,270	60%	2	YES	60%	225	
3	203.2	Grade separation on non-CMP Major Arterial Harbor Plaza in the Port of Long Beach, railroad overhead expansion (add one lane in each direction) (cost combined with Pico Ave railroad grade separation project)						1 project			
		1440	1,440	1994	\$30,500	100%	3	YES	30%	432	
4	203.2	Grade separation on non-CMP Major Arterial Pier G Avenue in the Port of Long Beach, railroad overhead						1 project			
		1440	1,440	1994	\$6,300	100%	3	YES	30%	432	
5	204.0	Freeway ramp addition or modification Harbor Scenic Dr/Harbor Plaza in the Port of Long Beach, off-ramp addition						1 ramp			
		1150	1,150	1994	\$357	100%	3	YES	30%	345	
6	325.0	New Local or Commuter Bus Service Section 15 System-Wide Passenger Miles Traveled Between 1993 and 1994, (w/Long Beach-59.47%, Contract Cities-0.53%, Discretionary-40.0%)						893 pass-mile			
		1	893	1994	\$34,013	59%	2	NO	100%	527	
7	203.2	Grade separation on non-CMP Major Arterial Caltrans ISTEADemo Project – Ocean BI (future I-710 Fwy) to Terminal Island, grade separated interchange connect ramp; Doc.: RTIP; (w/L.A.-10% & Fed.-80%)						1 project			
		1440	1,440	1996	\$14,700	10%	1	NO	20%	29	
8	209.5	Signal synch, surv & control on 6-lane Oth Maj Bellflower BI and Los Coyotes Diagonal intersection, traffic signal synchronization						0.3 route-mile			
		3870	1,161	1995	\$20	100%	3	NO	100%	1,161	

