

City of El Segundo

GENERAL PLAN

DRAFT ENVIRONMENTAL IMPACT REPORT

VOLUME TWO: APPENDICES

SCH# 91041092

PREPARED FOR:
CITY OF EL SEGUNDO
PLANNING DEPARTMENT
350 MAIN STREET
EL SEGUNDO, CALIFORNIA 90245

THE LIGHTFOOT PLANNING GROUP
1315 UNION PLAZA COURT SUITE 100
OCEANSIDE, CALIFORNIA 92054

PREPARED BY:
EIP ASSOCIATES
80 S. LAKE AVENUE SUITE 600
PASADENA, CALIFORNIA 91101

DECEMBER 1991

APPENDICES

APPENDIX A: NOTICE OF PREPARATION/INITIAL STUDY

Notice of Preparation



To: Kendra Morries
Director of Planning
(Agency) c/o City Hall
350 Main Street
(Address) El Segundo, CA 90245

Subject: Notice of Preparation of a Draft Environmental Impact Report

Lead Agency:

Agency Name El Segundo Planning Department
Street Address 350 Main Street
City/State/Zip El Segundo, CA 90245
Contact Kendra Morries
Director of Planning

Consulting Firm (If applicable):

Firm Name EIP Associates
Street Address 80 S. Lake Avenue, Suite 600
City/State/Zip Pasadena, CA 91101
Contact Jay Ziff

The El Segundo Planning Department will be the Lead Agency and will prepare an environmental impact report for the project identified below. We need to know the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval for the project.

The project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (is is not) attached.

Due to the time limits mandated by State law, your response must be sent at the earliest possible date but *not later than 30 days* after receipt of this notice.

Please send your response to Ms. Kendra Morries at the address shown above. We will need the name for a contact person in your agency.

Project Title: Environmental Impact Report - General Plan Revision

Project Location: El Segundo Los Angeles
City (nearest) County

Project Description: (brief)

The proposed project consists of the preparation of a program Environmental Impact Report that will evaluate potential impacts associated with an update of the City of El Segundo General Plan.

Date April 19, 1991

Signature Kendra S. Morries

Title Director of Planning

Telephone -(213) 322-4670

**INITIAL STUDY CHECKLIST FOR THE
EL SEGUNDO GENERAL PLAN UPDATE**

April 10, 1991

Lead Agency: City of El Segundo
Planning Department
350 Main Street
El Segundo, California 90245
(213) 322-4670
Contact: Kendra Morries
Director of Planning

Prepared for: The Lightfoot Planning Group
1315 Union Plaza Court, Suite 100
Oceanside, California 92054
Contact: Darrell W. Gentry
Vice President

Prepared by: EIP Associates, Inc.
80 South Lake Avenue, Suite 600
Pasadena, California 91101
Contact: Jay Ziff
Environmental Planner

PROJECT BACKGROUND

Project Title: Environmental Impact Report for the City of El Segundo General Plan Update.

Project Location: The City of El Segundo, Los Angeles County, California

The City of El Segundo encompasses 545 acres in the urbanized South Bay area of Los Angeles County (see Figure 1). The City is bordered by the Los Angeles International Airport (LAX) to the north, the San Diego Freeway (I-405) to the east, the City of Manhattan Beach to the south (the Chevron refinery is within the El Segundo city limits and covers the majority of the southern portion the City), and the Pacific Ocean and City of the Los Angeles to the west. A portion of the City of Hawthorne is also adjacent (see Figure 2).

Project Description: The project involves an update of the existing General Plan for the City of El Segundo. The plan will address the mandatory Elements of Land Use, Housing, Circulation, Open Space, Conservation, Noise, and Seismic Safety. Additional studies and elements will include: a Parks and Recreation Element, Public Infrastructure and Facilities Plan, Economic Development/Fiscal Impact Plan, Air Quality Management Plan, and potentially a Community Design Element.

A program Environmental Impact Report (EIR) will be prepared in conjunction with the General Plan Update. The program EIR will involve a comprehensive overview of the City's existing environmental conditions and provide a forecast of those conditions at general plan build out. The EIR will identify significant impacts and provide mitigation measures, including a mitigation monitoring program.

Impacts of the Project: Environmental impacts may occur in the following areas: earth; water; air; plant and animal life; noise; light and glare; land use; population; housing; transportation/circulation; public services; utilities; health and safety; natural resources; risk of upset; parks, recreation, and open space; cultural resources; and aesthetics.

Mitigation Measures: No mitigation measures are proposed at this time. The program Environmental Impact Report will study the impacts of the General Plan Update and, after analysis, assess where mitigation measures may be necessary to reduce identified impacts. A Mitigation Monitoring Program will be prepared and adopted following certification of the Final EIR.

2. ENVIRONMENTAL CHECKLIST FORM

I. Background

1. Name of proponent: City of El Segundo
2. Address and Phone Number of Proponent: Kendra Morries
 Director of Planning
 City of El Segundo
 350 Main Street
 El Segundo, CA 90245
 Tel: 213/322-4670
3. Date and Checklist Submitted :
4. Agency Requiring Checklist : City of El Segundo
5. Name of Proposal, if applicable: General Plan Revision

II. Environmental Impacts

(Explanations of all answers are provided in Section III.)

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
1. Earth. Will the proposal result in:			
a. Unstable earth conditions or in changes in geologic substructures ?	_____	_____X_____	_____
b. Disruptions, displacements, compaction or overcovering of the soil ?	_____X_____	_____	_____
c. Change in topography or ground surface relief features ?	_____X_____	_____	_____
d. The destruction, covering or modification of any unique geologic or physical features ?	_____	_____X_____	_____
e. Any increase in wind or water erosion of soils, either on or off the site ?	_____	_____X_____	_____
f. Changes in deposition or erosion of beach sands, or changes in siltation, deposition or erosion which may modify the channel of a river or stream or the bed of the ocean or any bay, inlet or lake ?	_____	_____X_____	_____
g. Exposure of people or property to geologic hazards such as earthquakes, landslides, mudslides, ground failure, or similiar hazards ?	_____X_____	_____	_____

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
2. Air. Will the proposal result in:			
a. Substantial air emissions or deterioration of ambient air quality ?	<u> x </u>	<u> </u>	<u> </u>
b. The creation of objectionable odors ?	<u> </u>	<u> x </u>	<u> </u>
c. Alteration of air movement, moisture or temperature, or any change in climate, either locally or regionally ?	<u> </u>	<u> </u>	<u> x </u>
3. Water. Will the proposal result in :			
a. Changes in currents, or the course of direction of water movements, in either marine or fresh waters ?	<u> </u>	<u> </u>	<u> x </u>
b. Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff ?	<u> x </u>	<u> </u>	<u> </u>
c. Alterations to the course or flow of flood waters ?	<u> </u>	<u> x </u>	<u> </u>
d. Change in the amount of surface water in any water body ?	<u> </u>	<u> </u>	<u> x </u>
e. Discharge into surface waters, or in any alteration of surface water quality, including but not limited to temperature, dissolved oxygen or turbidity ?	<u> </u>	<u> x </u>	<u> </u>
f. Alteration of the direction or rate of flow of ground waters ?	<u> </u>	<u> x </u>	<u> </u>
g. Change in the quantity of ground waters, either through direct additions or withdrawals, or through interception of an aquifer by cuts or excavations ?	<u> </u>	<u> x </u>	<u> </u>
h. Substantial reduction in the amount of water otherwise available for public water supplies ?	<u> </u>	<u> </u>	<u> x </u>
i. Exposure of people or property to water related hazards such as flooding or tidal waves ?	<u> </u>	<u> x </u>	<u> </u>
4. Plant Life. Will the proposal result in :			
a. Change in the diversity of species, or number of any species of plants (including trees, shrubs, grass, crops, and aquatic plants) ?	<u> x </u>	<u> </u>	<u> </u>

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
b. Reduction of the numbers of any unique, rare or endangered species of plants ?	_____	_____X_____	_____
c. Introduction of new species of plants into an area, or in a barrier to the normal replenishment of existing species ?	_____	_____X_____	_____
d. Reduction in acreage of any agricultural crop ?	_____	_____	_____X_____
5. Animal Life. Will the proposal result in :			
a. Change in the diversity of species, or numbers of any species of animals (birds, land animals including reptiles, fish and shellfish, benthic organisms or insects) ?	_____	_____X_____	_____
b. Reduction of the numbers of any unique, rare or endangered species of animals ?	_____	_____X_____	_____
c. Introduction of new species of animals into an area, or in a barrier to the migration or movement of animals?	_____	_____X_____	_____
d. Deterioration to existing fish or wildlife habitat ?	_____	_____X_____	_____
6. Noise. Will the proposal result in :			
a. Increases in existing noise levels ?	_____X_____	_____	_____
b. Exposure of people to severe noise levels ?	_____	_____X_____	_____
7. Light and Glare. Will the proposal produce new light and glare ?	_____X_____	_____	_____
8. Land Use. Will the proposal result in a substantial alteration of the present or planned land use of an area ?	_____X_____	_____	_____
9. Natural Resources. Will the proposal result in :			
a. Increase in the rate of use of any natural resources ?	_____	_____X_____	_____
10. Risk of Upset. Will the proposal result in :			
a. A risk of an explosion or the release of hazardous substances (including, but not limited to oil, pesticides, chemicals or radiation) in the event of an accident or upset conditions ?	_____	_____X_____	_____

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
b. Possible interference with an emergency response plan or an emergency evacuation plan ?	_____	_____X_____	_____
11. Population. Will the proposal alter the location, distribution, density, or growth rate of the human population of an area ?	_____	_____X_____	_____
12. Housing. Will the proposal affect existing housing, or create a demand for additional housing ?	_____X_____	_____	_____
13. Transportation/Circulation. Will the proposal result in :			
a. Generation of substantial additional vehicular movement ?	_____X_____	_____	_____
b. Effects on existing parking facilities, or demand for new parking ?	_____X_____	_____	_____
c. Substantial impact upon existing transportation systems ?	_____X_____	_____	_____
d. Alterations to present patterns of circulation or movement of people and/or goods ?	_____X_____	_____	_____
e. Alterations to waterborne, rail or air traffic ?	_____	_____X_____	_____
f. Increase in traffic hazards to motor vehicles, bicyclists or pedestrians ?	_____X_____	_____	_____
14. Public Services. Will the proposal have an effect upon or result in a need for new or altered governmental services in any of the following areas:			
a. Fire protection ?	_____X_____	_____	_____
b. Police protection ?	_____X_____	_____	_____
c. Schools?	_____X_____	_____	_____
d. Parks or other recreational facilities ?	_____X_____	_____	_____
e. Maintenance of public facilities, including roads ?	_____X_____	_____	_____
f. Other governmental services ?	_____	_____X_____	_____
15. Energy. Will the proposal result in :			
a. Use of substantial amounts of fuel or energy ?	_____	_____X_____	_____

	<u>Yes</u>	<u>Maybe</u>	<u>No</u>
b. Substantial increase in demand upon existing sources of energy, or require the development of new sources of energy ?	_____	_____X_____	_____
16. Utilities. Will the proposal result in a need for new systems, or substantial alterations to the following utilities :			
a. Power or natural gas ?	_____	_____X_____	_____
b. Communication systems ?	_____	_____X_____	_____
c. Water ?	_____	_____X_____	_____
d. Sewer or septic tanks ?	_____	_____X_____	_____
e. Storm water drainage ?	_____	_____X_____	_____
f. Solid waste and disposal ?	_____	_____X_____	_____
17. Human Health. Will the proposal result in :			
a. Creation of health hazard or potential health hazard (excluding mental health) ?	_____	_____X_____	_____
b. Exposure of people to potential health hazards ?	_____	_____X_____	_____
18. Aesthetics. Will the proposal result in the obstruction of any scenic vista or view open to the public, or will the proposal result in the creation of an aesthetically offensive site open to public view ?	_____	_____X_____	_____
19. Recreation. Will the proposal result in an impact upon the quality or quantity of existing recreational opportunities ?	_____	_____X_____	_____
20. Cultural Resources.			
a. Will the proposal result in the alteration of or the destruction of a prehistoric or historic archaeological site ?	_____	_____X_____	_____
b. Will the proposal result in adverse physical or aesthetic effects to a prehistoric or historic building, structure or object ?	_____	_____X_____	_____
c. Does the proposal have the potential to cause a physical change which would affect unique ethnic cultural values ?	_____	_____X_____	_____
d. Will the proposal restrict existing religious or sacred uses within the potential impact area ?	_____	_____	_____X_____

Yes

Maybe

No

21. **Mandatory Findings of Significance.**

- | | | | | |
|----|--|----------------|----------------|----------------|
| a. | Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory ? | x.
_____ | _____
_____ | _____
_____ |
| b. | Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals ? (A short-term impact on the environment is one which occurs in a relatively brief, definitive period of time while long-term impacts will endure well into the future.) | _____
_____ | x
_____ | _____
_____ |
| c. | Does the project have impacts which are individually limited, but cumulatively considerable ? (A project may impact on two or more separate resources where the impact on each resources is relatively small, but where the effect of the total of these impacts on the environment is significant. | x
_____ | _____
_____ | _____
_____ |
| d. | Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly ? | _____
_____ | x
_____ | _____
_____ |

III. Discussion of Environmental Evaluation

An EIR will be prepared to assess the environmental impacts resulting from proposed revisions to the City of El Segundo General Plan. Following is a list of potential areas of impacts that will be examined. The EIR analysis may result in a change in emphasis in one or more of the items listed below, and additional items may be identified. Mitigation measures will be developed and described in the Draft EIR.

1. Earth.

- a. **Maybe.** Changes in land use that may result from revisions to the General Plan could result in unstable earth conditions due to grading and excavations for formation of building pads and roadbases for new projects in the City. The Master EIR for the General Plan revision will assess the adequacy of both the Building Code and the City's Seismic Safety Element and provide mitigation measures as needed to eliminate avoidable environmental impacts.
- b & c. **Yes.** Project construction that may occur under the updated General Plan involving site preparation and excavation could result in changes to existing topography, and the displacement and over-covering of existing soils. Any geologic impacts that may result from grading and building on expansive soils of new project construction will be fully addressed under the Master EIR.
- d. **Maybe.** Projects that may be built under the revised General Plan may significantly alter or modify areas of natural topography. However, there are no unique geologic or physical features that would be destroyed. The Master EIR will assess any changes in land use resulting from General Plan revisions that would cause the destruction or modification of any identified unique geologic or physical features.
- e & f. **Maybe.** Site preparation activities may cause temporary soil erosion from wind and rain. Construction within the immediate coastal areas of the City could result in erosion of beach sand. The geology section of the Master EIR will evaluate any changes to the General Plan that would potentially cause erosion of beach sand within the City and along the adjacent coastline.
- g. **Yes.** The City of El Segundo is in a region of historic seismicity. While no major identified faults are located within the City, both the south branch of the Newport-Inglewood Fault (active), and the Palos Verdes Fault (potentially active) are located in close proximity to the City. Depth to ground water and the character of the soils within areas of the City create the potential for liquefaction occurring during an earthquake. An evaluation of the revised General Plan Seismic Safety Element will be conducted, and a full analysis of seismic hazard will be provided within the Master EIR.

2. Air.

- a. **Yes.** Construction of new projects may create the potential for high dust levels and particulate matter in the air. Construction related impacts on air quality would cease upon completion of individual projects. New developments within the City that would occur as a result of revisions to the General Plan would result in increased traffic in the vicinity that would, in turn, result in air emissions and the deterioration of ambient air quality. The City's Air Quality Management Plan will be addressed in the revised in General Plan. The EIR will evaluate changes in the General Plan as well as local and cumulative impacts on air quality. Any necessary mitigation measures will be included in the Master EIR to ensure attainment of federal and State standards.
- b. **Maybe.** Potential changes in land use patterns may expose people to objectionable odors generated from the Hyperion Treatment Plant located to the northwest of the City, and from the Chevron Oil Refinery, located in the southern portion of the City. The EIR will analyze any proposed changes in land use that could increase the exposure of people to objectionable odors.
- c. **No.** Proposed revisions to the General Plan would not result in the alteration of air movements or climatic conditions.

3. Water.

- a. **No.** Land use changes that may occur as a result of revisions to the General Plan would not affect directions of water movement in either marine or fresh waters.
- b. **Yes.** The placement of structures, driveways, parking areas, and other impervious surfaces may decrease soil absorption rates and increase drainage. Development may also result in an increase in dry season base flow resulting from landscape irrigation runoff. The Master EIR hydrological analyses will focus on any proposed changes to the General Plan that would result in adverse effects on absorption rates, drainage patterns, and or the rate and amount of surface runoff.
- c. **Maybe.** Flood hazard maps for the region are prepared by the Federal Emergency Management Agency (FEMA). As of 1978, the City has been cleared of all 100-year flood hazard zones, and is not at risk from flooding due to dam failure or stream overflow. The beach front area in El Segundo has been identified by the State of California as a tsunami hazard area which should be observed with special caution in the event of a tsunami alert. The City's storm drainage system occasionally results in localized flooding which could cause property damage and present a nuisance. Potential changes in land use patterns with revisions to the General Plan may put areas of the City at risk from flood hazards. The hydrology analysis in the Master EIR will determine any flood hazard constraints on areas within the City.

- d. **No.** As there are no natural bodies of water located within the City it is assumed that there will be no resultant increase in the quantity of water of any water body as a result of any General Plan Revisions.
- e. **Maybe.** Concentrations of pollutants (heavy metals such as lead and zinc), due to potential changes in land use, may alter the quality of surface waters within the City. Potentially significant effects on surface water quality resulting from any proposed changes in land use will be assessed in the EIR.
- f. **Maybe.** Dewatering is not expected to be required for grading or construction within the City. Landscape irrigation, however, may cause a rise in the water table and may affect direction of ground water flow. The magnitude of this impact will be addressed in the EIR.
- g. **Maybe.** Development within the City that may occur under revisions to the General Plan could impact the quantity of ground waters within the West Coast Groundwater Basin. The West Coast Basin Groundwater Barrier project is located along Lincoln Boulevard and runs southerly towards the Palos Verdes Peninsula. Overextraction of groundwater and or oil related activities may impact the quality and operation of the barrier project. The Master EIR will analyze any potential impacts on the quantity and quality of groundwater resources.
- h. **No.** Development related to changes that may occur in the General Plan are not expected to impact public water reservoirs, either ground or surface. As such it is not anticipated that development would result in a substantial reduction in the amount of water available for public water supplies.
- i. **Maybe.** Portions of the City are located adjacent to and in close proximity to the Pacific Ocean, and as a result may be susceptible to coastal dangers of flooding and tidal waves. Public safety related to water hazards will be assessed in the Master EIR.

4. Plant Life.

- a. **Yes.** Changes in land use within the City could result in changes in the diversity and number of species of plants. While these changes would primarily effect non-native or ornamental plants, a full assessment of potential impacts on plant life will be included in the EIR.
- b. **Maybe.** Information from the California Natural Diversity Data Base and the California Native Plants Society indicates that remnants of the Coastal Strand plant community occur in the area. Results of further surveys will be incorporated in the EIR.
- c. **Maybe.** New projects incorporating ornamental landscaped areas may include new species which were not present in the City prior to project development.

- d. **No.** There is no agricultural acreage within the City.

5. Animal Life.

- All. **Maybe.** In general, portions of the City serve as habitat for a number of birds, reptiles, and small rodents. Two endangered bird species, the California least tern and the brown pelican potentially fly over or rest along the coastal portions of the City. The El Segundo Blue Butterfly, also an endangered species occurs on two acres of protected coastal dune habitat adjacent to the Chevron refinery. A full assessment of existing studies and data bases will be used in determining any potential impacts on endangered species and animal life.

6. Noise.

- a. **Yes.** Any increase in air or automotive traffic or changes in traffic patterns over Los Angeles International Airport would have the potential to increase ambient noise levels. Analysis of any anticipated increases, and the adequacy of the revised Noise Element of the General Plan will be included in the EIR with necessary mitigation measures incorporated.
- b. **Maybe.** During construction of new projects sources of noise would be from heavy earth-moving equipment and other construction related activities. These noise levels would cease at project completion. The EIR will evaluate the City's Noise Element and provide any needed mitigation measures to insure that residents of the City are not exposed to severe noise levels as a result of project construction.

7. Light and Glare.

Yes. Changes in land use may result in increases in light and glare from new sources of interior and exterior lighting. Exterior lighting for security, visibility, and signage uses may cause increases in nighttime illumination that could potentially affect light sensitive receptors (i.e. residential uses). The EIR will evaluate changes in land use to insure that adequate provisions are made to prevent undue impacts from light and glare.

8. Land Use.

- **Yes.** Changes in land use that may result in revisions to the General Plan would alter present and planned land uses in the City. While the degree and specifics of these changes are not known at this time, the EIR will thoroughly evaluate the impacts of changes to the General Plan for physical and functional land use compatibility.

9. Natural Resources.

- a. **Maybe.** Changes to the General Plan may result in an increase in the rate of use of natural resources, that is water, mineral resources, wildlife or vegetation. The natural resources section of the EIR will evaluate any identified impacts on such resources as may result from the General Plan revisions.

10. Risk of Upset.

- a. **Maybe.** Changes in the General Plan may increase the risk of human upset from industries using flammable and toxic materials within the City. The significance of these risks will be assessed in the EIR.
- b. **Maybe.** Revisions to the General Plan could interfere with emergency response plans or emergency evacuation plans. An assessment of potential impacts on emergency evacuation plans for development handling hazardous materials will be assessed in the EIR.

11. Population

Maybe. Both daytime and nighttime populations of the area may change substantially with revisions to the General Plan. This increase in population and local traffic may create an increased demand for County fire services, police services, and the utilities that would serve the City.

12. Housing

Yes. Changes in land use designations with the General Plan update may alter the demand for housing within the City and in surrounding cities. The EIR will assess jobs and housing relative to the jobs/housing balance strategy outlined in the 1989 Air Quality Management Plan.

13. Transportation/Circulation

- a & b. **Yes.** Development within the City has the potential to effect traffic flow and circulation both locally and regionally. Development could impact existing traffic volumes, turning movements, travel speeds, and levels of service of roadways and intersections. Impacts on traffic, parking, and circulation resulting from the General Plan revision will be addressed in the EIR.
- c & d. **Yes.** Generation of traffic flow from the City has the potential to impact regional road networks and freeways, such as the Interstate 405 and State Route 1 (Sepulveda Boulevard). Residents traveling from the City may also place demands on regional public transit. The impact on these existing transportation systems and the resultant alteration of present patterns of circulation will be assessed.

- e. **Maybe.** The Century Freeway light rail corridor and station will be located within the City. While it is anticipated that there will be no impacts on rail transport, land use changes in the City could alter existing or future plans for rail transit. These issues will be addressed in the EIR. Parts of the City are within height restricted areas, though they are not located within the direct alignment for runways at Los Angeles International Airport. Changes in the General Plan would not exceed this height limit and would not have the potential to interfere with or alter air traffic.
- f. **Yes.** Any alteration of traffic flow or increase in traffic generation has the potential to increase traffic hazard for motor vehicles, bicyclists and pedestrians. The EIR will assess the need for turn-lanes, crosswalks, bicycle lanes and other measures which can reduce traffic hazard.

14. Public Services

- a-e. **Yes.** The proposed project could generate an increase in demand on public services. Public services including fire, police protection, schools and parks/recreation, and maintenance would be impacted. These and other related impacts on government services will be addressed and evaluated.
- f. **Maybe.** The proposed project may have an impact on other public facilities, such as libraries, which have not been identified in 14(a) to (e). Any impacts on these services will be identified and described within the EIR.

15. Energy.

- All. **Maybe.** Changes in land use could result in the use of substantial amounts of energy, or cause substantial increases in energy consumption, or require development of new sources of energy.

16. Utilities

- All **Maybe.** Changes in the General Plan could result in increased demand on existing electrical and natural gas supplies, communication services, water distribution, sanitary sewer, and stormwater drainage systems within the City. Alteration of land use patterns may require the construction of new service lines and modification to existing lines. The impacts of these increased demands will be documented and evaluated.

17. Human Health

- a. **Maybe.** Changes in land use may result in the exposure of people to potential health hazards from flight operations at Los Angeles International Airport. The magnitude of health hazards potentially resulting from existing and proposed land use designations will be addressed in the EIR.

- b. **Maybe.** Residents may be exposed to potential health hazards if appropriate safeguards are not taken. The EIR will address the adequacy of the General Plan to prevent potential hazards to human health, and will provide any needed mitigation measures.

18. Aesthetics

Maybe. Alteration of existing land use plans and policies of the General Plan could alter existing views and scenic resources, which would affect the aesthetic character of the area. The potential for, and degree of, these impacts will be reviewed in the EIR along with any required mitigation measures.

19. Recreation

Maybe. Recreational opportunities within the City could be altered with changes in land use. The EIR will assess the quantity and quality of recreational opportunities within the City, the impact of changes to the General Plan, and will provide any required mitigation measures.

20. Cultural Resources

- a-c. **Maybe.** Development within the City has the potential to impact unidentified archaeological and paleontological sites through compaction or filling from rough grading, increased erosion and vibration during heavy grading. Known cultural resources in the City will be identified, and the degree of potential impacts from ground disturbing activities will be assessed in the EIR document.
- d. **No.** Archeological sites found within the City have no known unique cultural, religious, or sacred values for past or existing peoples. Therefore, no major impact is anticipated.

