Air Quality Element

2020 General Plan

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City of Baldwin Park
2020 General Plan

Air Quality Element

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AIR QUALITY ELEMENT

Introduction

The State of California has not yet made air quality a mandatory General Plan element. The South Coast Air Quality Management Plan (AQMP) has, however, specified that air quality requirements be included in a jurisdiction's General Plan. The AQMP is prepared for a region designated as a non-attainment area for the purpose of bringing the area into compliance with the requirements for the national and/or state standards. Baldwin Park has created a separate Air Quality Element to adequately address relevant new air quality requirements and issues confronting the community.

Until a local jurisdiction brings its General Plan into compliance with the AQMP, project-by-project review by SCAG of "regionally significant" general development projects for conformance with the AQMP will be required. In addition, local government General Plans are also subject to AQMP conformity review. After a local government updates its Plan to be consistent with the AQMP, conformity review is limited to an annual cumulative impact review performed in conjunction with the Reasonable Further Progress Report prepared by SCAG and submitted to the EPA. Local governments must take at least the following actions prior to certifying that their General Plans are in conformance with the AQMP:

- Adopt an Air Quality Element (or sub-element) that includes objectives consistent with the AQMP and the Air Quality Element Guidelines.

- Commit to implement the appropriate local government measures identified in the Guidelines and the AQMP.

- Adopt any necessary changes to other portions of the General Plan to make them internally consistent with the newly adopted Air Quality Element.

Regional Mobility Plan

The Southern California Association of Governments has adopted a Regional Mobility Plan to address transportation issues on a regional basis. The Plan includes growth management, demand management, system management, and facilities development strategies to recapture and retain the transportation mobility levels of 1984 in the SCAG region. The Regional Mobility Plan is adopted with the AQMP, and its measures are included within the AQMP.

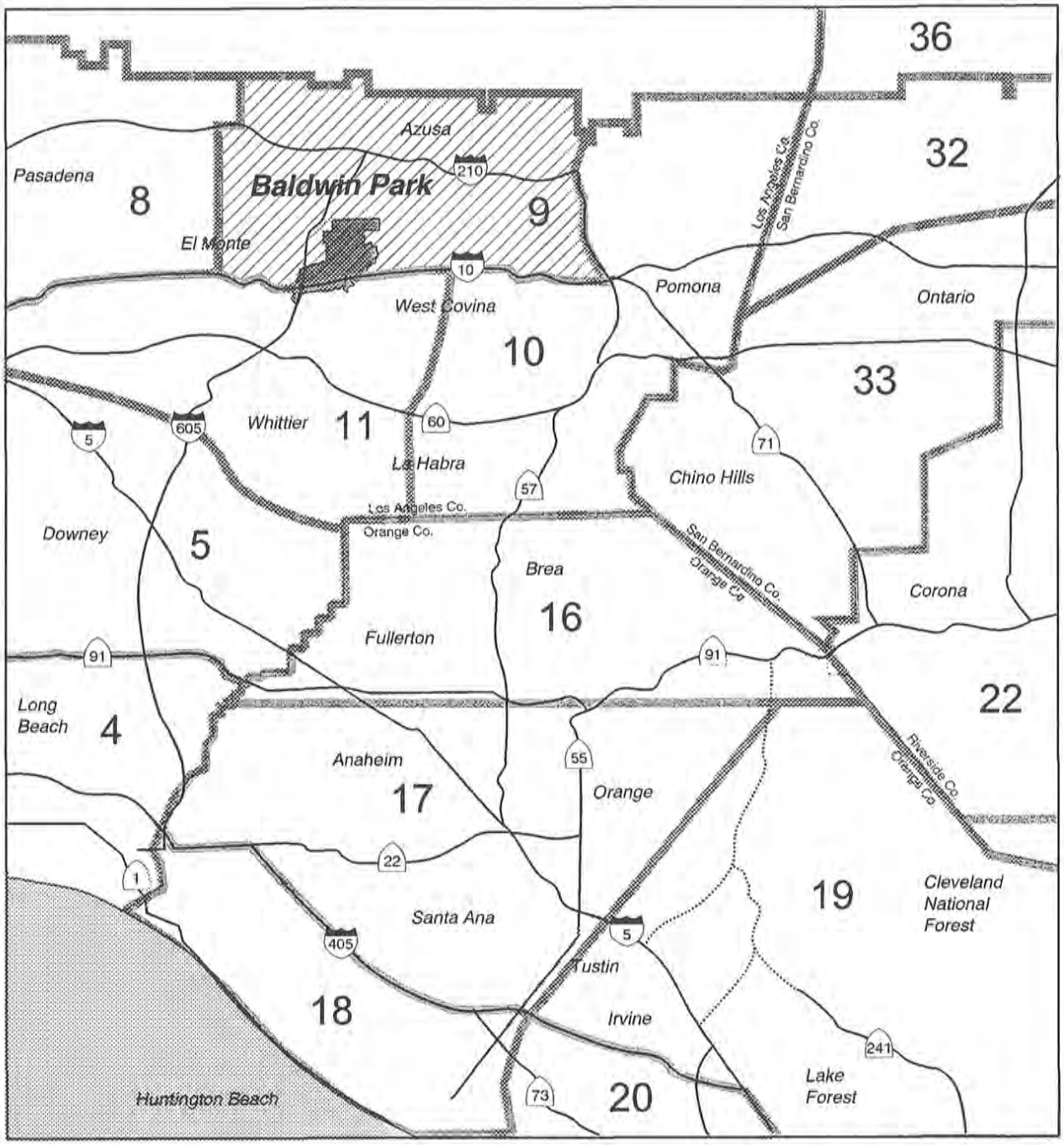
The South Coast Air Basin has the worst air quality problem in the nation. Despite implementing many strict controls, the basin still fails to meet the federal air quality standards for four of the six criteria pollutants including ozone, nitrogen dioxide, carbon monoxide and fine particulate matter. Because federal and State pollution standards have not been achieved, the basin is considered a "non-attainment" area.