21. Mandatory Findings of Significance

- a. **Yes.** The project has the potential to degrade the quality of the environment, through wind and water erosion from construction activities, and through possible increases in air pollution and noise from traffic related impacts. Development may have the potential to impact rare plant species identified by the California Natural Diversity Data Base and could possibly impact habitat of the El Segundo Blue Butterfly, a threatened, endangered species.
- b. **Maybe.** Changes to the General Plan have the potential to achieve the short-term goals of the City but could also impact the long-term viability of the City. Possible short-term impacts which may be to the disadvantage of long-term environmental goals in the region will be evaluated within the EIR.

- c. **Yes.** The project may have significant impacts in areas of geology, soils, air, water, plant and animal life, noise, light and glare, land use, housing, transportation, and public services, on existing conditions. These individual impacts may have cumulative considerable impacts on development within the Los Angeles County region in the long-term. The significance of cumulative impacts will be determined in the EIR.

- d. **Maybe.** The potential for the General Plan revisions to have direct and indirect adverse effects on human beings will be identified and discussed within the EIR.

APPENDIX B: NOTICE OF PREPARATION COMMENTS

GOVERNOR'S OFFICE OF PLANNING AND RESEARCH

1400 TENTH STREET
SACRAMENTO, CA 95814

DATE: Apr 30, 1991

TO: Reviewing Agency

RE: EL SEGUNDO PLANNING DEPARTMENT'S NOP for
EIR-GENERAL PLAN REVISION, CITY OF EL SEGUNDO
SCH # 91041092

Attached for your comment is the EL SEGUNDO PLANNING DEPARTMENT'S Notice of Preparation of a draft Environmental Impact Report (EIR) for the EIR-GENERAL PLAN REVISION, CITY OF EL SEGUNDO.

Responsible agencies must transmit their concerns and comments on the scope and content of the EIR, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of this notice. We encourage commenting agencies to respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

KENDRA MORRIES
EL SEGUNDO PLANNING DEPARTMENT
350 MAIN STREET
EL SEGUNDO, CA 90245

with a copy to the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the review process, call Tom Loftus at (916) 445-0613.

Sincerely,

A handwritten signature in black ink, appearing to read "David C. Nunenkamp".

David C. Nunenkamp
Deputy Director, Permit Assistance

Attachments

cc: Lead Agency

Send by mail agency
 X = sent by SCH

Resource Agency	Fish and Game - Regional Offices	Department of Transportation District Offices	Food and Agriculture	Regional Water Quality Control Board
<input type="checkbox"/> Karen Cagle Dept. of Planning & Waterways 1629 S Street Sacramento, CA 95814 916445-6281	<input type="checkbox"/> Gary Stewart, Regional Manager Department of Fish and Game 600 Locust Fiddling, CA 96001 916723-2300 (R-442)	<input type="checkbox"/> Jo Sanford Caltrans, District 1 1636 Union Street Berkeley, CA 95501 707/445-6671 (R-536)	<input type="checkbox"/> Yashek Cervinks Dept. of Food and Agriculture 1720 N Street, Room 104 Sacramento, CA 95814 916732-5227	<input type="checkbox"/> NORTH COAST REGION (1) 1440 Glenview Rd. Suisun, CA 95401 707/576-2220 (R-590)
<input checked="" type="checkbox"/> Gary L. Holloway California Coastal Commission 431 Howard Street, 4th Floor San Francisco, CA 94103 415/643-8355	<input type="checkbox"/> Jim Meersmith, Regional Manager Department of Fish and Game 1701 Nimbus Road, Suite A Rancho Cordova, CA 95670 916/355-0922 (R-438)	<input type="checkbox"/> Michelle Gallagher Caltrans, District 2 1637 Riverwide Drive Redding, CA 96001 916/225-3359 (R-442)	<input checked="" type="checkbox"/> Kay Te Dept. of Health 714 P Street, Room 1253 Sacramento, CA 95814 916/323-6111	<input type="checkbox"/> SAN FRANCISCO BAY REGION (2) 1800 Harrison Street, Suite 700 Oakland, CA 94612 415/464-1255 (R-561)
<input type="checkbox"/> Reed Hildebrand State Coastal Conservancy 1320 Broadway, Suite 800 Oakland, CA 94612 415/464-1805	<input type="checkbox"/> B. Hunter, Regional Manager Department of Fish and Game P.O. Box 47 Yreaville, CA 94599 707/944-5518	<input type="checkbox"/> Brian J. Smith Caltrans, District 3 703 B Street Marysville, CA 95901 916/741-4277 (R-457)	<input type="checkbox"/> MISTOCD	<input type="checkbox"/> CENTRAL COAST REGION (3) 1102-A Laurel Lane San Luis Obispo, CA 93401 805/549-3147 (R-629)
<input checked="" type="checkbox"/> Pamela O'Bryen Dept. of Conservation 1416 Ninth Street, Room 1126-2 Sacramento, CA 95814 916/322-5873	<input type="checkbox"/> G. Nokes, Regional Manager Department of Fish and Game 1234 East Shaw Avenue Fresno, CA 93710 209/722-3761 (R-421)	<input type="checkbox"/> Gary S. Adams Caltrans, District 4 P.O. Box 7310 San Francisco, CA 94120 415/557-9162 (R-597)	<input checked="" type="checkbox"/> State and Consumer Services	<input type="checkbox"/> LOS ANGELES REGION (4) 101 Center Plaza Drive Monterey Park, CA 91754 213/266-4460 (R-640)
<input type="checkbox"/> Div. of Mines and Geology	<input checked="" type="checkbox"/> Fred A. Worthley, Jr., Reg. Manager Department of Fish and Game 336 Golden Shore, Suite 50 Long Beach, CA 90802 213/990-5113 (R-635)	<input type="checkbox"/> Jerry Laumer Caltrans, District 5 P.O. Box 8114 San Luis Obispo, CA 93403-8114 805/949-3161 (R-629)	<input type="checkbox"/> Robert Stepp Dept. of General Services 400 P Street, Suite 3460 Sacramento, CA 95814 916/324-0214	<input type="checkbox"/> CENTRAL VALLEY REGION (1) 3443 Rosier Road, Suite A Sacramento, CA 95827-3098 916/361-5600
<input type="checkbox"/> Div. of Oil and Gas	<input type="checkbox"/> Independent Commissioners	<input type="checkbox"/> Moses Pacheco Caltrans, District 6 P.O. Box 12616 Fresno, CA 93778 209/276-5989 (R-422)	<input type="checkbox"/> Environmental Affairs	<input type="checkbox"/> FRESNO BRANCH OFFICE 3614 East Abiles Avenue Fresno, CA 93726 209/445-3116 (R-421)
<input type="checkbox"/> Land Resources Project Unit	<input type="checkbox"/> John B. Nuffer California Energy Commission 516 Ninth Street, MS-13 Sacramento, CA 95814 916/323-9180	<input checked="" type="checkbox"/> William A. Johnson Native American Heritage Center 815 Capitol Mall, Room 288 Sacramento, CA 95814 916/322-7791	<input checked="" type="checkbox"/> Barbara Fry Air Resources Board 1102 Q Street Sacramento, CA 95814 916/322-8267	<input type="checkbox"/> REDDING BRANCH OFFICE 415 Knollcrest Drive Redding, CA 96002 916/222-4445 (R-73-401)
<input type="checkbox"/> Douglas Wickizer Dept. of Forestry 1416 Ninth Street, Room 1516-2 Sacramento, CA 95814 916/322-0128	<input checked="" type="checkbox"/> George Herrick Public Utilities Commission 505 Van Ness Avenue San Francisco, CA 94102 415/557-1375 (R-597)	<input type="checkbox"/> Harvey Sawyer Caltrans, District 8 247 West Third Street San Bernardino, CA 92403 714/383-4808 (R-670)	<input type="checkbox"/> Victorville Branch Office 15428 Civic Drive, Suite 108 Victorville, CA 92392-2159 619/241-6313	<input type="checkbox"/> LA MORTAIN REGION (5) 2092 Lake Tahoe Boulevard Suite B2 South Lake Tahoe, CA 96150 916/544-3481
<input checked="" type="checkbox"/> Ilana Kretzberg Office of Historic Preservation P.O. Box 942896 Sacramento, CA 94296-0001 916/322-9621	<input checked="" type="checkbox"/> Betty Eubanks State Lands Commission 1807 - 13th Street Sacramento, CA 95814 916/322-2795	<input type="checkbox"/> Andy Zellman Caltrans, District 9 500 South Main Street Bishop, CA 93514 619/872-0693 (R-627)	<input type="checkbox"/> COLORADO RIVER BASIN REGION (7) 13-271 Highway 111, Suite 21 Palm Desert, CA 92260 619/346-7491	<input type="checkbox"/> SANTA ANA REGION (8) 6809 Indiana Avenue, Suite 200 Riverside, CA 92506 914/782-4130 (R-632)
<input type="checkbox"/> Mike Boyle Dept. of Parks and Recreation P.O. Box 942896 Sacramento, CA 94296-0001 916/322-6621	<input checked="" type="checkbox"/> Sandy Hearnard Caltrans - Division of Aeronautics P.O. Box 942874 Sacramento, CA 94274-0001 916/324-1133	<input type="checkbox"/> Ed Anton State Water Resources Control Board Division of Water Quality P.O. Box 100 Sacramento, CA 95801 916/445-9552	<input type="checkbox"/> SAN DIEGO REGION (9) 9771 Chino Vista Blvd., Suite 1 San Diego, CA 92124-1331 619/263-5114 (R-636)	<input type="checkbox"/> OTHER
<input type="checkbox"/> Anna Leona Brosson Recreation Board 1416 Ninth Street, Room 706 Sacramento, CA 95814 916/322-3740	<input type="checkbox"/> Sgl. Jim Weddell California Highway Patrol Long Range Planning Section Planning and Analysis Division 2555 Furr Avenue Sacramento, CA 95818 916/443-1981	<input type="checkbox"/> Chuck Limon Caltrans, District 12 2501 Pullman St. Santa Ana, CA 92705 714/724-2061 (R-655)	<input type="checkbox"/> APCA/DAMD. SOUTH	<input type="checkbox"/> OTHER
<input type="checkbox"/> Nancy Whitman SF Bay Conservancy & Dev'l Comm. 30 Van Ness Avenue, Room 2012 San Francisco, CA 94102 415/557-3686	<input checked="" type="checkbox"/> Ron Helgeson Caltrans - Planning P.O. Box 942874 Sacramento, CA 94274-0001	<input type="checkbox"/> Mike Falkenstein State Water Resources Control Board Division of Water Rights P.O. Box 100 Sacramento, CA 95801 916/445-9552	<input type="checkbox"/> APCA/DAMD. SOUTH	<input type="checkbox"/> OTHER
<input checked="" type="checkbox"/> Nadell Gayton Dept. of Water Resources 1416 Ninth Street, Room 449 Sacramento, CA 95814 916/445-7416				

ACKNOWLEDGEMENT

State of California
Project Notification and Review System
Office of the Governor
(916) 445-0613

SCH NUMBER: 91041092
TITLE: EIR-GENERAL PLAN REVISION, CITY OF EL SEGUNDO
SCH Contact: Tom Loftus
Department Date: 04/30/91
Clearance Date: 05/30/91

(If document received after 10 AM review starts on next day.)

Please use the State Clearinghouse Number on future correspondence with this office and with agencies approving or reviewing your project. This card does not verify compliance with environmental review requirements. A letter containing the State's comments or a letter confirming no State comments will be forwarded to you after the review is complete.

DEPARTMENT OF FISH AND GAME



Long Beach, California 90802
(213) 590-5113

May 9, 1991

Ms. Kendra Morris
El Segundo Planning Department
350 Main Street
El Segundo, California 90245

Dear Ms. Morris:

have reviewed the Notice of Preparation of a Draft EIR for the General Plan Revision, City of El Segundo (SCH 91041092). To enable our staff to adequately review and comment on this project, we recommend the following information be included in the Draft EIR:

1. A complete assessment of flora and fauna within and adjacent to the project area, with particular emphasis upon identifying endangered, threatened and locally unique species and sensitive and critical habitats.
2. A discussion of direct, indirect, and cumulative impacts expected to adversely affect biological resources, with specific measures to offset such impacts.
3. A discussion of potential adverse impacts from any increased runoff, sedimentation, soil erosion, and/or urban pollutants on streams and watercourses on or near the project site, with mitigation measures proposed to alleviate such impacts. Stream buffer areas and maintenance in their natural condition through non-structural flood control methods should also be considered in order to continue their high value as wildlife corridors.

More generally, there should be discussion of alternatives to not only minimize adverse impacts to wildlife, but to include direct benefit to wildlife and wildlife habitat. Those discussions should consider the Department of Fish and Game's policy that there should be no net loss of wetland acreage or habitat values. We oppose projects which do not provide adequate mitigation for such losses.

Ms. Kendra Morris

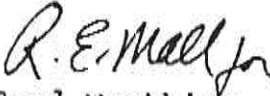
-2-

May 9, 1991

Diversion, obstruction of the natural flow, or changes in the bed, channel, or bank of any river, stream, or lake will require notification to the Department of Fish and Game as called for in the Fish and Game Code. Notification should be made after the project is approved by the lead agency.

Thank you for the opportunity to review and comment on this project. If you have any questions, please contact Krishan Lal of our Environmental Services staff at (213) 590-5137.

Sincerely,


Fred Worthley
Regional Manager
Region 5

cc: Office of Planning & Research

DEPARTMENT OF CONSERVATIONDIVISION OF ADMINISTRATIVE SERVICES
DIVISION OF MINES AND GEOLOGY
DIVISION OF OIL AND GAS
DIVISION OF RECYCLING1416 Ninth Street
SACRAMENTO CA 95814
TDD (916) 324 2555
ATSS 454 2555

(916) 445-8733

May 29, 1991

Ms. Kendra Morries
Planning Department
City of El Segundo
350 Main Street
El Segundo, CA 90245

Dear Ms. Morries:

Subject: Notice of Preparation (NOP) of a Draft Environmental Impact Report (Draft EIR) for the El Segundo General Plan Update, SCH# 91041092

Thank you for forwarding the NOP for the above-mentioned project. The Department of Conservation's Division of Mines and Geology (DMG) has special expertise in evaluating geologic and seismic hazards. We will review the relevant information and analysis in the Draft EIR when it is received from the State Clearinghouse.

The Draft EIR should include a complete description of the geologic and seismic environment. DMG Note 43, "Recommended Guidelines for Determining the Maximum Credible and the Maximum Probable Earthquakes", and DMG Note 46, "Guidelines for Geologic/Seismic Considerations in Environmental Impact Reports", are enclosed. These documents may aid in the determination of potential impacts to the City from earthquakes on nearby active or potentially active faults, and other geologic hazards that should be addressed in the Draft EIR and Safety Element. In 1990, the State Office of Planning and Research published an updated version of the General Plan Guidelines that should be used by the City to develop its General Plan.

There are a number of seismic and geologic hazards that should be addressed in the Draft EIR. The main hazards recognized by DMG at the present time include seismic ground shaking, liquefaction, and tsunami inundation. We offer the following comments on these hazards.

Seismic Ground Shaking:

Although there are apparently no active faults within the city limits, seismic ground shaking from earthquakes on nearby active

JUN 1 1991
PLANNING DIVISION

Ms. Kendra Morries
May 29, 1991
Page 2

faults could cause damage to parts of the City. The Newport-Inglewood fault zone, because of its proximity, has the potential to cause the most damage to the City of El Segundo. Based on a DMG earthquake planning scenario, parts of the City can expect seismic shaking of intensity

VIII (Modified Mercalli scale) from a major seismic event on the Newport-Inglewood fault (Topozada, et al, 1988). Earthquakes on a number of other active surface faults and buried fold/thrust belts, such as the Elysian Park (responsible for the 1987 Whittier Narrows Earthquake) and the Torrance-Wilmington structures, could also cause strong ground shaking in the City (Davis and Namson, 1989; Hauksson and Jones, 1989; Hauksson, 1990).

DMG has found that the value of a Draft EIR and Safety Element can be enhanced if the following information is included: 1) a map showing the location of the major faults and earthquake epicenters relative to the City, 2) a table listing the faults most likely to cause damage to the City, and 3) maximum credible earthquake magnitudes for those faults. Information regarding active faults in southern California can be obtained from Jennings (1975), Ziony (1985), Wesnousky (1986), the Los Angeles County Safety Element (1990), and Wallace (1990). Information for earthquakes in southern California and their associated ground shaking effects can be obtained from Topozada and others (1981), Topozada and Parke (1982), Ziony (1985), the Working Group on California Earthquake Probabilities (1990), and Wallace (1990).

DMG's earthquake planning scenarios have evaluated the approximate damage caused to transportation, utilities, and other critical facilities by ground shaking from large earthquakes for both the Newport-Inglewood fault (Topozada, et al, 1988) and the San Andreas fault (Davis, et al, 1982). This information may be useful as a guide in formulating earthquake preparedness plans.

Liquefaction and Tsunami Inundation:

According to several studies, parts of the City will likely be susceptible to liquefaction (Tinsley, et al, 1985; Topozada, et al, 1988; Los Angeles County Safety Element, 1990). In addition, the Los Angeles County Safety Element (1990) has identified areas along the coastline as tsunami inundation areas. DMG recommends construction of a map showing the extent of these hazards for the City's new Safety Element. These hazards should be addressed in the Draft EIR and the Safety Element and, if appropriate, City-wide planning measures should be developed.

In compliance with Section 65302(g) of the Government Code, DMG will review the draft Safety Element for the City's General Plan

Ms. Kendra Morries
May 29, 1991
Page 3

during its preparation. If you have any questions regarding these comments, please contact Roger Martin, Division of Mines and Geology Environmental Review Project Manager, at (916) 322-2562.

Sincerely,


Dennis J. O'Bryant
Environmental Program Coordinator

Enclosures

cc: Roger Martin, Division of Mines and Geology
Rick Wilson, Division of Mines and Geology

References:

Davis, J.F., Bennett, J.H., Borchardt, G.A., Kahle, J. E., Rice, S.J., and Silva, M.A., 1982, Earthquake planning scenario for a magnitude 8.3 earthquake on the San Andreas fault in southern California: California Division of Mines and Geology Special Publication 60, 128p.

Davis, T.L., and Namson, J., A cross section of the Los Angeles Area: Seismically active fold and thrust belt, the 1987 Whittier Narrows Earthquake, and earthquake hazard: Journal of Geophysical Research, V. 94, N. B7, p. 9644-9664.

Hauksson, E., 1990, Earthquakes, faulting, and stress in the Los Angeles Basin: Journal of Geophysical Research, V. 95, N. B10, p. 15,365-15,394.

Hauksson, E., and Jones, L.M., 1989, The 1987 Whittier Narrows Earthquake sequence in Los Angeles, southern California: Seismological and tectonic analysis: Journal of Geophysical Research, V. 94, N. B7, p. 9569-9589.

Jennings, C.W., 1975, Fault map of California: California Division of Mines and Geology, Geologic Data Map Series, Map No. 1, scale 1:750,000.

Los Angeles County, 1990, Technical appendix to the safety element of the Los Angeles County General Plan, hazards reduction in Los Angeles County: prepared for the Department of Regional Planning by Leighton and Associates with Sedway Cooke Associates.

Ms. Kendra Morries
May 29, 1991
Page 4

Tinsley, J.C., Youd, T.L., Perkins, D.M., and Chen, A.T.F., 1985, Evaluating liquefaction potential in J.I. Ziony (Editor), Evaluating Earthquake Hazards in the Los Angeles Region - An Earth-Science Perspective: U. S. Geological Survey Professional Paper 1360, 503 pp.

Topozada, T.R., Bennett, J.H., Borchardt, G., Saul, R., and Davis, J.F., 1988, Planning scenario for a major earthquake on the Newport-Inglewood fault zone: California Division of Mines and Geology Special Publication 99, 197 pp.

Topozada, T.R., and Parke, D.L., 1982, Areas damaged by California earthquakes, 1900-1949: California Division of Mines and Geology Open-File Report 82-17 SAC, 65 pp.

Topozada, T.R., Real, C.R., and Parke, D.L., 1981, Preparation of isoseismal maps and summaries of reported effects for pre-1900 California earthquakes: California Division of Mines and Geology Open-File Report 81-11, 182 pp.

Wallace, R.E. (Editor), 1990, The San Andreas Fault System, California: U.S. Geological Survey Professional Paper 1515, 238 pp..

Wesnousky, S.G., 1986, Earthquakes, Quaternary faults, and seismic hazard in California: Journal of Geophysical Research, V. 91, N. B12, p. 12,587-12,631.

Working Group on California Earthquake Probabilities, 1990, Probabilities of Large Earthquakes in the San Francisco Bay Region, California: U. S. Geological Survey Circular 1053, 51 pp.

Ziony, J.I. (Editor), 1985, Evaluating earthquake hazards in the Los Angeles region - An earth-science perspective: U. S. Geological Survey Professional Paper 1360, 503 pp.



RECOMMENDED GUIDELINES FOR DETERMINING THE MAXIMUM CREDIBLE AND THE MAXIMUM PROBABLE EARTHQUAKES

The following guidelines were suggested by the Geotechnical Subcommittee of the State Building Safety Board on 3 February 1975 to assist those involved in the preparation of geologic/seismic reports as required by regulations of the California Administrative Code, Title 17, Chapter 8, Safety of Construction of Hospitals. CDMG is currently using these guidelines when reviewing geologic/seismic reports.

Maximum credible earthquake

The maximum credible earthquake is the maximum earthquake that appears capable of occurring under the presently known tectonic framework. It is a rational and believable event that is in accord with all known geologic and seismologic facts. In determining the maximum credible earthquake, little regard is given to its probability of occurrence, except that its likelihood of occurring is great enough to be of concern. It is conceivable that the maximum credible earthquake might be approached more frequently in one geologic environment than in another.

The following should be considered when deriving the maximum credible earthquake:

- (a) The seismic history of the vicinity and the geologic province;
- (b) the length of the significant fault or faults which can affect the site within a radius of 100 kilometers; (See CDMG Preliminary Report 13);

- (c) the type(s) of faults involved;
- (d) the tectonic and/or structural history;
- (e) the tectonic and/or structural pattern or regional setting (geologic framework);
- (f) the time factor shall not be a parameter.

Maximum probable earthquake (functional-basis earthquake)

The maximum probable earthquake is the maximum earthquake that is likely to occur during a 100-year interval. It is to be regarded as a probable occurrence, not as an assured event that will occur at a specific time.

The following should be considered when deriving the "functional-basis earthquake":

- (a) The regional seismicity, considering the known past seismic activity;
- (b) the fault or faults within a 100 kilometer radius that may be active within the next 100 years;
- (c) the types of faults considered;
- (d) the seismic recurrence factor for the area and faults (when known) within the 100 kilometer radius;
- (e) the mathematic probability or statistical analysis of seismic activity associated with the faults within the 100 kilometer radius (the recurrence information should be plotted graphically);
- (f) the postulated magnitude shall not be lower than the maximum that has occurred within historic time.

PYA, JES, RWS 2/75



GUIDELINES FOR GEOLOGIC/SEISMIC CONSIDERATIONS IN ENVIRONMENTAL IMPACT REPORTS

The following guidelines were prepared by the Division of Mines and Geology with the cooperation of the State Water Resources Control Board to assist the following prepare and review environmental impact reports.

These guidelines are intended to expedite the environmental review process by identifying the potential geologic problems and by providing a recognition of those problems for design analysis and mitigation measures. All statements should be documented by reference to material (including specific map and chart numbers) available to the public. Other statements should be considered as opinions and so stated.

1. CHECKLIST OF GEOLOGIC PROBLEMS FOR ENVIRONMENTAL IMPACT REPORTS

GEOLOGIC PROBLEMS		Could the project or geologic event cause environmental problems?		Is this conclusion documented in attached reports?	
PROBLEM	ACTIVITY CAUSING PROBLEM	NO	YES	NO	YES
EARTHQUAKE/DAM	Fault Movement				
	Liquefaction				
	Landslides				
	Differential Compaction/ Seismic Settlement				
	Ground Rupture				
	Ground Shaking				
	Tsunamis				
	Seepage				
	Flooding Due to Failure of Dams and Levees				
LOSS OF LAND RESOURCES	Loss of Access				
	Deposits Covered by Changed Land-Use Conditions				
	Zoning Restrictions				
WASTE DISPOSAL PROBLEMS	Change in Groundwater Level				
	Disposal of Excavated Material				
	Percolation of Waste Material				
SLOPE AND/OR FOUNDATION INSTABILITY	Landslides and Mudflows				
	Unstable Cut and Fill Slopes				
	Collapse and Expansive Soil				
	Trench-Wall Stability				
EROSION, SEDIMENTATION FLOODING	Erosion of Graded Areas				
	Alteration of Runoff				
	Unprotected Drainage Ways				
	Increased Impervious Surfaces				
LAND SUBSIDENCE	Extraction of Groundwater, Gas, Oil, Geothermal Energy				
	Hydrocompaction, Peat Oxidation				
VOLCANIC HAZARDS	Lava Flow				
	Ash Fall				

(over)

II. CHECKLIST OF GEOLOGIC REPORT ELEMENTS

REPORT ELEMENTS	YES	NO
A. General Elements Present Description and map of project. Description and map of site. Description and map of pertinent off-site areas		
B. Geologic Element (refer to checklist) Are all the geologic problems mentioned? Are all the geologic problems adequately described?		
C. Mitigating Measures Are mitigating measures necessary? Is sufficient geologic information provided for the proper design of mitigating measures? Will the failure of mitigating measures cause an irreversible environmental impact?		
D. Alternatives Are alternatives necessary to reduce or prevent the irreversible environmental impact mentioned? Is sufficient geologic information provided for the proper consideration of alternatives? Are all the possible alternatives adequately described?		
E. Implementation of the Project Is the geologic report signed by a registered geologist? Does the report provide the necessary regulations and performance criteria to implement the project?		

*Required for interpretive geologic information.

III. PUBLISHED REFERENCES (selected)

<p>A. California Division of Mines and Geology Publications</p> <ol style="list-style-type: none"> Arfons, J.T., et al., 1973, Urban geology master plan for California. Bulletin 198. Greenstader, R.W., 1974, Maximum credible rock acceleration from earthquakes in California. Map Sheet 23. Jennings, C.W., 1978, Fault Risk 13 of California. GDM No. 1. Ossashott, G.B., 1974, San Fernando, California, earthquake of 9 February 1971. Bulletin 198. Note No. 37, Guidelines to geologic/seismic reports, 1973. Note No. 43, Recommended guidelines for determining the maximum credible and the maximum probable earthquakes, 1976. 	<ol style="list-style-type: none"> Note No. 44, Recommended guidelines for preparing engineering geologic reports, 1976. Note No. 46, Recommended guidelines for preparing mine reclamation plans, 1976. Parke, D.L., Reel, C.R., Topposada, T.R., 1978, Earthquake Epicenter Map of California, showing events from 1800 through 1974. Reel, C.R., Topposada, T.R., and Parke, D.L., 1978, Earthquake catalog of California, January 1, 1800-December 31, 1974 (microfiche). <p>B. Other Publications</p> <ol style="list-style-type: none"> Allen, C.R., et al., 1960, Relationship between seismicity and geologic structure in the southern California region. Bulletin of the Seismological Society of America, v. 50, no. 4. 	<ol style="list-style-type: none"> Boit, B.A. and Miller, R.D., 1971, Seismicity of northern and central California, 1965-1969. Bulletin of the Seismological Society of America, v. 51, no. 6. California Department of Water Resources, 1974, Crustal strain and fault movement in California. Bulletin No. 116-3. Coffman, J.L. and von Hake, C.A., ed., 1963, Earthquake history of the United States with the report of Commission, Publication 411. Hileman, J.A., et al., 1973, Seismicity of the southern California region, 1 January 1972 to 31 December 1972. California Institute of Technology, Contribution 3385. Periodical updates to this are available.
---	--	---

IV. PUBLIC AGENCIES WITH GEOLOGIC DATA

Source	Data Available			
	Seismicity	Geology	Ground Water	Soils
Libraries and Geology and Engineering Departments of California Universities	X	X	X	X
California Institute of Technology	X			
California Division of Mines and Geology (Sacramento, San Francisco, Los Angeles, CA)	X	X		
California Department of Water Resources (Sacramento, CA)		X		
California Department of Transportation (District Offices)				X
County Soil & Water Conservation Districts				X
County Engineer and Departments of Building and Safety	X	X		X
County Highway Department				X
County Flood Control District				X
U.S. Geological Survey (Merced Park, CA)		X		
U.S. Corps of Engineers (District Engineer)		X		
U.S. Bureau of Reclamation (Regional Offices)		X		
U.S. Soil Conservation Service and Forest Service				X

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD—
LOS ANGELES REGION

101 CENTRE PLAZA DRIVE
MONTEREY PARK, CA 91754-7156
(213) 266-7500



May 7, 1991

File: 700.333

Kendra S. Morries
Planning Department
City of El Segundo
350 Main Street
El Segundo, CA 90245

**NOTICE OF PREPARATION - GENERAL PLAN UPDATE.
CITY OF EL SEGUNDO**

We have reviewed the subject document regarding the proposed project.

We would like to see a discussion in the EIR of the increased generation of sewage and/or waste water under this new plan, as compared to the existing plan, and how the city plans to handle it.

Thank you for this opportunity to review your document. If you have any questions, please contact Eugene C. Ramstedt at (213) 266-7553.

JOHN L. LEWIS, Unit Chief
Technical Support Unit

cc: Terri Lovelady, State Clearinghouse

DEPARTMENT OF TRANSPORTATION

DISTRICT 7, 120 SO. SPRING ST.
LOS ANGELES, CA 90012
TDD (213) 620-3550



May 17, 1991

IGR/CEQA
City of El Segundo
NOP-EIR-Initial Study;
General Plan Update
SCH # 91041092
Vic LA-405-R19.21-R21.22
Vic LA-1-R23.92-R25.92

Ms. Kendra Morries
El Segundo Planning Department
350 Main Street
El Segundo, CA 90245

Dear Ms. Morries:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above-referenced project. Items which should be covered for the project include, but are not limited to:

- A. Trip generation/distribution including the method used to develop the percentages and assignment.
- B. ADT, AM and PM peak-hour volumes for both the existing and future (Year 2010) conditions. This should include the San Diego Freeway (I-405), the Sepulveda Boulevard (SR 1), and, affected ramps and intersections.
- C. An analysis of future (Year 2010) conditions which include project traffic and the cumulative traffic generated for all approved developments in the area.
- D. Consideration should be given to providing mitigation for congestion relief. Any mitigation proposed should be fully discussed in the document. These discussions should include, but not be limited to, the following:
 - * financing
 - * scheduling considerations
 - * implementation responsibilities
 - * monitoring
- E. Consideration should be given to requiring developer contributions or fair-share funding for transportation improvements on State facilities.

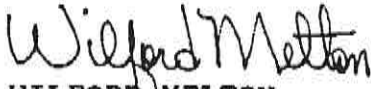
Kendra Morries
Page Two
May 17, 1991

We look forward to reviewing the DEIR. We expect to receive a copy from the State Clearinghouse. However, to expedite the review process, you may send two copies in advance to the undersigned at the following address:

Wilford Melton
District 7 IGR/CEQA Coordinator
Transportation Planning & Analysis Branch
120 So. Spring Street
Los Angeles, CA 90012

Thank you for this opportunity to comment. If you have any questions regarding these comments, please call me at (213) 620-3163.

Sincerely,


WILFORD MELTON
IGR/CEQA Coordinator
Transportation Planning &
Analysis Branch

cc: State Clearinghouse



COUNTY OF LOS ANGELES
DEPARTMENT OF PARKS AND RECREATION

433 South Vermont Avenue - Los Angeles, California 90020-1975 - (213) 738-2961

Rodney E. Cooper . . . Director

COUNTY OF LOS ANGELES
BOARD OF SUPERVISORS

Gloria Molina
First District

Kenneth Hahn
Second District

Edmund Edelman
Third District

Deane Dana
Fourth District

Mike Antonovich
Fifth District

May 10, 1991

Kendra Morries, Director of Planning
CITY OF EL SEGUNDO
350 Main Street
El Segundo, CA 90245

Dear Ms. Morris:

NOTICE OF PREPARATION OF A
DRAFT ENVIRONMENTAL IMPACT REPORT
EL SEGUNDO GENERAL PLAN REVISION

The Los Angeles County Department of Parks and Recreation has received the above-named document and has no comment at this time.

The Department appreciates the opportunity to review this document. If you have any questions or need additional information, please call me at (213) 738-2054.

Sincerely,

Marcia L. McDonough
Park Planning Assistant

csbl:0513mm1

PARK AND RECREATION
COMMISSION

James Bishop

Arturo Chayra

Gloria Heer

George Ray

Douglas Washington



PARKS ARE FOR
PEOPLE



COUNTY OF LOS ANGELES
DEPARTMENT OF PUBLIC WORKS

900 SOUTH FREMONT AVENUE
ALHAMBRA, CALIFORNIA 91803-1331
Telephone: (818) 458-5100

ADDRESS ALL CORRESPONDENCE TO:
P.O. BOX 1460
ALHAMBRA, CALIFORNIA 91803-1460

THOMAS A. TIDEMANSON, Director

May 28, 1991

P-6

IN REPLY PLEASE
REFER TO FILE:

Ms. Kendra Morris, Director
El Segundo Planning Department
350 Main Street
El Segundo, CA 90245-0989

Dear Ms. Morris:

RESPONSE TO A NOTICE OF PREPARATION

Thank you for the opportunity to provide comments on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the City of El Segundo General Plan Revision. We have reviewed the NOP and offer the following comments:

TRAFFIC/CIRCULATION

We agree with the NOP that development within the City has the potential to affect traffic flow and circulation both locally and regionally. We, therefore, request that the Report address impacts to adjacent roadways within unincorporated areas and recommend appropriate mitigation measures. The Report should also address the cumulative impacts from future development allowed by this and other general plans for adjacent cities. The impact analysis should reflect significant changes in traffic patterns such as those due to the future construction of the Century Freeway, alterations to the 405 Freeway, future light rail facilities in the City, and improvements to LAX.

The impact analysis should provide trip generation and distribution, and include an analysis of average daily a.m. and p.m. peak-hour traffic volumes for the existing and future buildout conditions.

We also recommend the Plan address possible funding mechanisms to alleviate the cost of roadway improvements in the City and within the unincorporated County area.

We will review the Report when it has been prepared. Also, we recommend Caltrans and adjacent cities review the Report for impact/mitigations in their jurisdictions.

If you have any questions regarding these comments, please contact Mr. Joe Banales of our Traffic and Lighting Division at (818) 458-5909.

WASTE MANAGEMENT

General Comments

The California Integrated Waste Management Act of 1989 (AB 939: Sher and subsequent amendments) requires each city and county, through source reduction, recycling, and composting programs, to divert 25 percent of the solid waste

Ms. Kendra Morris
May 28, 1991
Page 2

stream from landfills and transportation facilities by 1995, and 50 percent by the year 2000. The proposed General Plan buildout of the City will adversely impact land disposal facilities in Los Angeles County. Therefore, the EIR must address this concern and discuss potential mitigating measures including, but not limited to, recycling, composting, and source reduction programs.

The existing hazardous waste management facilities in this County are inadequate to handle the hazardous waste currently being generated. The General Plan buildout of El Segundo may generate additional hazardous waste, including household hazardous wastes, which could negatively impact existing facilities. The study should address the generation of hazardous wastes, disposal, and other mitigation measures such as collection, recycling, and waste reduction, as required by the County Hazardous Waste Management Plan (COHWMP).

Specific Comments

Environmental Checklist Form II.16 Utilities (f), page 8, indicates solid waste and disposal as potential environmental impacts, although not specifically addressed in Chapter III, Discussion of Environmental Evaluation, page 15.

The Report should recognize the existence of a National Pollutant Discharge Elimination System Permit for Stormwater/Urban Runoff Discharge for Los Angeles County. A significant portion of the City of El Segundo is within Phase II of the Permit. The City is currently a co-permittee and subject to the permit requirements. The areas impacted by the permit will at least be Earth and Water.

If you have any questions regarding these comments, please contact Mr. Michael Bohlander of our Waste Management Division at (818) 458-3562.

If you have any questions regarding the environmental reviewing process of this Department, please contact Ms. Clarice Nash at the previous page address or at (818) 458-4334.

Very truly yours,

T. A. TIDEMANSON
Director of Public Works

Carl L. Blum
CARL L. BLUM
Assistant Deputy Director
Planning Division

MA:aa
1/146



COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

(213) 267-2481

P. MICHAEL FREEMAN
FIRE CHIEF
FORESTER & FIRE WARDEN

May 17, 1991

Ms. Kendra Morries
El Segundo Planning Department
350 Main Street
El Segundo, CA 90245

Dear Ms. Morries:

**SUBJECT: ENVIRONMENTAL IMPACT REPORT -- (CITY OF EL SEGUNDO)
GENERAL PLAN REVISION**

SERVICE RESPONSIBILITY

The subject property is totally within the City of El Segundo and does not appear to have any impact on this Department. It is not a part of the Consolidated Fire Protection District nor Forester and Fire Warden responsibility areas.

FORESTRY DIVISION

We have reviewed the Notice of Preparation of a Draft Environmental Impact Report. We will address our comments to the completed Environmental Impact Report when it is made available.

Very truly yours,

P. MICHAEL FREEMAN

BY
JOSEPH FERRARA, CHIEF, FORESTRY DIVISION
PREVENTION, PREPAREDNESS & CONSERVATION BUREAU

JF:jmb

21

SERVING THE UNINCORPORATED AREAS OF LOS ANGELES COUNTY AND THE CITIES OF.

AGOURA HILLS
ARTESIA
AZUSA
BALDWIN PARK
BELL
BELLFLOWER
BELL GARDENS

BRADBURY
CARSON
CERRITOS
CLAREMONT
COMMERCE
CUDAHY
DIAMOND BAR

DUARTE
GLENORA
HAWAIIAN GARDENS
HIDDEN HILLS
HUNTINGTON PARK
INDUSTRY
IRWINDALE

LA CANADA FLINTRIDGE
LAKEWOOD
LA MIRADA
LANCASTER
LA PUENTE
LAWDALE
LOMITA

MAYWOOD
NORWALK
PALMDALE
PALOS VERDES ESTATES
PARAMOUNT
PICO RIVERA
RANCHO PALOS VERDES

ROLLING HILLS
ROLLING HILLS ESTATES
ROSEMEAD
SAN DIMAS
SANTA CLARITA
SIGNAL HILL
SOUTH EL MONTE

SOUTH GATE
TEMPLE CITY
WALNUT
WEST HOLLYWOOD
WESTLAKE VILLAGE
WHITTIER



COUNTY OF LOS ANGELES-DEPARTMENT OF HEALTH SERVICES
ENVIRONMENTAL HEALTH / HEALTH FACILITIES
BUREAU OF ENVIRONMENTAL PROTECTION
2525 Corporate Place, Room 150, Monterey Park, CA 91754 (213)881-4011

DHS

June 4, 1991

Ms. Kendra Morries
Director of Planning
El Segundo Planning Department
350 Main Street
El Segundo, California 90245

Dear Ms. Morries:

ENVIRONMENTAL IMPACT REPORT-GENERAL PLAN REVISION, EL SEGUNDO

This is in response to your Notice of Preparation of a Draft Environmental Impact Report (DEIR) dated April 19, 1991, for the above-referenced project:

This Bureau has reviewed the Initial Study relative to solid waste, sewage disposal and water supply for the project and submits the following comment:

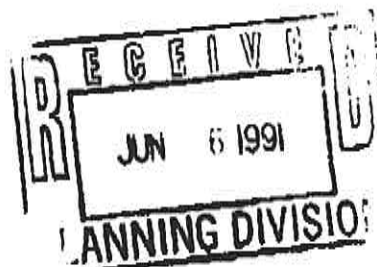
- The EIR should address the impact of the project on solid waste collection and disposal facilities. This should include a thorough discussion of source reduction and recycling measures to mitigate the impact of the project.

If you have any questions or wish additional information, please contact John Edmondson of our Solid Waste Management Program at (213)881-4151.

Very truly yours,

Jack Petralia, Director
Bureau of Environmental Protection

JP:kaj\eir's\elsegndo.eir





COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

955 Workman Mill Road, Whittier, CA 90601-4998
Mailing Address: PO Box 4998, Whittier, CA 90607-4998
Telephone: (213) 699-7411, (213) 699-5217, Fax: (213) 695-6139

CHARLES W. CARRY
Chief Engineer and General Manager

May 23, 1991

File No: 5-00.04-00

Ms. Kendra Morris
City of El Segundo
Planning Department
350 Main Street
El Segundo, CA 90245

Dear Ms. Morris:

City of El Segundo General Plan Update

The County Sanitation Districts received a *Notice of Preparation of a Draft Environmental Impact Report* for the subject project on April 22, 1991. We offer the following comments regarding sewerage service:

Portions of the City of El Segundo which are annexed to Sanitation District No. 5 or the South Bay Cities Sanitation District are provided sewerage service by the County Sanitation Districts. The remainder of the City is provided service through the City of Los Angeles' Hyperion Treatment Plant. When last measured, all Sanitation Districts conveyance facilities located within the City of El Segundo had available capacities to accommodate additional flows ranging from 0.5 million gallons per day (mgd) to 7.0 mgd. Local collector sewer lines, although tributary to the Sanitation Districts trunk sewer network, are not maintained by the Sanitation Districts.

The wastewater originating from within the City of El Segundo which is treated by the Sanitation Districts is processed at the Joint Water Pollution Control Plant (JWPCP), located at 24501 S. Figueroa Street, in the City of Carson. The JWPCP has a design capacity of 385 mgd and currently provides advanced primary treatment to an average wastewater flow of 368 mgd, with 200 mgd receiving secondary treatment. The JWPCP has been in operation since 1928 and is part of the Sanitation Districts' Joint Outfall System. This regional treatment system consists of five upstream water reclamation plants and the JWPCP. All sludge, and any wastewater flows which exceed the capacities of the upstream facilities, are diverted to the JWPCP for processing. The Sanitation Districts are currently constructing an expansion to the San Jose Creek WRP in Whittier, which will increase the upstream treatment capacity of the JOS by 37.5 mgd by 1992. When this expansion project is completed, the amount of wastewater diverted from the San Jose Creek WRP will be decreased, therefore, additional capacity will become available at the JWPCP. For information regarding the Hyperion Treatment Plant, please contact the City of Los Angeles.

It is the Sanitation Districts policy to remain neutral on growth issues and to expand facilities as necessary to accommodate the level of development which is approved by the local jurisdictions within our service area. Therefore, all Sanitation Districts facilities in question either have adequate capacity to handle the increase in wastewater flow which would result from growth and additional development, or will be expanded in the future to meet the communities needs.

28

Ms. Kendra Morris

2

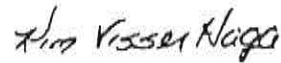
May 23, 1991

The Sanitation Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting to the Sanitation Districts' Sewerage System or increasing the existing strength and/or quantity of wastewater attributable to a particular parcel or operation already connected. A connection fee is required in order that necessary expansions to the Sewerage System can be constructed to accommodate new development. Payment of a connection fee will be required before a permit to connect to the sewer is issued.

If you have any questions, please contact the undersigned at (213) 699-7411, extension 2709.

Very truly yours,

Charles W. Carry



Kim M. Visser-Haga
Engineering Technician
Financial Planning &
Property Management Section

KMVI:ms



South Coast
AIR QUALITY MANAGEMENT DISTRICT
9150 FLAIR DRIVE, EL MONTE, CA 91731 (818) 572-6200

May 2, 1991

Ms. Kendra Morries
El Segundo Planning Department
350 Main Street
El Segundo, CA 90245

Dear Ms. Morries:

**Subject: Notice of Preparation of a Draft Environmental Impact Report for General Plan
Revision**

District #LAC910425-01

Thank you for the opportunity to comment on the above referenced environmental document. District staff has reviewed and assessed potential impacts that may result from the above referenced project.

Preliminary staff assessment indicates that the proposed project may adversely affect air quality. Appropriate mitigation measures should be incorporated into the proposed project to reduce air quality impacts to insignificant level. Refer to the District's "Air Quality Handbook for Preparing Environmental Impact Reports" to assess and mitigate adverse air quality impacts. Attached is Exhibit A, a list of potential emissions sources and mitigations measures for projects similar to the above listed project.

Upon completion of the Draft Environmental Impact Report, please forward two copies to:

South Coast Air Quality Management District
Planning Division
9150 Flair Drive
El Monte, CA 91731

Attn: **Connie A. Day**
EIR Review Program Supervisor

If you have any questions, please call me at (818) 307-4507.

Yours truly,

Connie A. Day
Program Supervisor

CAD:al

Enclosure

EXHIBIT A

POTENTIAL EMISSION SOURCES AND MITIGATION MEASURES

- A. To Minimize Construction Activity Emissions
 - o Water site and equipment in the morning and evening.
 - o Spread soil binders on site, unpaved roads, and parking areas.
 - o Re-establish ground cover on construction site through seeding and watering.
- B. Reduce Construction Equipment Emissions
 - o Wash off trucks leaving site.
 - o Properly tune and maintain all equipment.
 - o Use low-sulfur fuel for equipment.
- C. Reduce Construction-Related Traffic Congestion
 - o Provide rideshare incentives.
 - o Provide transit incentives for construction personnel.
 - o Configure construction parking to minimize traffic interferences.
 - o Minimize obstruction of through-traffic lanes.
 - o Provide a flagperson to guide the traffic properly.
 - o Schedule operations affecting roadways for off-peak traffic hours.
- D. Limit Emissions From Vehicle Trips and Roadway Construction
 - o Operate a Transportation management Plan per SCAQMD regulation XV.
 - o Provide commuter rideshare incentives.
 - o Provide commuter transit incentives.
 - o Promote Transportation Demand Management Associations.
 - o Establish a program of alternative work schedules.
 - o Establish a telecommuting program.
 - o Schedule goods movements for off-peak traffic hours.
 - o Promote local shuttle and regional transit systems.
 - o Provide dedicated turn lanes as appropriate.
 - o Provide transit shelters.
 - o Provide bicycle lanes, storage areas and amenities.
 - o Ensure efficient parking management.
 - o Prioritize Construction of HOV lanes.
 - o Work closely with cities in the region to implement TDM goals.
- E. Minimize Indirect- Source Emissions
 - o Implement energy conservation measures beyond state and local requirements.
 - o Install energy-efficient street lighting.
 - o Include energy costs in capital expenditure analyses
 - o Landscape with native drought-resistant species to reduce water consumption and to provide passive solar benefits.



818 West Seventh Street, 12th Floor • Los Angeles, California 90017-3435

(213) 236-1800 • FAX (213) 236-1825

May 30, 1991

EXECUTIVE COMMITTEE

- President**
Rep., Ventura County
John Flynn, *Supervisor*
- First Vice President**
Rep., City of Los Angeles
Robert Farrell, *Councilmember*
- Second Vice President**
Rep., Imperial County
Abe Seabolt, *Supervisor*
- Los Angeles County**
Mike Antonovich, *Supervisor*
Deane Dada, *Supervisor*
- Orange County**
Harriet Wieder, *Supervisor*
- Riverside County**
Melba Dunlap, *Supervisor*
- San Bernardino County**
Jim Mikala, *Supervisor*
- Cities of Los Angeles County**
Robert Bartlett, *Mayor*
Monrovia
- Cities of Imperial County**
Stella Mendoza, *Mayor*
Brawley
- Cities of Orange County**
Irwin Fried, *Councilmember*
Yuba Linda
- Cities of Riverside County**
Judy Nieburger, *Mayor*
Marana Valley
- Cities of San Bernardino County**
John Longville, *Mayor*
Rialto
- Cities of Ventura County**
John Melton, *Councilmember*
Santa Paula
- City of Los Angeles**
Tom Bradley, *Mayor*
- City of Long Beach**
Clarence Smith, *Councilmember*

Ms. Kendra Morris
Director of Planning
City of El Segundo
Planning Department
350 Main Street
El Segundo, CA 90245

Subject: Notice of Preparation of a Draft EIR for the Update of the City of El Segundo General Plan SCAG Clearinghouse No. LA-54899-NPR

Dear Ms. Morris:

Thank you for the opportunity to review and comment on the Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the Update of the City of El Segundo General Plan. In review of the NOP document, it appears that the EIR will provide a thorough assessment of the project's potential impacts upon many of the subjects relevant to regional planning issues.

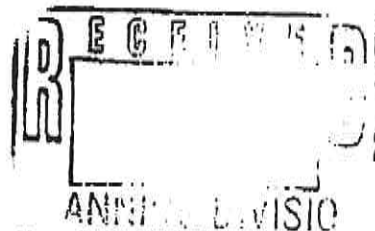
As you know, the California Environmental Quality Act requires that EIRs discuss any inconsistencies between the proposed project or program with the applicable general plans and regional plans (Section 15125 (b)). Accordingly, our major interest would be to ensure that the EIR clearly identifies any policies, objectives or programs which are inconsistent with the Regional Growth Management Plan, the Regional Mobility Plan, the Air Quality Management Plan and the Regional Housing Needs Assessment. If there are inconsistencies, an explanation and rationalization for such inconsistencies should be provided.

SCAG will not be submitting additional comments at this time, but would like a minimum of 45 days to review and comment on the Draft EIR when this document is available. Please remember to submit three (3) copies of the Draft EIR.

If SCAG can be of any further assistance, please contact Jim Birckhead at (213) 236-1915.