Both the federal and State governments have set health-based ambient air quality standards for the following pollutants: sulfur dioxide, lead, ozone, carbon monoxide, nitrogen dioxide, total suspended particulates, and PM10 (dust particles about 10 microns or less in diameter). These standards are designed to protect the most sensitive persons from illness or discomfort with a margin of safety. The California Standards are more stringent than the Federal Standards, and in the case of PM10 and sulphur dioxide, far more stringent. California has also set standards for sulfate, visibility, hydrogen sulfide, and vinyl chloride. Table AQ-1 on the following page outlines the current federal and state ambient air quality standards.

Ambient Air Quality

The South Coast Air Quality Management District (SCAQMD) monitors air quality throughout the basin at various monitoring stations. The SCAQMD has divided the basin into 38 separate monitoring areas. Figure AQ-1 illustrates the areas served by each monitoring station in the vicinity of Baldwin Park. Within each monitoring area, the District operates a monitoring station to measure local pollutant levels. Data gathered at these monitoring stations is considered representative of air quality levels for the entire monitoring area.

Baldwin Park is located in monitoring area No. 9. The monitoring station for this area is Number 060, which is located in the adjacent city of Azusa. Historic air quality data indicate that ozone and small particulate matter are the chief pollutants of concern. While ozone concentrations have effectively been reduced following extensive regional efforts to control emissions of ozone-forming compounds, particulate loads have continued to be problematic.



Source: South Coast Air Quality Management District, 1989

BALDWIN PARK

Figure AQ-1
Air Monitoring Boundaries

The 1989 AQMP enhanced the long-range strategy set forth in previous AQMPs. Using a three-tiered format, the Plan proposed a comprehensive set of control measures that included the use of less-polluting solvents and new, more efficient application methods in a variety of operations, as well as the use of alternative fuels. Most control measures were to be adopted within several years after adoption of the Plan. Implementation responsibilities were delineated between the District, Air Resources Board (ARB), EPA, and local governments depending on each agency's authority and type of control measure.