Sincerely,

Paul Hatanaka
(PAUL HATANAKA)
Clearinghouse Official



POLICY CHAIRS

- Judy Wright, *Councilmember*
Clermont, *Chair*, Transportation and Communications
- Diana King, *Mayor Pro Tem*
Clermont, *Chair*, Energy and Environment
- Hubert Wagner, *Mayor*
Lakewood, *Chair*, Community, Economic, and Human Development

AT-LARGE DELEGATES

- Judy Wright, *Councilmember*
Clermont
- Robert Genery, *Councilmember*
Laguna Beach
- Richard Kelly, *Mayor Pro Tem*
Palm Desert

ALTERNATES

Imperial County • Sam Sharp, *Supervisor* • Los Angeles County • Ed Edelman, *Supervisor* and Kenneth Hahn, *Supervisor* • Orange County • César Vasquez, *Supervisor* • Riverside County • Patricia Larson, *Supervisor* • San Bernardino County • Larry Walker, *Supervisor* • Ventura County • Vicky Howard, *Supervisor* • Cities of Imperial County • Victor Sanchez, Jr., *Mayor*, Westmorland • Cities of Los Angeles County • Abbe Lund, *Councilmember*, West Hollywood • Cities of Orange County • Ruthelyn Plummer, *Councilmember*, Newport Beach • Cities of Riverside County • (Vacant) • Cities of San Bernardino County • Elmer Digneu, *Mayor Pro Tem*, Loma Linda • Cities of Ventura County • (Vacant) • City of Los Angeles • Richard Alatorre, *Councilmember* • Joy Meus, *Councilmember* • Michael Woo, *Councilmember* • Long Beach 2nd position • Jeffrey Kellogg, *Councilmember* • At Large • Kathy Salazar, *Mayor Pro Tem*, Montebello • Fred Aguilar, *Mayor*, Chino • Robert Lewis, *Mayor Pro Tem*, Thousand Oaks

RECEIVED MAY 17 1991

MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MAY 10 1991

Ms. Kendra Morries
Director of Planning
El Segundo Planning Department
350 Main Street
El Segundo, California 90245

Dear Ms. Morries:

Notice of Preparation of a Draft Environmental Impact Report for the City of El Segundo General Plan Update

We have received the Notice of Preparation (NOP) of a Draft Environmental Impact Report (EIR) for the City of El Segundo General Plan Update. The project involves an update of the existing General Plan to address the mandatory elements of land use, housing, circulation, open space, conservation, noise and seismic safety. The comments herein represent Metropolitan's response as a potentially affected public agency.

Metropolitan's review of the NOP indicates that Metropolitan has a facility near your project area. Metropolitan's West Coast Feeder travels along El Segundo Boulevard to Aviation Boulevard, very near the border of the City of El Segundo. The attached map shows the West Coast Feeder in relation to your project area. It may be appropriate to consider its location in your project planning.

Metropolitan requests that the Draft EIR analyze the consistency of the proposed General Plan Amendment and any related development with the population forecasts adopted by the Southern California Association of Governments (SCAG). Metropolitan uses SCAG's population projections to determine future water demand. Development above these forecast provisions may increase demand on Metropolitan's resources and facilities beyond that anticipated.

Metropolitan encourages projects within its service area to include water conservation measures. While Metropolitan continues to build new supplies and develop means for more efficient use of current resources, drought and rapid development have put increasing demands on the current system. Water conservation, reclaimed water use, and ground water recharge programs contribute to local supplies.

Ms. Kendra Morries

-2-

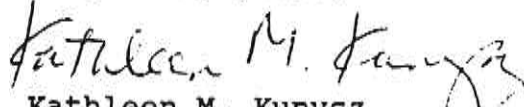
MAY 10 1991

Metropolitan supports mitigation measures such as using water efficient fixtures, drought tolerant landscaping, and reclaimed water to off-set any increase in water associated with your proposed project.

In order to avoid potential conflicts, we request that prints of plans for any construction or other activity in the area of Metropolitan's facilities and rights-of-way be submitted for our review and written approval. You may obtain detailed prints of drawings of Metropolitan's facilities and rights-of-way by contacting Mr. James E. Hale, Senior Engineering Technician, at (213) 250-6564.

We appreciate the opportunity to provide input to your planning process. If we can be of further assistance, please contact me at (213) 250-6272.

Very truly yours,


Kathleen M. Kunysz
Manager, Environmental Affairs

AER/gg

Attachment



LOS ANGELES CO.

DETAIL

56

56

SEE MAP 50

SEE MAP 62

56

56

SEE MAP 57

SEE 55A MAP

Southern California Edison Company

P O BOX 148

3811 ROUTE 14 SIENEGA BOULEVARD
INGLEWOOD CALIFORNIA 90306

MAIL ROOM (303) 433-1111
ATTN: MANAGER

TELEPHONE
(310) 433-3000

May 31, 1991

Ms. Kendra Morries
Director of Planning
City of El Segundo
350 Main Street
El Segundo, CA 90245

SUBJECT: Notice of Preparation for
Draft Environmental Impact Report - City of El Segundo
General Plan Update

Dear Ms. Morries:

This is to advise you that the City of El Segundo located within the service territory of the Southern California Edison Company and that electric loads resulting from the General Plan update are within the parameters of the overall projected load growth which we are planning to accommodate in this area.

Unless the demand for electrical generating capacity exceeds our estimates, and provided that there are no unexpected outages to major sources of electrical supply, we expect to meet our electrical requirements for the next several years.

In addition, the relocation, reconstruction, rearrangement, extension, or undergrounding of Edison's existing electrical distribution system which may be necessitated by activities resulting from the General Plan update, will be performed by Edison in accordance with Edison's effective Tariff Schedules approved by and filed with the California Public Utilities Commission.

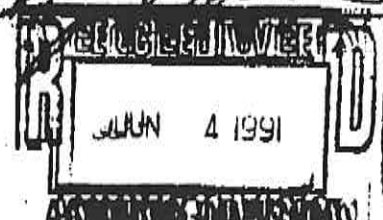
Thank you for the opportunity to review and comment under this Notice of Preparation.

Please contact me directly should you have any questions.

Very truly yours,

Mona P. P. P. P. P.

MLD:dd





RTD

Dana A. Woodbury
Director of Planning

May 17, 1991

Ms. Kendra Morris
Director of Planning
City of El Segundo
350 Main Street
El Segundo, CA 90245

Dear Ms. Morris:

Re: Environmental Impact Report-El Segundo General Plan Revision

The Southern California Rapid Transit District (SCRTD) has reviewed the Notice of Preparation (NOP) of a Draft Environmental Impact Report (DEIR) for the City of El Segundo's General Plan Revision and offers the following comments.

The DEIR should incorporate as mitigation measures, specific policies and programs designed to promote transportation alternatives to the single-occupant automobile. Promoting alternative modes of transportation such as transit, walking and biking should also be a major goal of the land use, circulation and air quality elements of the general plan. As a "Program EIR", the DEIR should clearly demonstrate the relevancy of its programs to achieving the goals and objectives of the General Plan as well as the internal consistency of the General Plan elements.

To foster an environment conducive to alternative transportation modes and contribute to achieving the region's air quality objectives, the DEIR should incorporate the following policies and strategies:

- A development standards review policy which would provide the opportunity to review individual projects for their traffic impacts and compatibility with transit and the other modes of transportation mentioned above. It would also provide incentives such as density bonuses and reduced parking requirements, or penalties such as traffic mitigation fees.
- A Public Access Code (PAC) which would govern the provision of parking in the City. Studies have shown that restricted access to parking is a very effective means of inducing people to use other modes of transportation. A PAC is broader than a conventional parking code in that it recognizes that access to a site is not limited to the automobile (see Model Public Access Code, enclosed). A PAC would incorporate policies such as charging employees for on-site parking, consolidated and shared parking.

Ms. Kendra Morries
May 17, 1991
Page 2

- Encourage higher density and mixed-use development, especially around transit facilities and corridors. This policy should also encourage the provision of on-site amenities and services whenever possible. On-site amenities and services such as restaurants, Automated Teller Machines (ATMs) and postal services offer people who work in an area the opportunity to run errands or go to lunch on foot rather than using their automobiles.
- Provide wide and well-lit sidewalks. These tend to encourage pedestrian activity and promote a sense of security for transit patrons.
- Support employer Transportation Demand Management (TDM) efforts and encourage the formation of Transportation Management Associations (TMAs) to coordinate employer TDM activities.
- Provide convenient transit facilities and amenities such as park-n-rides, and covered bus shelters set back from the street, with benches and adequate lighting.
- Explore the transit linkage opportunities that will be provided by the proposed Metro Green Line extension between Century Freeway and Compton Boulevard on Nash Street. The DEIR should clearly articulate how the land use, circulation and air quality elements intend to take advantage of these opportunities. This rail corridor and its station areas will provide excellent opportunities for the coordination of land use and transit. For additional information on the Metro Green Line extension, please contact the Los Angeles County Transportation Commission (LACTC) at (213) 623-1194.

The policies and strategies mentioned above may be combined into a comprehensive Traffic Reduction Incentives Program (TRIP). A TRIP would provide a convenient vehicle to coordinate land use, transportation/circulation and air quality policies and strategies.

The City of El Segundo is currently served by the following SCRTD Lines:

Line 120: Operates on Imperial Highway.

Line 124: Operates on El Segundo Blvd.

Line 125: Operates on Rosecrans Avenue.

Line 220: Operates on Imperial Highway between Sepulveda Boulevard and Pershing Drive.

Line 225/226: Operates on Aviation Boulevard, Douglas Street, Mariposa Avenue, Nash Street and Sepulveda Boulevard.

Line 232: Operates on Sepulveda Boulevard.

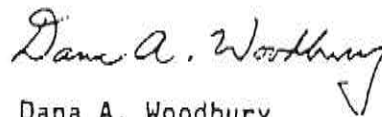
Ms. Kendra Morries
May 17, 1991
Page 3

Line 439: Limited-stop Express service, operates on Imperial Highway, California Street, Imperial Avenue, Main Street, Grand Avenue and Vista Del Mar Boulevard.

The DEIR should report on all transit facilities and services in the City and explore how they can be incorporated into an integrated land use-transportation-air quality program such as TRIP.

SCRTO is willing to cooperate with the City of El Segundo on any transit related aspect of the DEIR and General Plan. We look forward to receiving the DEIR when it becomes available. If you need additional information, please contact Joel Woodhull, Planning Manager, at (213) 972-4850.

Sincerely,



Dana A. Woodbury

Attachment

CITY OF LOS ANGELES CALIFORNIA



TOM BRADLEY
MAYOR

DEPARTMENT OF
CITY PLANNING
ROOM 561, CITY HALL
300 N. SPRING ST
LOS ANGELES, CA 90012-4801

MELANIE FALLON
DIRECTOR

(213) 237-1986
FAX (213) 237-0588

**CITY PLANNING
COMMISSION**

WILLIAM G. LUDDY
PRESIDENT
THEODORE STEIN, JR.
VICE-PRESIDENT
WILLIAM R. CHRISTOPHER
SUZETTE NEIMAN
FERNANDO TORRES-GIL

RAMONA HARO
SECRETARY

ROOM 503, CITY HALL
(213) 485-5071

May 22, 1991

Kendra Morris. Director
El Segundo Planning Department
350 Main Street
El Segundo, CA 90245

Dear Ms. Morris:

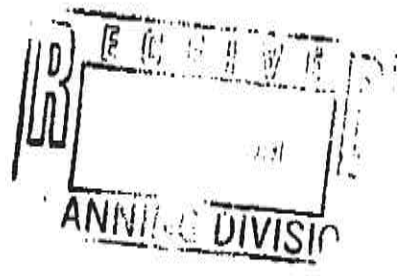
EIR FOR EL SEGUNDO GENERAL PLAN REVISION

Thank you for the opportunity to comment on your Notice of Preparation; however, we have no comments at this time.

Very truly yours,

Rouder Owen for
Albert J. Landini
Division Manager, Neighborhood Planning Division

AJL:TLG:tg





DEPARTMENT OF COMMUNITY DEVELOPMENT

CITY HALL - 1400 HIGHLAND AVENUE - MANHATTAN BEACH, CALIFORNIA 90266-4795
 TELEPHONE (213) 545-5621 FAX (213) 545-5234

May 7, 1991

El Segundo Planning Department
 350 Main Street
 El Segundo, CA 90245

Attention: Kendra Morries, Director of Planning

Dear Ms. Morries,

Thank you for the opportunity to review the Notice of Preparation for the Environmental Impact Report for the General Plan Revision for the City of El Segundo. We have no specific comments at this time, but will reserve that option at the time the Draft EIR is circulated.

As a neighboring city, we are particularly interested in any impacts on air quality, quantity and quality of ground waters, risk of human upset from industries using flammable and toxic materials, demand for housing in surrounding cities, effects on traffic flow and circulation both locally and regionally, impacts on the regional road networks and freeways (specifically Sepulveda Boulevard), and demands on regional public transit.

We look forward to receiving a copy of the Draft EIR when available. Inquiries for any information from the City of Manhattan Beach should be addressed to me.

Sincerely,

Maxine R. Woerner, AICP
 Senior Planner

a:\NOI\caeg.let



Allied-Signal Inc.
Engineered Materials Sector
P.O. Box 98
El Segundo, CA 90245
Telephone (213) 615-0100

April 22, 1991

Ms. Kendra Morries, Director of Planning
City of El Segundo
350 Main Street
El Segundo, CA 90245

Re: Environmental Impact Report - General Plan Revision

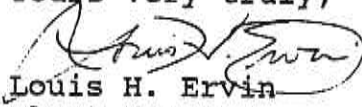
Dear Ms. Morries,

Thank you for the opportunity to comment on the NOP for the General Plan Revision EIR. We have three comments for your consideration:

- 1) With regard to Item 10a. What type of methodologies will be used to assess the risks of using flammable and toxic materials?
- 2) With regard to Item 10b. Will you be evaluating community notification plans as part of the emergency response plan?
- 3) Will a Socio-economic analysis be part of the EIR, or will it be done separately?

If you have any questions regarding our comments, please contact Bill Mason of my staff at 615-0100 Ext. 259 or myself.

Yours very truly,


Louis H. Ervin
Plant Manager

acf

cc W. T. Mason

24.05.

El Segundo Unified School District

641 SHELDON STREET ■ EL SEGUNDO, CALIFORNIA 90245
(213) 322-4500 ■ FAX (213) 640-8272

SUPERINTENDENT

WILLIAM N. MANAHAN, Ed.D.

April 22, 1991

Ms. Kendra Morries
Director of Planning
City of El Segundo
350 Main Street
El Segundo, California 90245

Dear Ms. Morries:

The El Segundo Unified School District is in receipt of the "Notice of Preparation of a Draft Environmental Impact Report" forwarded to this office on April 19, 1991. It is our understanding that the Project EIR will be conducted to determine the impact of revisions to the El Segundo City General Plan.

On behalf of the Board of Education, I am requesting that the School District be provided ongoing notices regarding meetings, mail-outs, and other information associated with this EIR. In addition, considering the close relationship that exists between the City of El Segundo and the El Segundo Unified School District and the fact that the EIR states that the environmental impact on public services such as schools is definite, the District is requesting that a representative of the School District be made a member of the General Plan Revision Committee.

Also, in reading through the Notice of Preparation of the EIR, the implications are that the City has specific revisions to the General Plan in mind. Is it possible to make a copy of the proposed revisions in advance? This information would be instrumental in ultimately developing a response by the El Segundo Unified School District through the EIR process.

Sincerely yours,



William N. Manahan
Superintendent

WNM:rh

cc: Board of Education

BOARD OF EDUCATION

KEITH R. WISE
President

NANCY M. WERNICK
Vice President

KENNETH N. SCHOFIELD
Clerk

ALAN D. LEITCH
Member

CHRISTINE M. SHERRILL
Member

*Manahan.EIR/KM
May 2, 1991
Page 2*

Thanks again for taking the time to become involved. The one year calendar that the City Council, staff and consultant have committed to is ambitious and will require the continued support of the community. If you have other questions or need any additional information, please feel free to contact me.

Sincerely,

Kendra Morries
Kendra Morries
Director of Planning

*cc: Ronald E. Cano, City Manager
EIP Associates
Lightfoot Planning Group
Sara Rostamian, Associate Planner*

Manahan.EIR

APPENDIX C: ARCHAEOLOGICAL SURVEY REPORT

California
Archaeological
Inventory



Regional
Information
Center

Orange
Los Angeles
Ventura

Mailing Address: Archaeological Information Center
UCLA Institute of Archaeology
Fowler Museum of Cultural History
Los Angeles, CA 90024-1510
Phone: 213-825-1980 FAX: 213-206-4723

September 19, 1991

Mr. Jeff E. Fujimoto
EIP Associates
80 South Lake Avenue, Suite 600
Pasadena, CA 91101

RECEIVED

SEP 23 1991

RE: Record search for the General Plan Update EIR for the
City of El Segundo.

**EIP ASSOCIATES
LOS ANGELES, CA.**

Dear Mr. Fujimoto,

As per your request of August 13, 1991, we have conducted an archaeological records search of the above referenced project. This document search included a review of all recorded historic and prehistoric archaeological sites in the vicinity as well as a review of all known cultural resource survey and excavation reports. In addition, we have checked our most current listings of California Historic Landmark and National Register sites as well as our file of historic maps regarding this region.

Due to the sensitive nature of cultural resources, archaeological site locations are not released. Instead, sensitive areas are delimited with relevant state trinomials listed.

These documents revealed:

PREHISTORIC RESOURCES:

One prehistoric site has been identified within the City of El Segundo boundaries (see enclosed map and list). The site, described as a shell scatter, is located along the city's northern boundary.

HISTORIC RESOURCES:

No historic archaeological sites have been identified within a one mile radius of the subject area (see enclosed map and list). No State Landmark or National Register properties have been identified within the City of El Segundo.

Inspection of our historic maps --Redondo 1896 and 1944 15' series -- indicates no development in the area on the 1896 edition. The 1944 edition indicates a fully urbanized city of El Segundo. Areas in excess of forty-five years of age should be evaluated against criteria for inclusion in the National Register of Historic Places.

PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS:

Four surveys and/or excavations have been conducted within the city boundaries (see enclosed map and bibliography). Most of these surveys took place along the boundaries of the city.

RECOMMENDATIONS

Our office recommends that when using these maps for city planning purposes, the following guidelines should be observed.

The areas within black ovals indicate areas of known archaeological sensitivity. The unmarked areas, i.e., those which do not contain ovals or hatching, are areas of unknown cultural resource sensitivity. It is likely that unrecorded prehistoric and historic cultural resources are situated in these areas. CEQA projects which fall within these areas should be reviewed by the Archaeological Information Center during the Initial Study Phase of the planning process (see enclosed Quick Check Letter and Form). Our office will evaluate the areas potential for yielding cultural resources and make recommendations for treatment.

Hatched areas indicate areas that have been assessed for cultural resources. These assessments range from an archaeological records search to a physical walk-over (Phase I Reconnaissance) of the subject property. Our office maintains all such reports on file as is constantly updating our records. It is therefore suggested that the quick check form be used to clarify the extent of evaluation. CEQA projects are required to address cultural resources prior to permitting (CEQA Sec. 21083.2 and 15300.2).

Our office is authorized by the State Historic Preservation Office to make recommendations regarding the degree of evaluation to be required. Adequate evaluation ranges from a Halt-work condition being applied to the permit to evaluation of resource significance through test excavations.

If you have any questions regarding our results or the recommendations presented herein, please feel free to contact our office at (213) 825-1980.

Invoices are mailed approximately two weeks after records searches. This will allow your firm the opportunity to request further information under the same invoice number. Please reference the invoice number listed below when making inquires. Requests made after invoicing will necessitate a separate invoice with a \$10.00 handling fee.

Sincerely,



Shelley Marie Gomes
Assistant Coordinator

Enclosures:

- (X) Map
- (X) Bibliography
- (X) Site list
- () Site records
- () Survey reports
- () Invoice #3355
- () SOPA list
- (X) Quick check letter & form

APPENDIX D: FISCAL IMPACT ANALYSIS

Coopers
& Lybrand

certified public accountants

2901 North Central Avenue
Phoenix, Arizona
85012-2755

in principal areas of the world

management consultants

telephone (602) 280-1800
telecopy (602) 280-1999

October 20, 1991

Mr. Lou Lightfoot
The Lightfoot Planning Group
1315 Union Plaza Court
Suite 100
Oceanside, CA 92054

Dear Mr. Lightfoot:

We have completed our preliminary report on the comparative potential fiscal impact of the two proposed General Plans for the City of El Segundo, as well as our analysis of the potential fiscal impact of the current General Plan. We understand that this report will be used by The Lightfoot Planning Group, EIP Associates, the General Plan Review Committee, and the City of El Segundo in preparing an update of the City's General Plan.

During the course of this study, we have relied on data and reports provided by various public and private sector sources. We believe that the information we used is reasonable; however, we did not conduct independent reviews to determine accuracy. Our analysis has been based on projections and hypothetical assumptions determined from the above reference public and private sources, regarding circumstances and events which have not yet taken place. To the extent that these do not materialize, the outcome may vary from the projected potential results, and these differences may be material.

Because of the nature of this report, the fiscal projections are not intended to be used for fiscal budgeting or planning purposes. Our findings are strictly for comparative purposes only.

We have no responsibility to update our analysis for events and circumstances occurring after the date of this letter.

We appreciate this opportunity to have been of service to you. Should you have any questions, please feel free to contact Coopers & Lybrand at (602) 280-1800.

Very truly yours,



JAC/DKS
jyc

COMPARATIVE FISCAL IMPACT ANALYSIS

Proposed for:

GENERAL PLANS

CITY OF EL SEGUNDO

October 20, 1991

1.0 Executive Summary

The purpose of this report is to analyze the consequences to the City of El Segundo on the comparative potential fiscal impacts of two proposed General Plans. This report also analyzes the comparative potential fiscal impacts of not adopting a new General Plan, but keeping the current one. The projections of potential fiscal impacts are not intended for fiscal budgeting or planning purposes, and should be used only as points of comparing one plan to another.

In order to project potential fiscal impacts of the proposed and current General Plans, we reviewed and analyzed current and projected real estate market conditions, historic and projected economic and demographic conditions, and historical revenue, expenditure and operating capacity trends of the City of El Segundo and surrounding municipalities. We also conducted interviews with City and County officials, as well as real estate sources in the region. Our findings are based on assumptions and analysis derived from these data.

The following five points outline our findings. Table 1-1 summarizes the various net fiscal impacts.

1. There does not appear to be sufficient hypothetical future demand by land use to fully absorb any of the potential supply of future land uses under the two proposed General Plans as well as the potential future supply under the existing General Plan by the year 2010.
2. Because there may not be sufficient hypothetical demand to fully absorb these uses, it appears likely that the future fiscal implications will not be different under the proposed or existing General Plans until at least 2030.
3. In order to make an "apples to apples" comparison between potential fiscal impacts of the proposed and existing General Plans, we have assumed a complete buildout for all three plans by 2010.
4. Based on these uniform buildout time tables, the Aeroplan appears to have the most significant beneficial future fiscal impacts on the City of El Segundo, returning approximately 15 percent more to the City than the existing General Plan. The Preferred Plan could benefit the City by nearly 10 percent more than the existing General Plan.

TABLE 1-1
 SUMMARY OF COMPARATIVE FINDINGS
 EXISTING PLAN, PREFERRED PLAN AND AEROPLAN
 CITY OF EL SEGUNDO

Plan	NPV of Net Fiscal Impact (1) 1991-2010	*** Increase Over Existing Plan *** Amount	Percent
Existing	\$92,225,906	-	-
Preferred	\$99,543,503	\$7,317,597	7.9%
Aeroplan	\$103,483,260	\$11,257,354	12.2%

(1) Discounted at 15 percent.

**Preliminary Draft
Subject to Change**

5. Compared to the Preferred Plan, the Aeroplan could provide an additional 5 percent net benefits to the City over the next 20 years, providing both Plans could be fully absorbed by the market over that time. However, given the numerous assumptions required to perform this comparative analysis, and given the likelihood that the supply of future land uses will not be absorbed in the market, the differences between the two plans appears minimal.

The remainder of this report includes background information and analysis that was used to reach our conclusions. It is organized as follows:

- o Section 2 analyzes supply and demand balance in the El Segundo real estate market.
- o Section 3 reviews historic trends in revenue, expenditure and operating trends for the City of El Segundo and neighboring municipalities.
- o Section 4 summarizes projections of potential fiscal impacts to the City of El Segundo by relevant revenue and expenditure line items.

2.0 Supply/Demand Conditions in El Segundo

This section of the report projects supply and demand conditions in the El Segundo real estate market. This step is important in order to determine possible land use mixes that may occur in Urban Mixed Use areas of the Preferred and Aeroplan General Plans.

Table 2-1 summarizes the potential additional supply of each of the General Plans. Presently, there is an estimated 27.4 million square feet of commercial, office and industrial space within El Segundo. Approximately 40 percent of the total square footage is office space, and an additional 40 percent is light industrial.

Under the existing General Plan, a total of 61.5 million square feet of space could potentially be built, an increase of approximately 34 million square feet. The Preferred Plan would allow a total of 56 million square feet, or an additional 28.7 million square feet of space, while the Aeroplan would allow an additional 34.8 million square feet, or a total of 62.2 million square feet.

The key differences in these three plans is the distribution of potential future uses. Nearly half of the potential future development under the existing plan is for light industrial space, compared to approximately 45 percent under the Preferred plan and less than 40 percent under the Aeroplan.

Both of the proposed plans allow a greater flexibility for future land uses by incorporating an Urban Mixed Use designation. Under this designation, nearly all types of reasonable land uses (except for heavy industrial) would be allowed. However, the uses would be limited in size by a prevailing FAR. The FAR for the Preferred plan is 0.9, while the FAR for the Aeroplan is 1.5. Based on these FAR differences, 60 percent of the additional potential development under the Preferred plan would occur within Urban Mixed Use areas, compared to 68 percent under the Aeroplan. Both of the proposed plans are identical in the acreage and square footage allowed by other land uses. The heavy industrial land use would be redeveloped into other uses under both of the proposed plans.

In the Coopers & Lybrand Existing Conditions Report dated June 5, 1991, the existing real estate conditions in the El Segundo market were analyzed. Based on this analysis, we have developed hypothetical demand projections for general land uses. These hypothetical demand projections are summarized on Table 2-2.

TABLE 2-1
ADDITIONAL ABSORPTION POTENTIAL
EL SEGUNDO
EXISTING LAND USE, PREFERRED PLAN BUILDOUT AND AEROPLAN BUILDOUT
1989 - 2010

Land Use Category	Space Existing	Existing Plan		Preferred Plan		Aeroplan Plan		Preferred Plan Additional Abs. Potential	Aeroplan Plan Additional Absorption Potential	Aeroplan Plan Additional Annual Abs. Potential
		Plan Buildout	Additional Absorption Potential	Plan Buildout	Additional Absorption Potential	Plan Buildout	Additional Absorption Potential			
Neighborhood Commercial	899,514	1,611,720	712,206	969,210	69,696	969,210	69,696	3,668	969,210	3,668
General Commercial	1,207,766	1,437,542	229,776	2,447,636	1,239,870	2,447,636	1,239,870	65,256	2,447,636	65,256
Subtotal Commercial	2,107,280	3,049,262	941,982	3,416,846	1,309,566	3,416,846	1,309,566	68,925	3,416,846	68,925
Light Industrial	10,232,244	26,305,884	16,073,640	22,925,558	12,693,314	22,925,558	12,693,314	668,069	22,925,558	668,069
Heavy Industrial	4,510,638	12,471,228	7,960,590	0	(4,510,638)	0	(4,510,638)	(237,402)	0	(237,402)
Corporate Office	10,573,426	19,703,145	9,129,719	12,351,219	1,777,793	12,351,219	1,777,793	93,568	12,351,219	93,568
Urban Mxed Use (1)	0	0	0	17,397,167	17,397,167	17,397,167	17,397,167	915,640	23,581,473	1,240,078
Total Non-Residential	27,423,588	61,529,519	34,105,931	56,090,790	28,667,202	62,255,096	34,831,508	1,508,800	62,255,096	1,833,237

Source: Lightfoot Planning Group.

TABLE 2-2
HYPOTHETICAL SUPPLY AND DEMAND
BY GENERAL LAND USE CATEGORY
CITY OF EL SEGUNDO
1991 - 2010

General Land Use	Hypothetical Annual Demand (Sq. Ft.)	Hypothetical Total Demand 1991 - 2010 (Sq. Ft.)	***** POTENTIAL ADDITIONAL SUPPLY *****		TOTAL		*** DEMAND/SUPPLY DIFFERENCE ***	
			Existing Plan	Preferred Plan	Aeroplan Plan	Aeroplan Plan	Existing Plan	Preferred Plan
Office (1)	375,000	7,125,000	9,129,719	14,664,322	20,828,628	(2,004,719)	(7,539,322)	(13,703,628)
Retail (2)	32,000	608,000	780,482	1,148,066	1,148,066	(172,482)	(540,066)	(540,066)
Hotel (3)	8,500	161,500	161,500	161,500	161,500	0	0	0
Industrial (4)	500,000	9,500,000	24,034,230	12,693,314	12,693,314	(14,534,230)	(3,193,314)	(3,193,314)
TOTAL	915,500	17,394,500	34,105,931	28,667,202	34,831,508	(16,711,431)	(11,272,702)	(17,437,008)

(1) Hypothetical Demand based on projections in "Demand for Office Space in Southern California -- Projections through the Year 2000," by Grubb & Ellis, 1991.
 (2) Hypothetical Demand based on demand derived from projected daytime and nighttime population growth projections, SCAG.
 (3) Hypothetical Demand based on employment driven demand projections. Average room size assumed = 500 square feet. For purposes of this analysis, demand is projected to equal supply in all three scenarios.
 (4) Hypothetical Demand based on historical industrial absorption trends.

**Preliminary Draft
Subject to Change**

Under provisions of the existing General Plan, there is the potential for an additional 34 million square feet of office, retail, hotel and industrial space. However, there appears to be demand for only 17 million square feet over the next 20 years. Assuming straight line growth in demand, the potential supply of land uses would not be built out until approximately 2030.

Similarly, the supply of potential land uses is well in excess of the hypothetical demand projections for both of the proposed plans. It appears that a total buildout would occur the soonest under the Preferred plan.

3.0 Historical Financial Analysis of the City of El Segundo

This section of the report reviews the historical revenues, expenditures, and other operating costs of the City of El Segundo. The purpose of this analysis is to provide some historical perspective on fiscal trends for both El Segundo and surrounding municipalities that may assist in developing projective assumptions.

Future real estate development in El Segundo will affect specific revenue sources due to increased employment, retail spending and enhanced property tax assessments. Specific revenue sources likely to be affected are sales taxes, property taxes, transient occupancy taxes, utility user taxes, and the business license fee.

Expenditures will be affected due to increase road maintenance due to heavier traffic and increased police and fire protection. Specifically, expenditures for public safety and public works are likely to be significantly affected by future real estate development.

Based on conversations with City officials, the costs of future capital improvements directly caused by real estate development will not be borne by the City, but will be paid for by the developer. For purposes of this analysis, we have assumed that no capital improvements due to future real estate development will affect the city, based on this finding.

From 1985 through 1989, total revenues collected by the City of El Segundo have annually increased by an average of 6.5 percent. However, the 1990 increase over 1989 revenue jumped considerably, by 41.2 percent. This substantial increase is due to a recently imposed business license fee. As a result of imposing this fee, the City realized an additional \$6.8 million in 1990 in licenses and permits compared to 1989. The revenue trends for the City of El Segundo are summarized on Table 3-1.

Historically, the greatest share of revenue to the City has come from both sales tax collections and licenses & permits. However, the business license fee has quickly become the most substantial portion of revenues. The importance of the business license fee is likely to increase due to future changes in its calculation, which will be detailed in the next section.

Table 3-2 summarizes historical expenditures for the City of El Segundo. The general trend in City expenditures has been relatively stable, with annual increases in spending never exceeding 7.2 percent.

TABLE 3-1
REVENUE TRENDS
CITY OF EL SEGUNDO
1985 - 1990

Category	1985	1986	% Change 1985-86	1987	% Change 1986-87	1988	% Change 1987-88	1989	% Change 1988-89	1990	% Change 1989-90
Sales tax	\$3,529,556	\$3,411,822	-3.3%	\$2,843,467	-16.7%	\$3,733,956	31.3%	\$4,682,601	25.4%	\$4,233,123	-9.6%
Property tax	1,716,614	1,926,873	12.2%	1,931,959	0.3%	2,148,555	11.2%	2,365,272	10.1%	2,462,547	4.1%
Franchise tax	2,526,944	2,477,996	-1.9%	1,993,899	-19.5%	1,947,068	-2.3%	1,562,631	-19.7%	1,509,847	-3.4%
Transient occupancy tax			NA		NA	1,272,088	NA	1,777,804	39.8%	1,968,931	10.8%
Other taxes	639,712	895,610	40.0%	1,383,680	54.5%	86,753	-93.7%	141,387	63.0%	198,820	40.6%
Utility user tax			NA		NA		NA	1,669,844	NA	2,441,440	46.2%
Licenses & permits	3,077,404	4,550,325	47.9%	4,537,498	-0.3%	4,626,086	2.0%	4,571,623	-1.2%	11,403,213	149.4%
Fines & forfeitures	424,454	361,746	-14.8%	398,897	10.3%	384,645	-3.6%	437,393	13.7%	479,535	9.6%
Use of money & property	2,537,207	171,420	-93.2%	1,382,018	706.2%	1,422,202	2.9%	1,537,200	8.1%	1,950,640	26.9%
Rev. from other agencies	1,160,958	1,196,165	3.0%	1,211,239	1.3%	1,201,602	-0.8%	978,970	-18.5%	915,794	-6.5%
Charges for services	616,189	1,072,993	74.1%	668,728	-37.7%	1,330,105	98.9%	1,170,329	-12.0%	1,962,235	67.7%
Other revenue	371,200	267,333	-28.0%	222,465	-16.8%	479,857	115.7%	454,446	-5.3%	621,676	36.8%
Total	\$16,600,238	\$16,332,283	-1.6%	\$16,573,850	1.5%	\$18,632,917	12.4%	\$21,349,500	14.6%	\$30,147,801	41.2%

Source: City of El Segundo Annual Financial Reports, 1985 - 1990.

TABLE 3-2
TOTAL EXPENDITURES
CITY OF EL SEGUNDO
1985 - 1990

Category	1985	1986	% Change		1987	% Change		1988	% Change		1989	% Change		1990	% Change	
			1985-86		1986-87	1987-88		1988-89	1989-90		1989-90		1989-90		1989-90	
General government	\$2,561,308	\$3,096,291	20.9%		\$3,370,945	8.9%		\$3,349,404	-0.6%		\$4,121,595	23.1%		\$4,636,995	12.5%	
Public safety	9,819,644	10,740,028	9.4%		10,977,959	2.2%		11,440,541	4.2%		12,029,209	5.1%		12,649,371	5.2%	
Public works	2,414,337	2,667,713	10.5%		2,628,740	-1.5%		2,342,559	-10.9%		2,439,972	4.2%		2,292,388	-6.0%	
Parks and recreation	1,709,212	1,908,291	11.6%		1,916,488	0.4%		1,811,668	-5.5%		2,064,959	14.0%		2,152,033	4.2%	
Community development	377,672	191,746	-49.2%		393,929	105.4%		196,096	-50.2%		31,889	-83.7%		13,444	-57.8%	
Other														111,516	NA	
Total Non-Capital Expenditures	\$16,882,173	\$18,604,069	10.2%		\$19,288,061	3.7%		\$19,140,258	-0.8%		\$20,687,624	8.1%		\$21,855,747	5.6%	
Capital Expenditures	\$1,150,238	\$121,113	-89.5%		\$121,576	0.4%		\$697,570	473.8%		\$206,131	-70.5%		\$541,056	162.5%	
TOTAL EXPENDITURES	\$18,032,411	\$18,725,182	3.8%		\$19,409,637	3.7%		\$19,837,828	2.2%		\$20,893,755	5.3%		\$22,396,803	7.2%	

Source: City of El Segundo Annual Financial Reports, 1985 - 1990.

On a per capita basis, the City of El Segundo spends a great deal more for police and fire protection than do neighboring cities. In 1988, the City of El Segundo spent over \$350 per capita on police, and over \$330 per capita on fire, while the neighboring municipalities or places of Redondo Beach, Hermosa Beach, Manhattan Beach, or Hawthorne spent around \$150 per capita on police and \$70 per capita on fire. The reason behind the differences appears to be the high-tech employment base in El Segundo.

4.0 Analysis of Potential Fiscal Impacts of Proposed General Plans

The purpose of this section is to determine the comparative potential fiscal impacts of the existing General Plan, the Preferred plan and the Aeroplan. For each plan, we have determined hypothetical projections of impacted revenue and expenditure streams to the year 2010. In order to compare "apples to apples," the methodology for projecting future revenues and expenditures is the same for all three plans.

As stated earlier, it appears unlikely that the entire potential supply of land uses will be absorbed over the next 20 years. However, for the comparative purposes of this analysis, we have made the assumption that in all three cases, the supply of potential future land uses will be entirely absorbed by 2010. Therefore, annual changes in additional square footages or units will differ between the three plans. These differences have an effect on employment, retail sales, transient occupancy taxes, property taxes, business license fees, utility user taxes, public safety expenditures and public works expenditures.

The following subsections outline the basic assumptions and methodology for each source of revenue and expenditure:

4.1 Calculation of Projected Sales Tax

According to the City of El Segundo Finance Department, El Segundo collects 1 percent of the total retail sales that occur within city limits. Historically, total retail sales within El Segundo have approximated \$150 to \$200 per square foot. This level of retail sales is generally consistent with both the national and regional norms. For the purposes of this analysis, we have assumed a base year sales per square foot of \$200. Based on the estimated total for retail oriented commercial space of approximately 2.1 million square feet, the assumed sales per square foot yields \$421.5 million dollars in retail sales for 1991. This amount is inflated by 5 percent annually. From this estimate of projected retail sales, the 1 percent sales tax collected by the City of El Segundo has been calculated.

4.2 Calculation of Transient Occupancy Tax

The transient occupancy tax is 8 percent of the actual occupied room rate per night. In order to project the transient occupancy tax on a consistent basis, the historical average annual tax per room was calculated from historical transient occupancy tax receipts and the historical number of occupied rooms. The advantage of this method is that future tax receipts would be based on future potential hotel/motel development.

Based on this analysis, it was determined that \$2,000 per occupied room was a reasonable base estimate. This amount, inflated by 5 percent annually, was multiplied by the number of projected occupied rooms to derive a future estimate of potential transient occupancy tax receipts.

4.3 Calculation of Real Property Tax

Estimating future revenue from property taxes in El Segundo is extremely difficult because of the limiting effects of Proposition 13 on the annual growth in assessed value. Because our analysis is to determine the comparative effects of future development under proposed General Plans, and because this development would affect real property values due to changes in use, this analysis has focused only on the net affects of future development on real property tax revenues.

In order to estimate an average fair market value by land use, readily available secondary source data were used. The median home value for El Segundo is based on information from TRW Real Estate Information Services. The remaining estimates by land use are based on historical trends in sales prices as reported in the Market History Reports, 1991, which is published by the Liquidity Fund as part of the National Real Estate Index. The estimates on income producing types of property are all based on a price per square foot basis.

The estimated fair market value, inflated by 5 percent annually, was multiplied by the annual change by land use type. That amount was then multiplied by 1.25 percent, which is the general tax rate given to us by the Los Angeles County Assessor's Office. The resulting tax revenues were then aggregated. According to the El Segundo Finance Department, the City of El Segundo receives 4.5 percent of this amount.

4.4 Calculation of Business License Fee

According to the El Segundo Finance Department, the structure of the business license fee will change significantly on January 1, 1992. For purposes of this comparative analysis, we assumed the new method of calculation beginning in 1991.

Because the business license fee is a complex formulation based on many factors, many assumptions and estimates had to be made, including the number of establishments with more than 5 employees and the number of employees in those businesses that would be subject to a per employee tax. Because there is a different business license fee assessed on vacant property than on occupied property, we have assumed an average vacancy rate of 10 percent for all types of non-residential, non-heavy industrial square footage.

4.5 Calculation of Utility User Tax

According to the El Segundo Finance Department, the utility user tax will be imposed at a rate of 3 percent on all utility charges except telephone charges, which will be imposed at a rate of 2 percent of the charge.

Because utility and telephone use are typically dependent on employees, we have estimated the amount of utility user tax collected by the City of El Segundo per non-government employee. Based on this historical analysis, the tax revenue per employee of \$25 was estimated. The projected potential utility user tax is then derived by multiplying estimated non-government employment by the utility user tax per employee, which is inflated at 5 percent annually.

4.6 Calculation of Public Safety Expenditures from Additional Development

As noted above, the City of El Segundo spends proportionally higher amounts per capita on police and fire protection than do surrounding municipalities and places. Of course, due to the high-tech and defense orientation of many of the large businesses located in El Segundo, this is not a surprise.

Given the historical trends in police and fire protection in the City of El Segundo, it appears likely that new retail, office and industrial development in the City will require increases for both police, fire and emergency medical services. In order to appropriately determine the impact of this future development in these areas, we have estimated future expenditures for police on an officer per employee basis, fire on an officer per million square feet basis, and emergency medical on an expenditure per employee basis.

4.7 Calculation of Public Works Expenditures from Additional Development

Increased development of all types could create additional traffic strains on El Segundo public streets. This strain would be in addition to the normal wear and tear or weathering.

In order to estimate the increase in traffic, we have used estimates of trips generated by Basmaciyen-Darnell, Inc. traffic engineers, by land use type to estimate the total annual trips generated in El Segundo. This number is multiplied by the average cost to maintain the roads per trip, estimated to be \$0.021.

The potential impact of future development on the waste water system has been estimated by evaluating the cost per square foot, which was determined to be approximately \$0.08 per square foot, and multiplying that amount by the total square footage in El Segundo.

Both of these projected potential impacts are inflated by an annual rate of 5 percent.

4.8 Conclusions

For each General Plan, the analysis and calculations described above have been performed in order to determine the projected potential fiscal impact. The existing General Plan analysis is shown on Tables 4-1A through 4-1H. The Preferred Plan analysis is shown on Tables 4-2A through 4-2H, and the Aeroplan analysis is shown on Tables 4-3A through 4-3H.

Tables 4-1A, 4-2A and 4-3A all summarize the specific analyses performed for each for each of the General Plans. In order to form some point of comparison, the net present value of the net fiscal impacts have been calculated using an 8 percent discount rate.

Based on the summarized comparisons for each of the three General Plans under consideration, it appears that adoption of the Aeroplan would have the greatest beneficial fiscal impact on the City of El Segundo. However, given the relative closeness in discounted amounts between the Preferred Plan and the Aeroplan, and given the many assumptions that must be made in order to do this type of comparative analysis, the comparative fiscal benefits between the Aeroplan and the Preferred Plan may be relatively insignificant. The net present value of the Aeroplan is about 5 percent higher than the net present value of the Preferred Plan.

Adoption of either of the two proposed plans appears to be reasonably more fiscally beneficial to the City of El Segundo than the status quo.

TABLE 4-1A
SUMMARY OF IMPACTED REVENUES & EXPENDITURES
CITY OF EL SEGUNDO
1991 - 2010

***** EXISTING PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
SALES TAX REVENUE	\$4,214,560	\$5,522,269	\$7,685,224	\$10,621,826	\$14,594,462
TRANSIENT OCCUPANCY TAX REVENUE	\$2,024,400	2,576,387	3,472,803	4,667,887	6,258,245
REAL PROPERTY TAX REVENUE	\$101,782	\$123,717	\$157,898	\$201,522	\$257,199
BUSINESS LICENSE FEE REVENUE	\$16,909,085	25,359,143	40,002,486	60,801,499	90,039,828
UTILITY USER TAX REVENUE	\$2,375,000	3,583,125	5,680,306	8,662,805	12,859,738
TOTAL PROJECTED REVENUE	<u>\$25,624,827</u>	<u>\$37,164,641</u>	<u>\$56,998,717</u>	<u>\$84,955,539</u>	<u>\$124,009,472</u>
IMPACTED PUBLIC SAFETY EXPENDITURES	\$11,480,558	16,998,449	27,102,762	41,492,830	61,558,901
IMPACTED PUBLIC WORKS EXPENDITURES	\$4,478,711	6,622,747	10,333,163	15,588,295	22,958,473
TOTAL IMPACTED EXPENDITURES	<u>\$15,959,269</u>	<u>\$23,621,196</u>	<u>\$37,435,926</u>	<u>\$57,081,125</u>	<u>\$84,517,374</u>
NET FISCAL IMPACT	<u>\$9,665,558</u>	<u>\$13,543,445</u>	<u>\$19,562,791</u>	<u>\$27,874,414</u>	<u>\$39,492,098</u>
NET PRESENT VALUE CALCULATION	<u>=====</u>	<u>=====</u>	<u>=====</u>	<u>=====</u>	<u>=====</u>
	8.0%	\$179,096,127			

TABLE 4-1B
CALCULATION OF SALES TAX
CITY OF EL SEGUNDO
1991 - 2010

***** EXISTING PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
Existing Commercial Sq. Ft.	2,107,280	2,271,592	2,476,982	2,682,372	2,887,762
Sales Per Sq. Ft. (Inflated)	\$200	243	310	396	505
Total Retail Sales (Inflated)	\$421,456,000	552,226,855	768,522,413	1,062,182,617	1,459,446,150
El Segundo Sales Tax Revenue (Inflated)	\$4,214,560	5,522,269	7,685,224	10,621,826	14,594,462

Note: Includes all estimated commercial space. Annual space added is only retail oriented space.

Assumptions:

Annual Inflation Rate:	5.0%
El Segundo Sales Tax:	1.0%
Annual Space Added:	41,078

TABLE 4-1C
 CALCULATION OF TRANSIENT OCCUPANCY TAX
 CITY OF EL SEGUNDO
 1991 - 2010

***** EXISTING PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
Existing Hotel Rooms	1,446	1,514	1,599	1,684	1,769
Average Annual Occupancy Rate	70.0%	70.0%	70.0%	70.0%	70.0%
Average Annual Occupied Rooms	1,012	1,060	1,119	1,179	1,238
Average Annual Tax Per Occupied Room (Inflated)	\$2,000	2,431	3,103	3,960	5,054
El Segundo Transient Occupancy Tax Revenue (Inflated)	\$2,024,400	2,576,387	3,472,803	4,667,887	6,258,245

Assumptions:

Annual Inflation Rate: 5.0%
 Annual Rooms Added: 17

TABLE 4-1D
CALCULATION OF REAL PROPERTY TAX
CITY OF EL SEGUNDO
1991 - 2010

***** EXISTING PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
FMV BY LAND USE CATEGORY FOR NEW DEVELOPMENT					
- 1 & 2 Family Residences (by unit)*	\$281,588	342,272	436,835	557,525	711,559
- Multifamily (sq. ft.)	\$85	103	132	168	215
- Commercial (Retail) (sq. ft.)	\$150	182	233	297	379
- Industrial (sq. ft.)	\$60	73	93	119	152
- Total New Office (sq. ft.)	\$200	243	310	396	505
- Total New Hotel (sq. ft.)	\$175	213	271	346	442
AVERAGE ANNUAL NEW DEMAND BY LAND USE CATEGORY					
- 1 & 2 Family Residences (units)	(3.0)	(3.0)	(3.0)	(3.0)	(3.0)
- Multifamily (sq. ft.)	25,200	25,200	25,200	25,200	25,200
- Commercial (Retail)	41,078	41,078	41,078	41,078	41,078
- Industrial (sq. ft.)	1,265,000	1,265,000	1,265,000	1,265,000	1,265,000
- Total New Office (sq. ft.)	480,500	480,500	480,500	480,500	480,500
- Total New Hotel (sq. ft.)	8,500	8,500	8,500	8,500	8,500
PROPERTY TAX STRUCTURE BY LAND USE CATEGORY					
- 1 & 2 Family Residences	1.3%	1.3%	1.3%	1.3%	1.3%
- Multifamily	1.3%	1.3%	1.3%	1.3%	1.3%
- Commercial (Retail)	1.3%	1.3%	1.3%	1.3%	1.3%
- Light Industrial	1.3%	1.3%	1.3%	1.3%	1.3%
- Total New Office	1.3%	1.3%	1.3%	1.3%	1.3%
- Total New Hotel	1.3%	1.3%	1.3%	1.3%	1.3%
NET INCREASE IN PROPERTY TAX COLLECTED ON NEW DEVELOPMENT BY LAND USE CATEGORY					
- 1 & 2 Family Residences	(10,560)	(12,835)	(16,381)	(20,907)	(26,683)
- Multifamily	26,775	32,545	41,537	53,013	67,659
- Commercial (Retail)	77,021	93,620	119,485	152,497	194,629
- Light Industrial	948,750	1,153,212	1,471,823	1,878,460	2,397,444
- Total New Office	1,201,250	1,460,127	1,863,533	2,378,393	3,035,499
- Total New Hotel	18,594	22,601	28,845	36,814	46,985
TOTAL REAL PROPERTY TAX REVENUE DUE TO NEW DEVELOPMENT	\$2,261,830	\$2,749,269	\$3,508,841	\$4,478,270	\$5,715,533
EL SEGUNDO PROPERTY TAX SHARE	\$101,782	\$123,717	\$157,898	\$201,522	\$257,199

* 1990 median home price in El Segundo ZIP Code 90245, according to TRW Real Estates Information Services.

Assumptions:

Inflation Rate: 5.0%
El Segundo Share of Property Tax: 4.5%

**PRELIMINARY DRAFT
SUBJECT TO CHANGE**

**TABLE 4-1E
CALCULATION OF BUSINESS LICENSE FEE
CITY OF EL SEGUNDO
1991 - 2010**

***** EXISTING PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
Fee for Establishments (1)	\$103	\$125	\$160	\$204	\$260
Fee Per Employee (2)	\$127	\$154	\$197	\$251	\$321
Fee per Acre (3)	\$1,531	\$1,861	\$2,375	\$3,031	\$3,869
Fee per Sq. Ft. of Vacant Floor Area (4)	\$0.10	\$0.12	\$0.16	\$0.20	\$0.25
Fee per Sq. Ft. of Occupied Floor Area (5)	\$0.24	\$0.29	\$0.37	\$0.48	\$0.61
<hr/>					
Number of Establishments	2,316	2,948	3,662	4,375	5,089
Taxable Surplus Employment	91,816	113,964	141,557	169,149	196,742
Heavy Industrial Acreage	1,266	1,264	1,261	1,258	1,255
Total Non-industrial Commercial Sq. Ft.	22,912,950	28,417,234	35,297,589	42,177,944	49,058,299
Average Annual Commercial Vacancy Rate	10.0%	10.0%	10.0%	10.0%	10.0%
Annual Vacant Commercial Square Feet	2,291,295	2,841,723	3,529,759	4,217,794	4,905,830
Annual Occupied Commercial Square Feet	20,621,655	25,575,511	31,767,830	37,960,150	44,152,469
<hr/>					
CALCULATION OF TAX					
Revenue per Establishment	\$238,548	\$369,062	\$585,071	\$892,269	\$1,324,553
Revenue per Surplus Employee	\$11,660,632	\$17,592,499	\$27,889,278	\$42,532,815	\$63,139,001
Revenue Per Acre	\$1,938,858	\$2,352,377	\$2,995,408	\$3,814,193	\$4,856,765
Revenue Per Sq. Ft. of Vacant Commercial Space	\$229,130	\$345,413	\$547,581	\$835,094	\$1,239,679
Revenue Per Sq. Ft. of Occupied Commercial Space	\$4,949,197	\$7,460,926	\$11,827,759	\$18,038,040	\$26,777,062
<hr/>					
TOTAL POTENTIAL REVENUE	\$19,016,365	\$28,120,278	\$43,845,098	\$66,112,412	\$97,337,059
Sales Tax Credit (6)	\$2,107,280	\$2,761,134	\$3,842,612	\$5,310,913	\$7,297,231
<hr/>					
TOTAL COLLECTABLE REVENUE	\$16,909,085	\$25,359,143	\$40,002,486	\$60,801,499	\$90,039,828
	=====	=====	=====	=====	=====

- (1) Calculated under the new fee schedule effective January 1, 1992.
- (2) Calculated under the new fee schedule effective January 1, 1992. This portion of the fee is assessed on every employee per establishment beyond the 5th employee.
- (3) According to the City of El Segundo Finance Department and Municipal Resource Consultants, this portion of the fee is charged on large industrial land users only.
- (4) Calculated under the new fee schedule effective January 1, 1992.
- (5) Calculated under the new fee schedule effective January 1, 1992.
- (6) Fifty percent credit from Sales Tax, calculated under the new fee schedule effective January 1, 1992.