At the same time that this effort was underway in the South Coast Air Basin, the California Legislature passed the California Clean Air Act (CCAA). The CCAA requires all nonattainment air basins in the state to develop new attainment plans to meet federal and state air quality standards. In addition, the CCAA places a number of performance tests before each Plan. The CCAA Plan for Southern California was adopted July 12, 1991. Although the 1989 AQMP is a federal attainment Plan, the CCAA caused the District and SCAG to immediately begin updating the Plan.

1991 AQMP Revision

The 1991 AQMP addressed CCAA requirements, retained the basic structure of the 1989 AQMP, but also contained several enhancements to the emissions inventory and modeling analyses, and included improved mobile source strategies. The purpose of the 1991 AQMP Revision was to set forth a comprehensive program that would lead the Basin into compliance with all federal and state air quality standards.

The 1991 AQMP Revision specified programs which required the cooperation of all levels of government: local, regional, state, and federal. Accordingly, each agency/jurisdiction was assigned specific planning and implementation responsibilities.

1994 AQMP Revision

The 1994 Air Quality Management Plan was adopted in September 1994 and was designed to meet both state and federal Clean Air Act requirements. The 1994 AQMP addressed requirements of the 1990 Clean Air Act to meet National Ambient Air Quality Standards and requirements of the California Clean Air Act (CCAA) amendments of 1992. The 1994 AQMP proposed to attain state standards for nitric oxides by 1997, for carbon monoxide by 2000, and standards for PM10 and ozone by post-2010. The 1994 AQMP included new information on emission inventories, overall emissions control strategy, new stationary source control measures, transportation control measures, CARB mobile source control strategy, and best available control measures for PM10.

- Amendments to the federal Post-1996 Rate-of-Progress Plan and the Federal Attainment Plans for ozone and carbon monoxide
- A Maintenance Plan for nitrogen dioxide
- An attainment demonstration and State Implementation Plan Revision for PM10

Responsibilities of Governmental Agencies

Implementation of the Plan's strategies requires a cooperative partnership of governmental agencies at the federal, state, regional and local level. These agencies form the four cornerstones from which implementation programs will evolve.

Federal Agencies: At the federal level are the U.S. EPA and other agencies charged with controlling emissions from federally regulated including airplanes, trains, ships, mobile-operating construction and farm equipment below 175 horsepower, and off-shore oil development. EPA will also have the lead in working with other federal agencies to implement some of the AQMP control measures. This will involve working with the Department of Interior to reduce emissions from off-shore oil development, the Department of Defense and Coast Guard to reduce emissions from military aircraft and marine vessel operations, and the FAA to reduce emissions from aircraft engines.

Air Resources Board (ARB): At the State level, the ARB is responsible for motor vehicle emissions and fuels. Many of the on-road mobile source control measures depend upon actions by the ARB to formulate strict exhaust emission standards and fuel quality requirements for passenger vehicles and trucks. The ARB also establishes off-road mobile source emissions standards, and along with the District, implements the control measures in the AQMP directed towards reducing emissions from consumer products.

Several other state agencies will implement those control measures that fall within their authority. For example, the CEC and PUC assist in implementing a variety of energy conservation-related control measures such as establishing energy efficient standards and approving utility conservation programs.

On-road motor vehicles, which include passenger cars, light-duty trucks, medium-duty vehicles, heavy-duty vehicles, and motorcycles, number approximately 10 million in the South Coast Air Basin. By the year 2010, vehicle miles traveled is projected to be about 380 million miles per day. SCAG's adopted transportation plan include transportation improvements, advancement of transportation technologies, market based transportation pricing and livable communities. The 1997 AQMP includes seven transportation control measures (TCMs). These include the following:

- TCM-01 Transportation Improvements
- ATT-01 Telecommunications
- ATT-02 Smart Shuttle Transit
- ATT-03 Zero-Emission Vehicles/Infrastructure
- ATT-04 Alternative Fuel Vehicles/Infrastructure
- ATT-05 Intelligent Transportation Systems
- FSS-02 Market Based Transportation Pricing

The focus for local government will be successful implementation of transportation improvements.