Assumptions:

Inflation Rate:	5.0%
Average Non-government Workers per Sq. Ft.:	241
Percent Employed in Small Establishments:	3.35%
Average Employees per Establishment:	40
Average Change Commercial Sq. Ft.:	1,376,071
Average Change in Industrial Acreage:	(0.6)

TABLE 4-1F
 CALCULATION OF UTILITY USER TAX
 CITY OF EL SEGUNDO
 1991 - 2010

***** EXISTING PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
Total Non-government Employment	95,000	117,914	146,463	175,012	203,561
Utility User Tax Per Non-government Employee	\$25.00	\$30.39	\$38.78	\$49.50	\$63.17
Utility User Tax Revenue	\$2,375,000 =====	\$3,583,125 =====	\$5,680,306 =====	\$8,662,805 =====	\$12,859,738 =====
Assumptions					
Inflation Rate:	5.0%				

TABLE 4-1G
CALCULATION OF PUBLIC SAFETY EXPENDITURES FROM ADDITIONAL DEVELOPMENT
CITY OF EL SEGUNDO
1991 - 2010

***** EXISTING PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
Total Employment	100,000	117,914	146,463	175,012	203,561
Total Commercial Square Feet	27,423,588	34,603,736	43,578,921	52,554,106	61,529,291
ADDITIONAL POLICE REQUIRED					
- Officers Per 1,000 Employees	0.7	0.7	0.7	0.7	0.7
- Total Officers Required	70	83	103	123	142
- Annual Expenditure Per Officer	\$81,767	99,388	126,847	161,893	206,621
Total Police Expenditures	\$5,723,690	8,249,229	13,065,288	19,912,847	29,340,201
ADDITIONAL FIRE REQUIRED					
- Officers Per Million Sq. Ft.	2.0	2.0	2.0	2.0	2.0
- Total Officers Required	55	69	87	105	123
- Annual Expenditure Per Officer	\$90,376	109,853	140,203	178,938	228,376
Total Fire Expenditures	\$4,956,868	7,602,620	12,219,777	18,807,885	28,103,584
ADDITIONAL EMERGENCY MEDICAL REQUIRED					
- Annual Expenditure Per Employee	\$8.00	9.72	12.41	15.84	20.22
Total Fire Expenditures	\$800,000	\$1,146,600	\$1,817,698	\$2,772,098	\$4,115,116
TOTAL IMPACTED PUBLIC SAFETY EXPENDITURES	\$11,480,558	\$16,998,449	\$27,102,762	\$41,492,830	\$61,558,901
Assumptions:					
Inflation Rate:	5.0%				

TABLE 4-1H
CALCULATION OF PUBLIC WORKS EXPENDITURES FROM ADDITIONAL DEVELOPMENT
CITY OF EL SEGUNDO
1991 - 2010

PRELIMINARY
SUBJECT TO
DRAFT
CHANGE

***** EXISTING PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
TRANSPORTATION IMPACT ANALYSIS					
Total Units/Square Feet by Land Use					
- 1 & 2 Family Residences	3,993	3,981	3,966	3,951	3,936
- Multifamily	3,197	3,323	3,481	3,638	3,796
- Retail	1,384,280	1,548,592	1,753,982	1,959,372	2,164,762
- Office	10,573,426	12,495,426	14,897,926	17,300,426	19,702,926
- Hotel	723,000	757,000	799,500	842,000	884,500
- Light Industrial	10,232,244	13,616,168	17,846,073	22,075,978	26,305,883
- Heavy Industrial	4,510,638	6,186,550	8,281,440	10,376,330	12,471,220
Trips Generated by Land Use/D.U. or Sq. Ft.					
- Single Family (1)	10.0	10.0	10.0	10.0	10.0
- Multifamily (1)	7.0	7.0	7.0	7.0	7.0
- Retail (2)	30.0	30.0	30.0	30.0	30.0
- Office (2)	10.0	10.0	10.0	10.0	10.0
- Hotel (2)	14.0	14.0	14.0	14.0	14.0
- Light Industrial (2)	7.0	7.0	7.0	7.0	7.0
- Heavy Industrial (2)	1.5	1.5	1.5	1.5	1.5
Total Trips Generated by Land Use					
- Single Family	39,930	39,810	39,660	39,510	39,360
- Multifamily	22,379	23,261	24,364	25,466	26,569
- Retail	41,528	46,458	52,619	58,781	64,943
- Office	105,734	124,954	148,979	173,004	197,029
- Hotel	10,122	10,598	11,193	11,788	12,383
- Light Industrial	71,626	95,313	124,923	154,532	184,141
- Heavy Industrial	6,766	9,280	12,422	15,564	18,707
Total Daily Trips	298,085	349,674	414,160	478,646	543,132
Total Annual Trips	108,801,144	127,631,018	151,168,360	174,705,703	198,243,045
Maintenance Expenditure per Trip	\$0.02	\$0.03	\$0.03	\$0.04	\$0.05
Total Impacted Transportation Expenditure	\$2,284,824	\$3,257,862	\$4,924,747	\$7,264,012	\$10,519,956
WASTE WATER IMPACT ANALYSIS					
Total Commercial Square Feet	27,423,588	34,603,736	43,578,921	52,554,106	61,529,291
Waste Water Expenditure/Sq. Ft.	\$0.08	\$0.10	\$0.12	\$0.16	\$0.20
Total Waste Water Expenditures	\$2,193,887	\$3,364,885	\$5,408,417	\$8,324,283	\$12,438,516
TOTAL IMPACTED PUBLIC WORKS EXPENDITURES	\$4,478,711	\$6,622,747	\$10,333,163	\$15,588,295	\$22,958,473

(1) Trips per dwelling unit (d.u.)
(2) Trips per 1,000 square feet.

Assumptions:

Inflation Rate: 5.0%
Average unit size, multifamily: 800 sq. ft.
Average unit size, hotel room: 500 sq. ft.

TABLE 4-2A
SUMMARY OF IMPACTED REVENUES & EXPENDITURES
CITY OF EL SEGUNDO
1991 - 2010

***** PREFERRED PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
SALES TAX REVENUE	\$4,214,560	\$5,793,783	\$8,464,915	\$12,169,768	\$17,275,647
TRANSIENT OCCUPANCY TAX REVENUE	\$2,024,400	2,576,387	3,472,803	4,667,887	6,258,245
REAL PROPERTY TAX REVENUE	\$134,136	163,043	208,089	265,580	338,955
BUSINESS LICENSE FEE REVENUE	\$16,909,085	25,593,543	40,675,597	62,137,844	92,354,508
UTILITY USER TAX REVENUE	\$2,375,000	3,650,144	5,872,759	9,044,888	13,521,543
TOTAL PROJECTED REVENUE	\$25,657,181	\$37,776,901	\$58,694,164	\$88,285,968	\$129,748,898
IMPACTED PUBLIC SAFETY EXPENDITURES	\$11,480,558	16,867,864	26,822,906	40,991,188	60,940,906
IMPACTED PUBLIC WORKS EXPENDITURES	\$4,478,711	6,653,680	10,421,992	15,764,649	23,263,934
TOTAL IMPACTED EXPENDITURES	\$15,959,269	\$23,521,544	\$37,244,898	\$56,755,836	\$84,204,841
NET FISCAL IMPACT	\$9,697,912	\$14,255,357	\$21,449,266	\$31,530,132	\$45,544,057
NET PRESENT VALUE CALCULATION					
	8.0%	\$195,614,251			

TABLE 4-2B
 CALCULATION OF SALES TAX
 CITY OF EL SEGUNDO
 1991 - 2010

***** PREFERRED PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
Existing Commercial Sq. Ft.	2,107,280	2,383,280	2,728,280	3,073,280	3,418,280
Sales Per Sq. Ft. (Inflated)	\$200	243	310	396	505
Total Retail Sales (Inflated)	\$421,456,000	579,378,347	846,491,549	1,216,976,837	1,727,564,663
El Segundo Sales Tax Revenue (Inflated)	\$4,214,560	5,793,783	8,464,915	12,169,768	17,275,647

Assumptions:

Annual Inflation Rate: 5.0%
 El Segundo Sales Tax: 1.0%
 Annual Space Added: 69,000

TABLE 4-2C
CALCULATION OF TRANSIENT OCCUPANCY TAX
CITY OF EL SEGUNDO
1991 - 2010

***** PREFERRED PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
Existing Hotel Rooms	1,446	1,514	1,599	1,684	1,769
Average Annual Occupancy Rate	70.0%	70.0%	70.0%	70.0%	70.0%
Average Annual Occupied Rooms	1,012	1,060	1,119	1,179	1,238
Average Annual Tax Per Occupied Room (Inflated)	\$2,000	2,431	3,103	3,960	5,054
El Segundo Transient Occupancy Tax Revenue (Inflated)	\$2,024,400	2,576,387	3,472,803	4,667,887	6,258,245

Assumptions:

Annual Inflation Rate:	5.0%
Annual Rooms Added:	17

TABLE 4-2D
CALCULATION OF REAL PROPERTY TAX
CITY OF EL SEGUNDO
1991 - 2010

***** PREFERRED PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
FMV BY LAND USE CATEGORY FOR NEW DEVELOPMENT					
- 1 & 2 Family Residences (by units)*	\$281,588	342,272	436,835	557,525	711,559
- Multifamily (sq. ft.)	\$85	103	132	168	215
- Commercial (Retail) (sq. ft.)	\$150	182	233	297	379
- Industrial (sq. ft.)	\$60	73	93	119	152
- Total New Office (sq. ft.)	\$200	243	310	396	505
- Total New Hotel (sq. ft.)	\$175	213	271	346	442
AVERAGE ANNUAL NEW DEMAND BY LAND USE CATEGORY					
- 1 & 2 Family Residences (units)	(7.0)	(7.0)	(7.0)	(7.0)	(7.0)
- Multifamily (sq. ft.)	30,560	30,560	30,560	30,560	30,560
- Commercial (Retail) (sq. ft.)	68,925	68,925	68,925	68,925	68,925
- Industrial (sq. ft.)	430,667	430,667	430,667	430,667	430,667
- Total New Office (sq. ft.)	1,000,858	1,000,858	1,000,858	1,000,858	1,000,858
- Total New Hotel (sq. ft.)	8,500	8,500	8,500	8,500	8,500
PROPERTY TAX STRUCTURE BY LAND USE CATEGORY					
- 1 & 2 Family Residences	1.3%	1.3%	1.3%	1.3%	1.3%
- Multifamily	1.3%	1.3%	1.3%	1.3%	1.3%
- Commercial (Retail)	1.3%	1.3%	1.3%	1.3%	1.3%
- Light Industrial	1.3%	1.3%	1.3%	1.3%	1.3%
- Total New Office	1.3%	1.3%	1.3%	1.3%	1.3%
- Total New Hotel	1.3%	1.3%	1.3%	1.3%	1.3%
NET INCREASE IN PROPERTY TAX COLLECTED ON NEW DEVELOPMENT BY LAND USE CATEGORY					
- 1 & 2 Family Residences	(24,639)	(29,949)	(38,223)	(48,783)	(62,261)
- Multifamily	32,470	39,467	50,372	64,288	82,050
- Commercial (Retail)	129,234	157,085	200,485	255,875	326,569
- Light Industrial	323,000	392,609	501,079	639,518	816,206
- Total New Office	2,502,145	3,041,373	3,881,648	4,954,076	6,322,796
- Total New Hotel	18,594	22,601	28,845	36,814	46,985
TOTAL REAL PROPERTY TAX REVENUE DUE TO NEW DEVELOPMENT	\$2,980,804	\$3,623,186	\$4,624,206	\$5,901,789	\$7,532,344
REAL PROPERTY TAX TO EL SEGUNDO	\$134,136	\$163,043	\$208,089	\$265,580	\$338,955

* 1990 median home price in El Segundo ZIP Code 90245, according to TRW Real Estate Information Services.

Assumptions:

Inflation Rate: 5.0%
El Segundo Share of Property Tax: 4.5%

TABLE 4-2E
CALCULATION OF BUSINESS LICENSE FEE
CITY OF EL SEGUNDO
1991 - 2010

PRELIMINARY
SUBJECT TO
DRAFT
CHANGE

***** PREFERRED PLAN BUILDOUT *****

Category	1991	1992	1995	2000	2005	2010
Fee for Establishments (1)	\$103	\$108	\$125	\$160	\$204	\$260
Fee Per Employee (2)	\$127	\$133	\$154	\$197	\$251	\$321
Fee per Acre (3)	\$1,531	\$1,608	\$1,861	\$2,375	\$3,031	\$3,869
Fee per Sq. Ft. of Vacant Floor Area (4)	\$0.10	\$0.11	\$0.12	\$0.16	\$0.20	\$0.25
Fee per Sq. Ft. of Occupied Floor Area (5)	\$0.24	\$0.25	\$0.29	\$0.37	\$0.48	\$0.61

Number of Establishments	2,316	2,533	3,003	3,786	4,568	5,351
Taxable Surplus Employment	91,816	97,941	116,095	146,353	176,610	206,867
Heavy Industrial Acreage	1,266	1,251	1,204	1,126	1,048	970
Total Non-industrial Commercial Sq. Ft.	22,912,950	24,421,900	28,948,750	36,493,500	44,038,250	51,583,000
Average Annual Commercial Vacancy Rate	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Annual Vacant Commercial Square Feet	2,291,295	2,442,190	2,894,875	3,649,350	4,403,825	5,158,300
Annual Occupied Commercial Square Feet	20,621,655	21,979,710	26,053,875	32,844,150	39,634,425	46,424,700

CALCULATION OF TAX						
Revenue per Establishment	\$238,548	\$273,986	\$375,965	\$604,894	\$931,623	\$1,392,719
Revenue per Surplus Employee	\$11,660,632	\$13,060,424	\$17,921,549	\$28,834,189	\$44,408,773	\$66,388,341
Revenue Per Acre	\$1,938,858	\$2,010,724	\$2,240,572	\$2,674,344	\$3,176,776	\$3,752,698
Revenue Per Sq. Ft. of Vacant Commercial Space	\$229,130	\$256,430	\$351,874	\$566,134	\$871,927	\$1,303,477
Revenue Per Sq. Ft. of Occupied Commercial Space	\$4,949,197	\$5,538,887	\$7,600,475	\$12,228,494	\$18,833,628	\$28,155,097

TOTAL POTENTIAL REVENUE	\$19,016,365	\$21,140,451	\$28,490,435	\$44,908,055	\$68,222,729	\$100,992,332
Sales Tax Credit (6)	\$2,107,280	\$2,285,094	\$2,896,892	\$4,232,458	\$6,084,884	\$8,637,823
TOTAL COLLECTABLE REVENUE	\$16,909,085	\$18,855,357	\$25,593,543	\$40,675,597	\$62,137,844	\$92,354,508
=====						

- (1) Calculated under the new fee schedule effective January 1, 1992.
- (2) Calculated under the new fee schedule effective January 1, 1992. This portion of the fee is assessed on every employee per establishment beyond the 5th employee.
- (3) According to the City of El Segundo Finance Department and Municipal Resource Consultants, this portion of the fee is charged on large industrial land users only.
- (4) Calculated under the new fee schedule effective January 1, 1992.
- (5) Calculated under the new fee schedule effective January 1, 1992.
- (6) Fifty percent credit from Sales Tax, calculated under the new fee schedule effective January 1, 1992.

Assumptions:

Inflation Rate:	5.0%
Average Non-government Workers per Sq Percent Employed in Small Establishments	241 3.35%
Average Employees per Establishment:	40
Average Change Commercial Sq. Ft.:	1,508,950
Average Change in Industrial Acreage:	(15.6)

TABLE 4-2F
 CALCULATION OF UTILITY USER TAX
 CITY OF EL SEGUNDO
 1991 - 2010

***** PREFERRED PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
Total Employment	95,000	120,119	151,425	182,731	214,037
Utility User Tax Per Employee	\$25.00	\$30.39	\$38.78	\$49.50	\$63.17
Utility User Tax Revenue	\$2,375,000 =====	\$3,650,144 =====	\$5,872,759 =====	\$9,044,888 =====	\$13,521,543 =====
Assumptions					
Inflation Rate:	5.0%				

TABLE 4-2G
CALCULATION OF PUBLIC SAFETY EXPENDITURES FROM ADDITIONAL DEVELOPMENT
CITY OF EL SEGUNDO
1991 - 2010

***** PREFERRED PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
Total Employment	100,000	120,119	151,425	182,731	214,037
Total Commercial Square Feet	27,423,588	33,459,388	41,004,138	48,548,888	56,093,638
ADDITIONAL POLICE REQUIRED					
- Officers Per 1,000 Employees	0.7	0.7	0.7	0.7	0.7
- Total Officers Required	70	84	106	128	150
- Annual Expenditure Per Officer	\$81,767	99,388	126,847	161,893	206,621
	-----	-----	-----	-----	-----
Total Police Expenditures	\$5,723,690	8,348,617	13,445,830	20,722,313	30,993,170
ADDITIONAL FIRE REQUIRED					
- Officers Per Million Sq. Ft.	2.0	2.0	2.0	2.0	2.0
- Total Officers Required	55	67	82	97	112
- Annual Expenditure Per Officer	\$90,376	109,853	140,203	178,938	228,376
	-----	-----	-----	-----	-----
Total Fire Expenditures	\$4,956,868	7,351,201	11,497,793	17,374,511	25,620,842
ADDITIONAL EMERGENCY MEDICAL REQUIRED					
- Annual Expenditure Per Employee	\$8.00	9.72	12.41	15.84	20.22
	-----	-----	-----	-----	-----
Total Fire Expenditures	\$800,000	\$1,168,046	\$1,879,283	\$2,894,364	\$4,326,894
	-----	-----	-----	-----	-----
TOTAL IMPACTED PUBLIC SAFETY EXPENDITURES	\$11,480,558	\$16,867,864	\$26,822,906	\$40,991,188	\$60,940,906
	=====	=====	=====	=====	=====
Assumptions:					
Inflation Rate:	5.0%				

TABLE 4-2H
CALCULATION OF PUBLIC WORKS EXPENDITURES FROM ADDITIONAL DEVELOPMENT
CITY OF EL SEGUNDO
1991 - 2010

PRELIMINARY
SUBJECT TO
DRAFT
CHANGE

***** PREFERRED PLAN BUILDOUT *****

Category	1991	1992	1995	2000	2005	2010
TRANSPORTATION IMPACT ANALYSIS						
Total Units/Square Feet by Land Use						
- 1 & 2 Family Residences	3,993	3,986	3,965	3,930	3,895	3,860
- Multifamily	3,197	3,235	3,350	3,541	3,732	3,923
- Retail	1,384,280	1,453,205	1,659,980	2,004,605	2,349,230	2,693,855
- Office	10,573,426	11,574,284	14,576,858	19,581,148	24,585,438	29,589,725
- Hotel	723,000	731,500	757,000	799,500	842,000	884,500
- Light Industrial	10,232,244	10,900,313	12,904,520	16,244,865	19,585,210	22,925,555
- Heavy Industrial	4,510,638	4,273,236	3,561,030	2,374,020	1,187,010	0
Trips Generated by Land Use/D.U. or Sq. Ft.						
- Single Family (1)	10.0	10.0	10.0	10.0	10.0	10.0
- Multifamily (1)	7.0	7.0	7.0	7.0	7.0	7.0
- Retail (2)	30.0	30.0	30.0	30.0	30.0	30.0
- Office (2)	10.0	10.0	10.0	10.0	10.0	10.0
- Hotel (2)	14.0	14.0	14.0	14.0	14.0	14.0
- Light Industrial (2)	7.0	7.0	7.0	7.0	7.0	7.0
- Heavy Industrial (2)	1.5	1.5	1.5	1.5	1.5	1.5
Total Trips Generated by Land Use						
- Single Family	39,930	39,860	39,650	39,300	38,950	38,600
- Multifamily	22,379	22,646	23,449	24,786	26,123	27,460
- Retail	41,528	43,596	49,799	60,138	70,477	80,816
- Office	105,734	115,743	145,769	195,811	245,854	295,897
- Hotel	10,122	10,241	10,598	11,193	11,788	12,383
- Light Industrial	71,626	76,302	90,332	113,714	137,096	160,479
- Heavy Industrial	6,766	6,410	5,342	3,561	1,781	0
Total Daily Trips	298,085	314,798	364,938	448,503	532,069	615,634
Total Annual Trips	108,801,144	114,901,429	133,202,284	163,703,710	194,205,136	224,706,561
Maintenance Expenditure per Trip	\$0.02	\$0.02	\$0.03	\$0.03	\$0.04	\$0.05
Total Impacted Transportation Expenditure	\$2,284,824	\$2,533,577	\$3,400,072	\$5,333,122	\$8,074,771	\$11,924,268
WASTE WATER IMPACT ANALYSIS						
Total Commercial Square Feet	27,423,588	28,932,538	33,459,388	41,004,138	48,548,888	56,093,638
Waste Water Expenditure/Sq. Ft.	\$0.08	\$0.08	\$0.10	\$0.12	\$0.16	\$0.20
Total Waste Water Expenditures	\$2,193,887	\$2,430,333	\$3,253,608	\$5,088,870	\$7,689,878	\$11,339,666
TOTAL IMPACTED PUBLIC WORKS EXPENDITURES	\$4,478,711	\$4,963,910	\$6,653,680	\$10,421,992	\$15,764,649	\$23,263,934

(1) Trips per dwelling unit (d.u.)

(2) Trips per 1,000 square feet.

Assumptions:

Inflation Rate: 5.0%
Average unit size multifamily: 800 sq. ft.
Average unit size hotel room: 500 sq. ft.