Transportation improvements include both capital and non-capital based actions. Capital-based actions include HOV Lanes; transit improvements; traffic flow improvements; park and ride and intermodal facilities; and urban freeway, bicycle, and pedestrian facilities. Non-Capital based actions include rideshare matching, congestion management program-based transportation demand management (TDM), telecommunication facilities/satellite work centers, TDM demonstration projects/programs, and transit pass centers. Advanced transportation technologies include the use of telecommunications, smart shuttle transit, zero emissions vehicles and infrastructure, alternative fuel vehicles and infrastructure, and intelligent vehicle highway system.

Stationary Source Control Measures

The District is responsible for implementing the stationary source control measures. However, local governments may choose to take responsibility for implementing the fugitive dust and miscellaneous source categories control measures. Stationary source control measures in the 1997 AQMP include the following subcategories: coatings and solvents, petroleum operations, combustion sources, and fugitive dust and miscellaneous source categories.

Local jurisdictions will be responsible for the fugitive dust and miscellaneous source categories. These include the following control measures:

Air pollution is a regional problem affecting the entire South Coast Air Basin, which includes Baldwin Park. The basin has been in violation of federal and State air quality standards for many years. To help attain air quality standards, the Baldwin Park Air Quality Element specifies goals and policies to reduce the generation of air pollutants within the City. Specifically, the goals focus on land use and transportation planning, and stationary source emissions reduction measures to aid in reducing air pollution within the basin.

Land Use Planning

Land use regulations influence the distribution of housing, employment centers, and other land uses within a community. The widespread distribution of different land use sectors affects individuals traveling to various destinations within a community. A substantial amount of air pollution generated can be attributed to automobile trips traveling between these locations thus land use patterns affect the capacity and efficiency of transportation networks. Reducing the number of trips taken within the area through local land use patterns will ultimately influence the amount of pollutants generated. The Land Use Element specifies measures that will encourage the use of non-motorized transportation such as bicycles and pedestrian travel. In particular, commercial centers generally are separated from residential uses and require use of the automobile to access. The integration of residential and commercial uses creates the opportunity for individuals to choose alternative transportation modes, including walking or bicycling.

Goal 1.0 **Improve air quality by reducing the amount of air pollution through proper land use planning.**

Policy 1.1 Establish a new Mixed Used land use category for Downtown which provides for the integration of residential and commercial uses. Establish Downtown as a pedestrian district through development regulations, public improvements, and street design.

Policy 1.2 Locate multiple family developments close to commercial areas to encourage pedestrian rather than vehicular travel.

Policy 1.3 Encourage the development of higher density housing in close proximity to the City's Metrolink station.

Policy 1.4 Provide for the enhancement of neighborhood commercial centers to provide services within walking distance of residential neighborhoods.

Policy 1.5 Encourage the design of new residential and commercial areas to foster pedestrian circulation.

Policy 2.6 Review the zoning regulations annually to identify whether revisions are required to accommodate and encourage the use of alternative-fuel vehicles (e.g. electric cars).

Goal 3.0 **Improve air quality by reducing the amount of vehicular emissions through transportation planning that encourages trip reduction.**

Policy 3.1 Utilize incentives, regulations and/or Transportation Demand Management (TDM) programs in cooperation with other jurisdictions in the South Coast Air Basin to eliminate vehicle trips which would otherwise be made.

Policy 3.2 Utilize incentives, regulations and/or Transportation Demand Management in cooperation with other jurisdictions to reduce the vehicle miles traveled for auto trips which still need to be made.

Goal 4.0 **Improve air quality by reducing vehicular emissions through transportation planning improvements that improve the flow of traffic.**

Policy 4.1 Promote and establish modified work schedules which reduce peak period auto travel.