TABLE 4-3A
SUMMARY OF IMPACTED REVENUE AND EXPENDITURES
CITY OF EL SEGUNDO
1991 - 2010

***** AEROPLAN PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
SALES TAX REVENUE	\$4,214,560	\$5,793,783	\$8,464,915	\$12,169,768	\$17,275,647
TRANSIENT OCCUPANCY TAX REVENUE	\$2,024,400	2,576,387	3,472,803	4,667,887	6,258,245
REAL PROPERTY TAX REVENUE	\$170,618	207,388	264,685	337,813	431,144
BUSINESS LICENSE FEE REVENUE	\$16,909,085	26,769,759	44,053,256	68,843,601	103,969,526
UTILITY USER TAX REVENUE	\$2,375,000	3,813,701	6,342,435	9,977,349	15,136,655
TOTAL PROJECTED REVENUE	\$25,693,664	\$39,161,018	\$62,598,096	\$95,996,419	\$143,071,217
IMPACTED PUBLIC SAFETY EXPENDITURES	\$11,480,558	17,602,746	28,806,369	45,018,951	67,991,174
IMPACTED PUBLIC WORKS EXPENDITURES	\$4,478,711	6,900,669	11,131,253	17,172,764	25,702,926
TOTAL IMPACTED EXPENDITURES	\$15,959,269	\$24,503,415	\$39,937,622	\$62,191,715	\$93,694,100
NET FISCAL IMPACT	\$9,734,394	\$14,657,603	\$22,660,473	\$33,804,703	\$49,377,117
NET PRESENT VALUE CALCULATION					
	8.0%	\$205,760,916			

TABLE 4-3B
CALCULATION OF SALES TAX
CITY OF EL SEGUNDO
1991 - 2010

***** AEROPLAN PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
Existing Commercial Sq. Ft.	2,107,280	2,383,280	2,728,280	3,073,280	3,418,280
Sales Per Sq. Ft. (Inflated)	\$200	243	310	396	505
Total Retail Sales (Inflated)	\$421,456,000	579,378,347	846,491,549	1,216,976,837	1,727,564,663
El Segundo Sales Tax Revenue (Inflated)	\$4,214,560	5,793,783	8,464,915	12,169,768	17,275,647

Assumptions:

Annual Inflation Rate:	5.0%
El Segundo Sales Tax:	1.0%
Annual Space Added:	69,000

TABLE 4-3C
 CALCULATION OF TRANSIENT OCCUPANCY TAX
 CITY OF EL SEGUNDO
 1991 - 2010

***** AEROPLAN PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
Existing Hotel Rooms	1,446	1,514	1,599	1,684	1,769
Average Annual Occupancy Rate	70.0%	70.0%	70.0%	70.0%	70.0%
Average Annual Occupied Rooms	1,012	1,060	1,119	1,179	1,238
Average Annual Tax Per Occupied Room (Inflated)	\$2,000	2,431	3,103	3,960	5,054
El Segundo Transient Occupancy Tax Revenue (Inflated)	\$2,024,400	2,576,387	3,472,803	4,667,887	6,258,245

Assumptions:

Annual Inflation Rate: 5.0%
 Annual Rooms Added: 17

TABLE 4-3D
CALCULATION OF REAL PROPERTY TAX
CITY OF EL SEGUNDO
1991 - 2010

***** AEROPLAN PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
FMV BY LAND USE CATEGORY FOR NEW DEVELOPMENT					
- 1 & 2 Family Residences (by unit)*	\$281,588	342,272	436,835	557,525	711,559
- Multifamily (sq. ft.)	\$85	103	132	168	215
- Commercial (Retail)(sq. ft.)	\$150	182	233	297	379
- Industrial (sq. ft.)	\$60	73	93	119	152
- Total New Office (sq. ft.)	\$200	243	310	396	505
- Total New Hotel (sq. ft.)	\$175	213	271	346	442
AVERAGE ANNUAL NEW DEMAND BY LAND USE CATEGORY					
- 1 & 2 Family Residences (units)	(7.0)	(7.0)	(7.0)	(7.0)	(7.0)
- Multifamily (Sq. Ft.)	30,560	30,560	30,560	30,560	30,560
- Commercial (Retail) (Sq. Ft.)	68,925	68,925	68,925	68,925	68,925
- Industrial (Sq. Ft.)	430,667	430,667	430,667	430,667	430,667
- Total New Office (Sq. Ft.)	1,325,145	1,325,145	1,325,145	1,325,145	1,325,145
- Total New Hotel (Sq. Ft.)	8,500	8,500	8,500	8,500	8,500
PROPERTY TAX STRUCTURE BY LAND USE CATEGORY					
- 1 & 2 Family Residences	1.3%	1.3%	1.3%	1.3%	1.3%
- Multifamily	1.3%	1.3%	1.3%	1.3%	1.3%
- Commercial (Retail)	1.3%	1.3%	1.3%	1.3%	1.3%
- Light Industrial	1.3%	1.3%	1.3%	1.3%	1.3%
- Total New Office	1.3%	1.3%	1.3%	1.3%	1.3%
- Total New Hotel	1.3%	1.3%	1.3%	1.3%	1.3%
NET INCREASE IN PROPERTY TAX COLLECTED ON NEW DEVELOPMENT BY LAND USE CATEGORY					
- 1 & 2 Family Residences	(24,639)	(29,949)	(38,223)	(48,783)	(62,261)
- Multifamily	32,470	39,467	50,372	64,288	82,050
- Commercial (Retail)	129,234	157,085	200,485	255,875	326,569
- Light Industrial	323,000	392,609	501,079	639,518	816,206
- Total New Office	3,312,863	4,026,805	5,139,337	6,559,241	8,371,439
- Total New Hotel	18,594	22,601	28,845	36,814	46,985
TOTAL REAL PROPERTY TAX REVENUE DUE TO NEW DEVELOPMENT	\$3,791,522	\$4,608,619	\$5,881,895	\$7,506,954	\$9,580,987
REAL PROPERTY TAX TO EL SEGUNDO	\$170,618	\$207,388	\$264,685	\$337,813	\$431,144

* 1990 median home price in El Segundo ZIP Code 90245, according to TRW Real Estate Information Services.

Assumptions:

Inflation Rate: 5.0%
El Segundo Share of Property Tax: 4.5%

TABLE 4-3E
CALCULATION OF BUSINESS LICENSE FEE
CITY OF EL SEGUNDO
1991 - 2010

***** AEROPLAN PLAN BUILDOUT *****

Category	1991	1992	1995	2000	2005	2010
Fee for Establishments (1)	\$103	\$108	\$125	\$160	\$204	\$260
Fee Per Employee (2)	\$127	\$133	\$154	\$197	\$251	\$321
Fee per Acre (3)	\$1,531	\$1,608	\$1,861	\$2,375	\$3,031	\$3,869
Fee per Sq. Ft. of Vacant Floor Area (4)	\$0.10	\$0.11	\$0.12	\$0.16	\$0.20	\$0.25
Fee per Sq. Ft. of Occupied Floor Area (5)	\$0.24	\$0.25	\$0.29	\$0.37	\$0.48	\$0.61
<hr/>						
Number of Establishments	2,316	2,567	3,138	4,088	5,039	5,990
Taxable Extra Employment	91,816	99,241	121,297	158,057	194,817	231,577
Heavy Industrial Acreage	1,266	1,251	1,204	1,126	1,048	970
Total Non-industrial Commercial Sq. Ft.	22,912,950	24,746,187	30,245,898	39,412,083	48,578,268	57,744,453
Average Annual Commercial Vacancy Rate	10.0%	10.0%	10.0%	10.0%	10.0%	10.0%
Annual Vacant Commercial Square Feet	2,291,295	2,474,619	3,024,590	3,941,208	4,857,827	5,774,445
Annual Occupied Commercial Square Feet	20,621,655	22,271,568	27,221,308	35,470,875	43,720,441	51,970,008
<hr/>						
CALCULATION OF TAX						
Revenue per Establishment	\$238,548	\$277,624	\$392,811	\$653,271	\$1,027,667	\$1,559,075
Revenue per Surplus Employee	\$11,660,632	\$13,233,848	\$18,724,586	\$31,140,216	\$48,986,989	\$74,318,253
Revenue Per Acre	\$1,938,858	\$2,010,724	\$2,240,572	\$2,674,344	\$3,176,776	\$3,752,698
Revenue Per Sq. Ft. of Vacant Commercial Space	\$229,130	\$259,835	\$367,641	\$611,411	\$961,816	\$1,459,174
Revenue Per Sq. Ft. of Occupied Commercial Space	\$4,949,197	\$5,612,435	\$7,941,041	\$13,206,473	\$20,775,236	\$31,518,149
<hr/>						
TOTAL POTENTIAL REVENUE	\$19,016,365	\$21,394,466	\$29,666,650	\$48,285,714	\$74,928,485	\$112,607,349
<hr/>						
Sales Tax Credit (6)	\$2,107,280	\$2,285,094	\$2,896,892	\$4,232,458	\$6,084,884	\$8,637,823
<hr/>						
TOTAL COLLECTABLE REVENUE	\$16,909,085	\$19,109,372	\$26,769,759	\$44,053,256	\$68,843,601	\$103,969,526
<hr/>						

- (1) Calculated under the new fee schedule effective January 1, 1992.
(2) Calculated under the new fee schedule effective January 1, 1992. This portion of the fee is assessed on every employee per establishment beyond the 5th employee.
(3) According to the City of El Segundo Finance Department and Municipal Resource Consultants, this portion of the fee is charged on large industrial land users only.
(4) Calculated under the new fee schedule effective January 1, 1992.
(5) Calculated under the new fee schedule effective January 1, 1992.
(6) Fifty percent credit from Sales Tax, calculated under the new fee schedule effective January 1, 1992.

Assumptions:

Inflation Rate:	5.0%
Average Non-government Workers per Sq. Ft.:	241
Percent Employed in Small Establishments:	3.35%
Average Employees per Establishment:	40
Average Change Commercial Sq. Ft.:	1,833,237
Average Change in Industrial Acreage:	(15.6)

TABLE 4-3F
CALCULATION OF UTILITY USER TAX
CITY OF EL SEGUNDO
1991 - 2010

***** AEROPLAN PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
Total Non-government Employment	95,000	125,502	163,536	201,570	239,604
Utility User Tax Per Non-government Employee	\$25.00	\$30.39	\$38.78	\$49.50	\$63.17
Utility User Tax Revenue	\$2,375,000 =====	\$3,813,701 =====	\$6,342,435 =====	\$9,977,349 =====	\$15,136,655 =====
Assumptions					
Inflation Rate:	5.0%				

TABLE 4-3G
CALCULATION OF PUBLIC SAFETY EXPENDITURES FROM ADDITIONAL DEVELOPMENT
CITY OF EL SEGUNDO
1991 - 2010

***** AEROPLAN PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
Total Employment	100,000	125,502	163,536	201,570	239,604
Total Commercial Square Feet	27,423,588	34,756,536	43,922,721	53,088,906	62,255,091
ADDITIONAL POLICE REQUIRED					
- Officers Per 1,000 Employees	0.7	0.7	0.7	0.7	0.7
- Total Officers Required	70	88	114	141	168
- Annual Expenditure Per Officer	\$81,767	99,388	126,847	161,893	206,621
Total Police Expenditures	\$5,723,690	8,746,170	14,460,610	22,826,922	34,712,351
ADDITIONAL FIRE REQUIRED					
- Officers Per Million Sq. Ft.	2.0	2.0	2.0	2.0	2.0
- Total Officers Required	55	70	88	106	125
- Annual Expenditure Per Officer	\$90,376	109,853	140,203	178,938	228,376
Total Fire Expenditures	\$4,956,868	7,636,191	12,316,180	18,999,277	28,435,094
ADDITIONAL EMERGENCY MEDICAL REQUIRED					
- Annual Expenditure Per Employee	\$8.00	9.72	12.41	15.84	20.22
Total Fire Expenditures	\$800,000	\$1,220,384	\$2,029,579	\$3,192,752	\$4,843,730
TOTAL IMPACTED PUBLIC SAFETY EXPENDITURES	\$11,480,558	\$17,602,746	\$28,806,369	\$45,018,951	\$67,991,174

Assumptions:

Inflation Rate: 5.0%

TABLE 4-3H
CALCULATION OF PUBLIC WORKS EXPENDITURES FROM ADDITIONAL DEVELOPMENT
CITY OF EL SEGUNDO
1991 - 2010

PRELIMINARY
SUBJECT TO DRAFT
TO CHANGE

***** AEROPLAN PLAN BUILDOUT *****

Category	1991	1995	2000	2005	2010
TRANSPORTATION IMPACT ANALYSIS					
Total Units/Square Feet by Land Use					
- 1 & 2 Family Residences	3,993	3,965	3,930	3,895	3,860
- Multifamily	3,197	3,350	3,541	3,732	3,923
- Retail	1,384,280	1,659,980	2,004,605	2,349,230	2,693,855
- Office	10,573,426	15,874,006	22,499,731	29,125,456	35,751,181
- Hotel	723,000	757,000	799,500	842,000	884,500
- Light Industrial	10,232,244	12,904,520	16,244,865	19,585,210	22,925,555
- Heavy Industrial	4,510,638	3,561,030	2,374,020	1,187,010	0
Trips Generated by Land Use/D.U. or Sq. Ft.					
- Single Family (1)	10.0	10.0	10.0	10.0	10.0
- Multifamily (1)	7.0	7.0	7.0	7.0	7.0
- Retail (2)	30.0	30.0	30.0	30.0	30.0
- Office (2)	10.0	10.0	10.0	10.0	10.0
- Hotel (2)	14.0	14.0	14.0	14.0	14.0
- Light Industrial (2)	7.0	7.0	7.0	7.0	7.0
- Heavy Industrial (2)	1.5	1.5	1.5	1.5	1.5
Total Trips Generated by Land Use					
- Single Family	39,930	39,650	39,300	38,950	38,600
- Multifamily	22,379	23,449	24,786	26,123	27,460
- Retail	41,528	49,799	60,138	70,477	80,816
- Office	105,734	158,740	224,997	291,255	357,512
- Hotel	10,122	10,598	11,193	11,788	12,383
- Light Industrial	71,626	90,332	113,714	137,096	160,479
- Heavy Industrial	6,766	5,342	3,561	1,781	0
Total Daily Trips	298,085	377,909	477,689	577,469	677,249
Total Annual Trips	108,801,144	137,936,874	174,356,538	210,776,201	247,195,865
Maintenance Expenditure per Trip	\$0.02	\$0.03	\$0.03	\$0.04	\$0.05
Total Impacted Transportation Expenditure	\$2,284,824	\$3,520,926	\$5,680,169	\$8,763,772	\$13,117,684
WASTE WATER IMPACT ANALYSIS					
Total Commercial Square Feet	27,423,588	34,756,536	43,922,721	53,088,906	62,255,091
Waste Water Expenditure/Sq. Ft.	\$0.08	\$0.10	\$0.12	\$0.16	\$0.20
Total Waste Water Expenditures	\$2,193,887	\$3,379,743	\$5,451,085	\$8,408,992	\$12,585,241
TOTAL IMPACTED PUBLIC WORKS EXPENDITURES	\$4,478,711	\$6,900,669	\$11,131,253	\$17,172,764	\$25,702,926

- (1) Trips per dwelling unit (d.u.)
(2) Trips per 1,000 square feet.

Assumptions:

Inflation Rate:	5.0%
Average unit size multifamily:	800 sq. ft.
Average unit size hotel room:	500 sq. ft.

APPENDIX E: DAILY TRAFFIC VOLUMES

TABLE C

COMPARISON OF DAILY TRAFFIC VOLUMES
TO ESTIMATED DAILY ROADWAY CAPACITIES
RECOMMENDED MASTER PLAN OF STREETS
CURRENT GENERAL PLAN BUILDOUT

ROADWAY SEGMENT	CLASSIFICATION (a)	ROADWAY CAPACITY	ADT	V/C Ratio(b)	LOS(c)
AVIATION BOULEVARD					
Imperial to Mariposa	Major Arterial	77,000	54,000	0.70	B
Mariposa to Grand	Major Arterial	77,000	56,000	0.73	C
Grand to El Segundo	Major Arterial	77,000	43,000	0.56	A
El Segundo to Utah	Major Arterial	77,000	43,000	0.56	A
Utah to Rosecrans	Major Arterial	77,000	48,000	0.62	B
CENTER STREET					
Imperial Ave. to Maple	Collector (2-lane)	14,000	4,000	0.29	A
Maple to Mariposa	Collector (2-lane)	14,000	7,000	0.50	A
Mariposa to Grand	Collector (2-lane)	14,000	7,000	0.50	A
Grand to El Segundo	Collector (2-lane)	14,000	9,000	0.64	B
CONNECTOR ROAD					
Nash to I-105 On-Ramp	Collector (4-lane)	40,400	1,000	0.02	A
I-105 On-Ramp to Douglas (3 WB and 2 EB)	Collector (5-lane)	46,700	15,000	0.32	A
CONTINENTAL (Lairport St.) BOULEVARD					
Imperial Hwy to Maple	Secondary Arterial	53,000	5,000	0.09	A
Maple to Mariposa	Secondary Arterial	53,000	13,000	0.25	A
Mariposa to Grand	Secondary Arterial	53,000	13,000	0.25	A
Grand to El Segundo	Secondary Arterial	53,000	17,000	0.32	A
DOUGLAS STREET (ONE WAY NORTHBOUND)					
Imperial Hwy to Connector Road	Secondary Arterial	53,000	15,000	0.28	A
Connector Rd to Mariposa	Secondary Arterial	53,000	16,000	0.30	A
Mariposa to El Segundo	Secondary Arterial	53,000	24,000	0.45	A
DOUGLAS STREET (TWO WAY)					
El Segundo to Utah	Secondary Arterial	53,000	17,000	0.32	A
Utah to Rosecrans	Secondary Arterial	53,000	16,000	0.30	A
EL SEGUNDO BOULEVARD					
Main to Center	Secondary Arterial	53,000	12,000	0.23	A
Center to Sepulveda	Secondary Arterial	53,000	26,000	0.49	A
Sepulveda to Continental	Major Arterial	77,000	29,000	0.38	A
Continental to Nash	Major Arterial	77,000	44,000	0.57	A
Nash to Douglas	Major Arterial	77,000	59,000	0.77	C
Douglas to Aviation	Major Arterial	77,000	58,000	0.75	C
Aviation to Isis	Major Arterial	77,000	60,000	0.78	C

TABLE C (Con't)

COMPARISON OF DAILY TRAFFIC VOLUMES
TO ESTIMATED DAILY ROADWAY CAPACITIES
RECOMMENDED MASTER PLAN OF STREETS
CURRENT GENERAL PLAN BUILDOUT

ROADWAY SEGMENT	CLASSIFICATION (a)	ROADWAY CAPACITY	ADT	V/C Ratio(b)	LOS(c)
GRAND AVENUE					
Vista Del Mar to Main	Secondary Arterial	53,000	11,000	0.21	A
Main to Center	Secondary Arterial	53,000	16,000	0.30	A
Center to Sepulveda	Secondary Arterial	53,000	25,000	0.47	A
Sepulveda to Continental	Secondary Arterial	53,000	24,000	0.45	A
Continental to Nash	Secondary Arterial	53,000	32,000	0.60	A
Nash to Douglas	Secondary Arterial	53,000	20,000	0.38	A
Douglas to Aviation	Secondary Arterial	53,000	22,000	0.42	A
HUGHES WAY					
Sepulveda to Nash	Secondary Arterial	53,000	32,000	0.60	A
Nash to Douglas	Secondary Arterial	53,000	4,000	0.08	A
IMPERIAL HIGHWAY					
Vista Del Mart to Main	Secondary Arterial	58,300	35,000	0.60	A
Main to California	Secondary Arterial	58,300	50,000	0.86	D
California to Sepulveda	Secondary Arterial	58,300	49,000	0.84	D
Sepulveda to Nash	Secondary Arterial	58,300	75,000	1.29	F
Nash to Douglas	Secondary Arterial	58,300	67,000	1.13	F
Douglas to Aviation	Secondary Arterial	58,300	67,000	1.15	F
IMPERIAL AVENUE					
Main to Center	Collector (2-lane)	14,000	8,000	0.57	A
MAIN STREET					
Imperial Hwy to Maple	Collector (4-lane)	31,000	19,000	0.61	B
Maple to Mariposa	Collector (4-lane)	31,000	16,000	0.52	A
Mariposa to Grand	Collector (4-lane)	31,000	18,000	0.58	A
Grand to El Segundo	Collector (4-lane)	31,000	10,000	0.32	A
MAPLE AVENUE					
Sepulveda to Continental	Collector (4-lane)	31,000	7,000	0.23	A
Continental to Nash	Collector (4-lane)	31,000	8,000	0.26	A
MARIPOSA AVENUE					
Main to Center	Collector (2-lane)	14,000	11,000	0.79	C
Center to Sepulveda	Collector (2-lane)	14,000	16,000	1.14	F
Sepulveda to Continental	Secondary Arterial	53,000	30,000	0.57	A
Continental to Nash	Secondary Arterial	53,000	27,000	0.51	A
Nash to Douglas	Secondary Arterial	53,000	21,000	0.40	A
Douglas to Aviation	Secondary Arterial	53,000	6,000	0.11	A

TABLE C (Con't)

COMPARISON OF DAILY TRAFFIC VOLUMES
TO ESTIMATED DAILY ROADWAY CAPACITIES
RECOMMENDED MASTER PLAN OF STREETS
CURRENT GENERAL PLAN BUILDOUT

ROADWAY SEGMENT	CLASSIFICATION (a)	ROADWAY CAPACITY	ADT	V/C Ratio(b)	LOS(c)
NASH STREET (ONE WAY SOUTHBOUND)					
Imperial Hwy to Connector Rd	Secondary Arterial	53,000	25,000	0.47	A
Connector Rd to Maple	Secondary Arterial	53,000	24,000	0.45	A
Maple to Mariposa	Secondary Arterial	53,000	25,000	0.47	A
Mariposa to Grand	Secondary Arterial	53,000	15,000	0.28	A
Grand to El Segundo	Secondary Arterial	53,000	26,000	0.49	A
NASH STREET (TWO WAY)					
El Segundo to Hughes	Secondary Arterial	53,000	39,000	0.74	C
Hughes to Rosecrans	Secondary Arterial	53,000	23,000	0.43	A
ROSECRANS AVENUE					
Vista Del Mar to Sepulveda	Major Arterial	77,000	43,000	0.56	A
Sepulveda to Nash	Major Arterial	77,000	72,000	0.94	E
Nash to Douglas	Major Arterial	77,000	95,000	1.23	F
Douglas to Aviation	Major Arterial	77,000	101,000	1.31	F
SEPULVEDA BOULEVARD					
Imperial Hwy to Maple	Major Arterial	77,000	93,000	1.21	F
Maple to Mariposa	Major Arterial	77,000	92,000	1.19	F
Mariposa to Grand	Major Arterial	77,000	87,000	1.13	F
Grand to El Segundo	Major Arterial	77,000	87,000	1.13	F
El Segundo to Hughes Way	Major Arterial	77,000	87,000	1.13	F
Hughes Way to Rosecrans	Major Arterial	77,000	100,000	1.30	F
UTAH AVENUE (Hughes Way)					
Douglas to Aviation	Secondary Arterial	53,000	6,000	0.11	A
VISTA DEL MAR					
Grand to Rosecrans	Secondary Arterial	53,000	31,000	0.58	A

(a) Per Recommended Master Plan of Streets

(b) Ratio of daily traffic volume to capacity

(c) Level of Service, determined on basis of V/C Ratio, describes operating conditions on the roadway. LOS "A" is generally free-flowing. LOS "E" represents capacity. LOS "C" and "D" are typical in urban conditions. LOS "F" represents severe congestion.

TABLE F

COMPARISON OF DAILY TRAFFIC VOLUMES
ESTIMATED DAILY ROADWAY CAPACITIES
MASTER PLAN OF STREETS
CURRENT GENERAL PLAN BUILDOUT
OPTIMISTIC TRANSIT & TDM

ROADWAY SEGMENT	CLASSIFICATION (a)	ROADWAY CAPACITY	ADT	V/C Ratio(b)	LOS(c)
AVIATION BOULEVARD					
Imperial to Mariposa	Major Arterial	77,000	45,000	0.58	A
Mariposa to Grand	Major Arterial	77,000	47,000	0.61	B
Grand to El Segundo	Major Arterial	77,000	38,000	0.49	A
El Segundo to Utah	Major Arterial	77,000	38,000	0.49	A
Utah to Rosecrans	Major Arterial	77,000	42,000	0.55	A
CENTER STREET					
Imperial Ave. to Maple	Collector (2-lane)	14,000	4,000	0.29	A
Maple to Mariposa	Collector (2-lane)	14,000	6,000	0.43	A
Mariposa to Grand	Collector (2-lane)	14,000	5,000	0.36	A
Grand to El Segundo	Collector (2-lane)	14,000	8,000	0.50	A
CONNECTOR ROAD					
Nash to I-105 On-Ramp	Collector (4-lane)	40,400	1,000	0.02	A
I-105 On-Ramp to Douglas (3 WB and 2 EB)	Collector (5-lane)	46,700	13,000	0.28	A
CONTINENTAL (Lairport St.) BOULEVARD					
Imperial Hwy to Maple	Secondary Arterial	53,000	4,000	0.08	A
Maple to Mariposa	Secondary Arterial	53,000	10,000	0.19	A
Mariposa to Grand	Secondary Arterial	53,000	10,000	0.19	A
Grand to El Segundo	Secondary Arterial	53,000	13,000	0.25	A
DOUGLAS STREET (ONE WAY NORTHBOUND)					
Imperial Hwy to Connector Road	Secondary Arterial	53,000	14,000	0.26	A
Connector Rd to Mariposa	Secondary Arterial	53,000	15,000	0.28	A
Mariposa to El Segundo	Secondary Arterial	53,000	22,000	0.42	A
DOUGLAS STREET (TWO WAY)					
El Segundo to Utah	Secondary Arterial	53,000	16,000	0.30	A
Utah to Rosecrans	Secondary Arterial	53,000	12,000	0.23	A
EL SEGUNDO BOULEVARD					
Main to Center	Secondary Arterial	53,000	12,000	0.23	A
Center to Sepulveda	Secondary Arterial	53,000	24,000	0.45	B
Sepulveda to Continental	Major Arterial	77,000	28,000	0.36	A
Continental to Nash	Major Arterial	77,000	39,000	0.51	A
Nash to Douglas	Major Arterial	77,000	54,000	0.70	B
Douglas to Aviation	Major Arterial	77,000	51,000	0.66	B
Aviation to Isis	Major Arterial	77,000	52,000	0.68	B

TABLE F (Con't)

COMPARISON OF DAILY TRAFFIC VOLUMES
ESTIMATED DAILY ROADWAY CAPACITIES
MASTER PLAN OF STREETS
CURRENT GENERAL PLAN BUILDOUT
OPTIMISTIC TRANSIT & TDM