Policy 4.2 Participate in efforts to achieve increased designation, construction, and operation of High Occupancy Vehicle (HOV) lanes on local freeways.

Policy 4.3 Encourage employer rideshare and transit incentives programs by local businesses.

Policy 4.4 Encourage businesses to alter truck delivery routes and local delivery schedules during peak hours, or switch to off-peak delivery hours.

Policy 4.5 Implement citywide traffic flow improvements outlined in the Circulation Element.

Policy 4 .6 Adopt and implement the required components of the Congestion Management Plan, and continue to work with Los Angeles County on annual updates to the CMP.

Policy 4.7 Promote State and federal legislation which would improve vehicle/transportation technology.

This section describes specific measures that will implement the goals and policies in this Element. Of primary importance in attaining air quality goals is a coordinated regional effort. Baldwin Park will cooperate with the South Coast Air Quality Management District and the Southern California Association of Governments to implement the goals of this Element and the AQMP. The City will be primarily responsible for implementing the transportation and stationary source control measures included in the AQMP. The AQMP transportation measures focus on reducing the number of trips, improving traffic flow, and utilizing alternative methods of transportation.

Transportation

The City will pursue the following programs to address transportation-related pollutant emissions.

Person Work Reduction

- Adopt or amend trip reduction ordinances to require employers to reduce motor vehicle person work trips.
- Implement the bicycle routes plan contained in the Circulation Element.

Employer Rideshare and Transit Incentives

- Trip reduction programs for the City as an employer
- Van pool programs for private employers
- Employee incentives for public transit use
- Merchant transportation incentives
- Adopt a non-work trip reduction ordinance to require major retail centers to offer customer mode-shift travel incentives and provide facilities for non-motorized transportation needs.
- Identify, as appropriate, the local applicability of requiring special event centers to operate park-and-ride and off-site facility lots, requiring auto free zones, requiring street closure during peak periods, and enhancing transit performance.

Truck Dispatching and Rescheduling

- Alter truck delivery routes and local delivery schedules.
- Develop a truck accident reduction program.
- Adopt a SCAQMD Truck Delivery Rule, if necessary.
- Assess needs for federal regulation to assist in the implementation of these efforts.

LOS Deficient Plans: LOS Deficiency Plans must be prepared to describe how excessive congestion on the CMP Highway System can be mitigated in those cases where acceptable LOS cannot be met at certain locations.

Annual Monitoring: The Congestion Management Agency (CMA), shall annually determine if the County and cities are conforming with CMP requirements. In addition, the agency will monitor the implementation of all elements in the CMP by each jurisdiction.

Dust Control And Particulate Emissions

Dust particulates contribute to the degradation of air quality. The AQMP includes specific actions and a timetable for local jurisdictions and agencies to follow to reduce particulates. The control measures for the fugitive dust category as defined in the 1997 AQMP are as follows:

- Fugitive dust and miscellaneous sources
- Road dust suppression
- Watering of disturbed surface areas
- Windbreaks
- Paving at areas adjacent to roadways
- Chemical stabilization of unpaved areas
- Aggregate covering of unpaved roads
- Track-out prevention
- Street cleaning
- Bedliners in and covering of fill import and export vehicles
- Post-Event street clean-up
- Revegetation of disturbed surface areas
- Reduced vehicular speeds on unpaved roads
- Soil erosion control for agricultural activities
- Add-on controls
- Public awareness programs

Each measure relevant to Baldwin Park is outlined below.

Paved Roads

- Consistent with SCAQMD regulations, prohibit outdoor storage of fine particulate matter.

- Develop a "clean streets" management program which includes adopting construction carryout and entrainment ordinances and vehicle entrainment ordinances, as well as allocating resources for controlling emissions from unpaved areas and storm water control.

- Participate in the "clean streets" management program by allocating resources for controlling emissions from unpaved areas and stormwater control respectively.