ROADWAY SEGMENT	CLASSIFICATION (a)	ROADWAY CAPACITY	ADT	V/C Ratio(b)	LOS(c)
GRAND AVENUE					
Vista Del Mar to Main	Secondary Arterial	53,000	10,000	0.19	A
Main to Center	Secondary Arterial	53,000	13,000	0.25	A
Center to Sepulveda	Secondary Arterial	53,000	20,000	0.38	A
Sepulveda to Continental	Secondary Arterial	53,000	20,000	0.38	A
Continental to Nash	Secondary Arterial	53,000	25,000	0.47	A
Nash to Douglas	Secondary Arterial	53,000	13,000	0.25	A
Douglas to Aviation	Secondary Arterial	53,000	15,000	0.28	A
HUGHES WAY					
Sepulveda to Nash	Secondary Arterial	53,000	27,000	0.51	A
Nash to Douglas	Secondary Arterial	53,000	2,000	0.04	A
IMPERIAL HIGHWAY					
Vista Del Mart to Main	Secondary Arterial	58,300	34,000	0.58	A
Main to California	Secondary Arterial	58,300	46,000	0.79	C
California to Sepulveda	Secondary Arterial	58,300	45,000	0.77	C
Sepulveda to Nash	Secondary Arterial	58,300	67,000	1.15	F
Nash to Douglas	Secondary Arterial	58,300	63,000	1.08	F
Douglas to Aviation	Secondary Arterial	58,300	64,000	1.10	F
IMPERIAL AVENUE					
Main to Center	Collector (2-lane)	14,000	8,000	0.57	A
MAIN STREET					
Imperial Hwy to Maple	Collector (4-lane)	31,000	16,000	0.52	A
Maple to Mariposa	Collector (4-lane)	31,000	14,000	0.45	A
Mariposa to Grand	Collector (4-lane)	31,000	15,000	0.48	A
Grand to El Segundo	Collector (4-lane)	31,000	10,000	0.32	A
MAPLE AVENUE					
Sepulveda to Continental	Collector (4-lane)	31,000	6,000	0.19	A
Continental to Nash	Collector (4-lane)	31,000	7,000	0.23	A
MARIPOSA AVENUE					
Main to Center	Collector (2-lane)	14,000	10,000	0.71	C
Center to Sepulveda	Collector (2-lane)	14,000	14,000	1.00	E
Sepulveda to Continental	Secondary Arterial	53,000	25,000	0.47	A
Continental to Nash	Secondary Arterial	53,000	24,000	0.45	A
Nash to Douglas	Secondary Arterial	53,000	18,000	0.34	A
Douglas to Aviation	Secondary Arterial	53,000	3,000	0.06	A

TABLE F (Con't)

COMPARISON OF DAILY TRAFFIC VOLUMES
ESTIMATED DAILY ROADWAY CAPACITIES
MASTER PLAN OF STREETS
CURRENT GENERAL PLAN BUILDOUT
OPTIMISTIC TRANSIT & TDM

ROADWAY SEGMENT	CLASSIFICATION (a)	ROADWAY CAPACITY	ADT	V/C Ratio(b)	LOS(c)
MASH STREET (ONE WAY SOUTHBOUND)					
Imperial Hwy to Connector Rd	Secondary Arterial	53,000	21,000	0.40	A
Connector Rd to Maple	Secondary Arterial	53,000	20,000	0.38	A
Maple to Mariposa	Secondary Arterial	53,000	21,000	0.40	A
Mariposa to Grand	Secondary Arterial	53,000	14,000	0.26	A
Grand to El Segundo	Secondary Arterial	53,000	20,000	0.38	A
MASH STREET (TWO WAY)					
El Segundo to Hughes	Secondary Arterial	53,000	24,000	0.45	A
Hughes to Rosecrans	Secondary Arterial	53,000	15,000	0.28	A
ROSECRANS AVENUE					
Vista Del Mar to Sepulveda	Major Arterial	77,000	41,000	0.53	A
Sepulveda to Nash	Major Arterial	77,000	67,000	0.87	D
Nash to Douglas	Major Arterial	77,000	83,000	1.08	F
Douglas to Aviation	Major Arterial	77,000	87,000	1.13	F
SEPULVEDA BOULEVARD					
Imperial Hwy to Maple	Major Arterial	77,000	84,000	1.09	F
Maple to Mariposa	Major Arterial	77,000	83,000	1.08	F
Mariposa to Grand	Major Arterial	77,000	80,000	1.04	F
Grand to El Segundo	Major Arterial	77,000	79,000	1.03	F
El Segundo to Hughes Way	Major Arterial	77,000	78,000	1.01	F
Hughes Way to Rosecrans	Major Arterial	77,000	90,000	1.17	F
UTAH AVENUE (Hughes Way)					
Douglas to Aviation	Secondary Arterial	53,000	11,000	0.21	A
VISTA DEL MAR					
Grand to Rosecrans	Secondary Arterial	53,000	31,000	0.58	A

(a) Per Recommended Master Plan of Streets

(b) Ratio of daily traffic volume to capacity.

(c) Level of Service, determined on basis of V/C Ratio, describes operating conditions on the roadway. LOS "A" is generally free-flowing. LOS "E" represents capacity. LOS "C" and "D" are typical in urban conditions. LOS "F" represents severe congestion.

TABLE J

COMPARISON OF DAILY TRAFFIC VOLUMES
TO ESTIMATED DAILY ROADWAY CAPACITIES
RECOMMENDED MASTER PLAN OF STREETS
PREFERRED LAND USE PLAN
MIXED USE AT FAR OF .9
OPTIMISTIC TRANSIT & TDM SCENARIO

ROADWAY SEGMENT	CLASSIFICATION (a)	ROADWAY CAPACITY	ADT	V/C Ratio(b)	LOS(c)
AVIATION BOULEVARD					
Imperial to Mariposa	Major Arterial	77,000	46,000	0.60	A
Mariposa to Grand	Major Arterial	77,000	48,000	0.62	B
Grand to El Segundo	Major Arterial	77,000	44,000	0.57	A
El Segundo to Utah	Major Arterial	77,000	42,000	0.55	A
Utah to Rosecrans	Major Arterial	77,000	45,000	0.58	A
CENTER STREET					
Imperial Ave. to Maple	Collector (2-lane)	14,000	4,000	0.29	A
Maple to Mariposa	Collector (2-lane)	14,000	6,000	0.43	A
Mariposa to Grand	Collector (2-lane)	14,000	4,000	0.29	A
Grand to El Segundo	Collector (2-lane)	14,000	5,000	0.36	A
CONNECTOR ROAD					
Nash to I-105 On-Ramp	Collector (4-lane)	40,400	1,000	0.02	A
I-105 On-Ramp to Douglas (3 WB and 2 EB)	Collector (5-lane)	46,700	13,000	0.28	A
CONTINENTAL (Lairport St.) BOULEVARD					
Imperial Hwy to Maple	Secondary Arterial	53,000	5,000	0.09	A
Maple to Mariposa	Secondary Arterial	53,000	9,000	0.17	A
Mariposa to Grand	Secondary Arterial	53,000	7,000	0.13	A
Grand to El Segundo	Secondary Arterial	53,000	11,000	0.21	A
DOUGLAS STREET (ONE WAY NORTHBOUND)					
Imperial Hwy to Connector Road	Secondary Arterial	53,000	16,000	0.30	A
Connector Rd to Mariposa	Secondary Arterial	53,000	18,000	0.34	A
Mariposa to El Segundo	Secondary Arterial	53,000	22,000	0.42	A
DOUGLAS STREET (TWO WAY)					
El Segundo to Utah	Secondary Arterial	53,000	16,000	0.30	A
Utah to Rosecrans	Secondary Arterial	53,000	12,000	0.23	A
EL SEGUNDO BOULEVARD					
Main to Center	Secondary Arterial	53,000	12,000	0.23	A
Center to Sepulveda	Secondary Arterial	53,000	23,000	0.43	A
Sepulveda to Continental	Major Arterial	77,000	27,000	0.35	A
Continental to Nash	Major Arterial	77,000	34,000	0.44	A
Nash to Douglas	Major Arterial	77,000	50,000	0.65	B
Douglas to Aviation	Major Arterial	77,000	45,000	0.58	A
Aviation to Isis	Major Arterial	77,000	45,000	0.58	A

TABLE J (Con't)

COMPARISON OF DAILY TRAFFIC VOLUMES
TO ESTIMATED DAILY ROADWAY CAPACITIES
RECOMMENDED MASTER PLAN OF STREETS
PREFERRED LAND USE PLAN
MIXED USE AT FAR OF .9
OPTIMISTIC TRANSIT & TDM SCENARIO

ROADWAY SEGMENT	CLASSIFICATION (a)	ROADWAY CAPACITY	ADT	V/C Ratio(b)	LOS(c)
GRAND AVENUE					
Vista Del Mar to Main	Secondary Arterial	53,000	9,000	0.17	A
Main to Center	Secondary Arterial	53,000	10,000	0.19	A
Center to Sepulveda	Secondary Arterial	53,000	15,000	0.28	A
Sepulveda to Continental	Secondary Arterial	53,000	16,000	0.30	A
Continental to Nash	Secondary Arterial	53,000	18,000	0.34	A
Nash to Douglas	Secondary Arterial	53,000	9,000	0.17	A
Douglas to Aviation	Secondary Arterial	53,000	10,000	0.19	A
HUGHES WAY					
Sepulveda to Nash	Secondary Arterial	53,000	27,000	0.51	A
Nash to Douglas	Secondary Arterial	53,000	4,000	0.08	A
IMPERIAL HIGHWAY					
Vista Del Mart to Main	Secondary Arterial	58,300	33,000	0.57	A
Main to California	Secondary Arterial	58,300	43,000	0.74	C
California to Sepulveda	Secondary Arterial	58,300	43,000	0.74	C
Sepulveda to Nash	Secondary Arterial	58,300	61,000	1.05	F
Nash to Douglas	Secondary Arterial	58,300	61,000	1.05	F
Douglas to Aviation	Secondary Arterial	58,300	61,000	1.05	F
IMPERIAL AVENUE					
Main to Center	Collector (2-lane)	14,000	8,000	0.57	A
MAIN STREET					
Imperial Hwy to Maple	Collector (4-lane)	31,000	14,000	0.45	A
Maple to Mariposa	Collector (4-lane)	31,000	12,000	0.39	A
Mariposa to Grand	Collector (4-lane)	31,000	12,000	0.39	A
Grand to El Segundo	Collector (4-lane)	31,000	10,000	0.32	A
MAPLE AVENUE					
Sepulveda to Continental	Collector (4-lane)	31,000	6,000	0.19	A
Continental to Nash	Collector (4-lane)	31,000	8,000	0.26	A
MARIPOSA AVENUE					
Main to Center	Collector (2-lane)	14,000	10,000	0.71	C
Center to Sepulveda	Collector (2-lane)	14,000	13,000	0.93	E
Sepulveda to Continental	Secondary Arterial	53,000	22,000	0.42	A
Continental to Nash	Secondary Arterial	53,000	24,000	0.45	A
Nash to Douglas	Secondary Arterial	53,000	23,000	0.43	A
Douglas to Aviation	Secondary Arterial	53,000	10,000	0.19	A

TABLE J (Con't)

COMPARISON OF DAILY TRAFFIC VOLUMES
TO ESTIMATED DAILY ROADWAY CAPACITIES
RECOMMENDED MASTER PLAN OF STREETS
PREFERRED LAND USE PLAN
MIXED USE AT FAR OF .9
OPTIMISTIC TRANSIT & TOM SCENARIO

ROADWAY SEGMENT	CLASSIFICATION (a)	ROADWAY CAPACITY	ADT	V/C Ratio(b)	LOS(c)
NASH STREET (ONE WAY SOUTHBOUND)					
Imperial Hwy to Connector Rd	Secondary Arterial	53,000	20,000	0.38	A
Connector Rd to Maple	Secondary Arterial	53,000	19,000	0.36	A
Maple to Mariposa	Secondary Arterial	53,000	20,000	0.38	A
Mariposa to Grand	Secondary Arterial	53,000	14,000	0.26	A
Grand to El Segundo	Secondary Arterial	53,000	18,000	0.34	A
NASH STREET (TWO WAY)					
El Segundo to Hughes	Secondary Arterial	53,000	16,000	0.30	A
Hughes to Rosecrans	Secondary Arterial	53,000	13,000	0.25	A
ROSECRANS AVENUE					
Vista Del Mar to Sepulveda	Major Arterial	77,000	40,000	0.52	A
Sepulveda to Nash	Major Arterial	77,000	65,000	0.84	D
Nash to Douglas	Major Arterial	77,000	74,000	0.96	E
Douglas to Aviation	Major Arterial	77,000	95,000	1.23	F
SEPULVEDA BOULEVARD					
Imperial Hwy to Maple	Major Arterial	77,000	73,000	0.95	E
Maple to Mariposa	Major Arterial	77,000	72,000	0.94	E
Mariposa to Grand	Major Arterial	77,000	72,000	0.94	E
Grand to El Segundo	Major Arterial	77,000	69,000	0.90	D
El Segundo to Hughes Way	Major Arterial	77,000	69,000	0.90	D
Hughes Way to Rosecrans	Major Arterial	77,000	83,000	1.08	F
UTAH AVENUE (Hughes Way)					
Douglas to Aviation	Secondary Arterial	53,000	9,000	0.17	A
VISTA DEL MAR					
Grand to Rosecrans	Secondary Arterial	53,000	30,000	0.57	A

(a) Per Recommended Master Plan of Streets

(b) Ratio of daily traffic volume to capacity

(c) Level of Service, determined on basis of V/C Ratio, describes operating conditions on the roadway. LOS "A" is generally free-flowing. LOS "E" represents capacity. LOS "C" and "D" are typical in urban conditions. LOS "F" represents severe congestion.

TABLE K

COMPARISON OF DAILY TRAFFIC VOLUMES
TO ESTIMATED DAILY ROADWAY CAPACITIES
RECOMMENDED MASTER PLAN OF STREETS
PREFERRED LAND USE PLAN
MIXED USE AT FAR OF 1.5
OPTIMISTIC TRANSIT & TDM SCENARIO

ROADWAY SEGMENT	CLASSIFICATION (a)	ROADWAY CAPACITY	ADT	V/C Ratio(b)	LOS(c)
AVIATION BOULEVARD					
Imperial to Mariposa	Major Arterial	77,000	58,000	0.75	C
Mariposa to Grand	Major Arterial	77,000	59,000	0.77	C
Grand to El Segundo	Major Arterial	77,000	51,000	0.66	B
El Segundo to Utah	Major Arterial	77,000	50,000	0.65	B
Utah to Rosecrans	Major Arterial	77,000	53,000	0.69	B
CENTER STREET					
Imperial Ave. to Maple	Collector (2-lane)	14,000	4,000	0.29	A
Maple to Mariposa	Collector (2-lane)	14,000	5,000	0.36	A
Mariposa to Grand	Collector (2-lane)	14,000	4,000	0.29	A
Grand to El Segundo	Collector (2-lane)	14,000	5,000	0.36	A
CONNECTOR ROAD					
Nash to I-105 On-Ramp	Collector (4-lane)	40,400	1,000	0.02	A
I-105 On-Ramp to Douglas (3 WB and 2 EB)	Collector (5-lane)	46,700	13,000	0.28	A
CONTINENTAL (Lairport St.) BOULEVARD					
Imperial Hwy to Maple	Secondary Arterial	53,000	5,000	0.09	A
Maple to Mariposa	Secondary Arterial	53,000	9,000	0.17	A
Mariposa to Grand	Secondary Arterial	53,000	8,000	0.15	A
Grand to El Segundo	Secondary Arterial	53,000	12,000	0.23	A
DOUGLAS STREET (ONE WAY NORTHBOUND)					
Imperial Hwy to Connector Road	Secondary Arterial	53,000	21,000	0.40	A
Connector Rd to Mariposa	Secondary Arterial	53,000	25,000	0.47	A
Mariposa to El Segundo	Secondary Arterial	53,000	26,000	0.49	A
DOUGLAS STREET (TWO WAY)					
El Segundo to Utah	Secondary Arterial	53,000	18,000	0.34	A
Utah to Rosecrans	Secondary Arterial	53,000	20,000	0.38	A
EL SEGUNDO BOULEVARD					
Main to Center	Secondary Arterial	53,000	12,000	0.23	A
Center to Sepulveda	Secondary Arterial	53,000	23,000	0.43	A
Sepulveda to Continental	Major Arterial	77,000	27,000	0.35	A
Continental to Nash	Major Arterial	77,000	36,000	0.47	A
Nash to Douglas	Major Arterial	77,000	51,000	0.66	B
Douglas to Aviation	Major Arterial	77,000	46,000	0.60	A
Aviation to Isis	Major Arterial	77,000	46,000	0.60	A

TABLE K (Con't)

COMPARISON OF DAILY TRAFFIC VOLUMES
 TO ESTIMATED DAILY ROADWAY CAPACITIES
 RECOMMENDED MASTER PLAN OF STREETS
 PREFERRED LAND USE PLAN
 MIXED USE AT FAR OF 1.5
 OPTIMISTIC TRANSIT & TDM SCENARIO

ROADWAY SEGMENT	CLASSIFICATION (a)	ROADWAY CAPACITY	ADT	V/C Ratio(b)	LOS(c)
GRAND AVENUE					
Vista Del Mar to Main	Secondary Arterial	53,000	9,000	0.17	A
Main to Center	Secondary Arterial	53,000	10,000	0.19	A
Center to Sepulveda	Secondary Arterial	53,000	15,000	0.28	A
Sepulveda to Continental	Secondary Arterial	53,000	17,000	0.32	A
Continental to Nash	Secondary Arterial	53,000	21,000	0.40	A
Nash to Douglas	Secondary Arterial	53,000	15,000	0.28	A
Douglas to Aviation	Secondary Arterial	53,000	16,000	0.30	A
HUGHES WAY					
Sepulveda to Nash	Secondary Arterial	53,000	31,000	0.58	A
Nash to Douglas	Secondary Arterial	53,000	4,000	0.08	A
IMPERIAL HIGHWAY					
Vista Del Mart to Main	Secondary Arterial	58,300	34,000	0.58	A
Main to California	Secondary Arterial	58,300	44,000	0.75	C
California to Sepulveda	Secondary Arterial	58,300	44,000	0.75	C
Sepulveda to Nash	Secondary Arterial	58,300	63,000	1.08	F
Nash to Douglas	Secondary Arterial	58,300	62,000	1.06	F
Douglas to Aviation	Secondary Arterial	58,300	66,000	1.13	F
IMPERIAL AVENUE					
Main to Center	Collector (2-lane)	14,000	8,000	0.57	A
MAIN STREET					
Imperial Hwy to Maple	Collector (4-lane)	31,000	14,000	0.45	A
Maple to Mariposa	Collector (4-lane)	31,000	12,000	0.39	A
Mariposa to Grand	Collector (4-lane)	31,000	12,000	0.39	A
Grand to El Segundo	Collector (4-lane)	31,000	10,000	0.32	A
MAPLE AVENUE					
Sepulveda to Continental	Collector (4-lane)	31,000	6,000	0.19	A
Continental to Nash	Collector (4-lane)	31,000	8,000	0.26	A
MARIPOSA AVENUE					
Main to Center	Collector (2-lane)	14,000	10,000	0.71	C
Center to Sepulveda	Collector (2-lane)	14,000	13,000	0.93	E
Sepulveda to Continental	Secondary Arterial	53,000	24,000	0.45	A
Continental to Nash	Secondary Arterial	53,000	28,000	0.53	A
Nash to Douglas	Secondary Arterial	53,000	26,000	0.49	A
Douglas to Aviation	Secondary Arterial	53,000	16,000	0.30	A

TABLE K (Cont)

COMPARISON OF DAILY TRAFFIC VOLUMES
TO ESTIMATED DAILY ROADWAY CAPACITIES
RECOMMENDED MASTER PLAN OF STREETS
PREFERRED LAND USE PLAN
MIXED USE AT FAR OF 1.5
OPTIMISTIC TRANSIT & TDM SCENARIO

ROADWAY SEGMENT	CLASSIFICATION (a)	ROADWAY CAPACITY	ADT	V/C Ratio(b)	LOS(c)
NASH STREET (ONE WAY SOUTHBOUND)					
Imperial Hwy to Connector Rd	Secondary Arterial	53,000	23,000	0.43	A
Connector Rd to Maple	Secondary Arterial	53,000	23,000	0.43	A
Maple to Mariposa	Secondary Arterial	53,000	23,000	0.43	A
Mariposa to Grand	Secondary Arterial	53,000	17,000	0.32	A
Grand to El Segundo	Secondary Arterial	53,000	23,000	0.43	A
NASH STREET (TWO WAY)					
El Segundo to Hughes	Secondary Arterial	53,000	24,000	0.45	A
Hughes to Rosecrans	Secondary Arterial	53,000	17,000	0.32	A
ROSECRANS AVENUE					
Vista Del Mar to Sepulveda	Major Arterial	77,000	42,000	0.55	A
Sepulveda to Nash	Major Arterial	77,000	67,000	0.87	D
Nash to Douglas	Major Arterial	77,000	76,000	0.99	E
Douglas to Aviation	Major Arterial	77,000	85,000	1.10	F
SEPULVEDA BOULEVARD					
Imperial Hwy to Maple	Major Arterial	77,000	74,000	0.96	E
Maple to Mariposa	Major Arterial	77,000	73,000	0.95	E
Mariposa to Grand	Major Arterial	77,000	72,000	0.94	E
Grand to El Segundo	Major Arterial	77,000	69,000	0.90	D
El Segundo to Hughes Way	Major Arterial	77,000	69,000	0.90	D
Hughes Way to Rosecrans	Major Arterial	77,000	87,000	1.13	F
UTAH AVENUE (Hughes Way)					
Douglas to Aviation	Secondary Arterial	53,000	9,000	0.17	A
VISTA DEL MAR					
Grand to Rosecrans	Secondary Arterial	53,000	30,000	0.57	A

(a) Per Recommended Master Plan of Streets

(b) Ratio of daily traffic volume to capacity

(c) Level of Service, determined on basis of V/C Ratio, describes operating conditions on the roadway. LOS "A" is generally free-flowing. LOS "E" represents capacity. LOS "C" and "D" are typical in urban conditions. LOS "F" represents severe congestion.

TABLE L

COMPARISON OF DAILY TRAFFIC VOLUMES
TO ESTIMATED DAILY ROADWAY CAPACITIES
RECOMMENDED MASTER PLAN OF STREETS
CURRENT GENERAL PLAN BUILDOUT
OPTIMISTIC TRANSIT & TDM

ROADWAY SEGMENT	CLASSIFICATION (a)	ROADWAY CAPACITY	ADT	V/C Ratio(b)	LOS(c)
AVIATION BOULEVARD					
Imperial to Mariposa	Major Arterial	77,000	45,000	0.58	A
Mariposa to Grand	Major Arterial	77,000	46,000	0.60	A
Grand to El Segundo	Major Arterial	77,000	38,000	0.49	A
El Segundo to Utah	Major Arterial	77,000	38,000	0.49	A
Utah to Rosecrans	Major Arterial	77,000	42,000	0.55	A
CENTER STREET					
Imperial Ave. to Maple	Collector (2-lane)	14,000	4,000	0.29	A
Maple to Mariposa	Collector (2-lane)	14,000	6,000	0.43	A
Mariposa to Grand	Collector (2-lane)	14,000	5,000	0.36	A
Grand to El Segundo	Collector (2-lane)	14,000	7,000	0.50	A
CONNECTOR ROAD					
Nash to I-105 On-Ramp	Collector (4-lane)	40,400	1,000	0.02	A
I-105 On-Ramp to Douglas (3 WB and 2 EB)	Collector (5-lane)	46,700	13,000	0.28	A
CONTINENTAL (Lairport St.) BOULEVARD					
Imperial Hwy to Maple	Secondary Arterial	53,000	4,000	0.08	A
Maple to Mariposa	Secondary Arterial	53,000	9,000	0.17	A
Mariposa to Grand	Secondary Arterial	53,000	9,000	0.17	A
Grand to El Segundo	Secondary Arterial	53,000	12,000	0.23	A
DOUGLAS STREET (ONE WAY NORTHBOUND)					
Imperial Hwy to Connector Road	Secondary Arterial	53,000	14,000	0.26	A
Connector Rd to Mariposa	Secondary Arterial	53,000	15,000	0.28	A
Mariposa to El Segundo	Secondary Arterial	53,000	22,000	0.42	A
DOUGLAS STREET (TWO WAY)					
El Segundo to Utah	Secondary Arterial	53,000	16,000	0.30	A
Utah to Rosecrans	Secondary Arterial	53,000	9,000	0.17	A
EL SEGUNDO BOULEVARD					
Main to Center	Secondary Arterial	53,000	12,000	0.23	A
Center to Sepulveda	Secondary Arterial	53,000	24,000	0.45	A
Sepulveda to Continental	Major Arterial	77,000	28,000	0.36	A
Continental to Nash	Major Arterial	77,000	38,000	0.49	A
Nash to Douglas	Major Arterial	77,000	54,000	0.70	B
Douglas to Aviation	Major Arterial	77,000	51,000	0.66	B
Aviation to Isis	Major Arterial	77,000	52,000	0.68	B

TABLE L (Con't)

COMPARISON OF DAILY TRAFFIC VOLUMES
TO ESTIMATED DAILY ROADWAY CAPACITIES
RECOMMENDED MASTER PLAN OF STREETS
CURRENT GENERAL PLAN BUILDOUT
OPTIMISTIC TRANSIT & TDM

ROADWAY SEGMENT	CLASSIFICATION (a)	ROADWAY CAPACITY	ADT	V/C Ratio(b)	LOS(c)
GRAND AVENUE					
Vista Del Mar to Main	Secondary Arterial	53,000	10,000	0.19	A
Main to Center	Secondary Arterial	53,000	13,000	0.25	A
Center to Sepulveda	Secondary Arterial	53,000	16,000	0.30	A
Sepulveda to Continental	Secondary Arterial	53,000	20,000	0.38	A
Continental to Nash	Secondary Arterial	53,000	25,000	0.47	A
Nash to Douglas	Secondary Arterial	53,000	13,000	0.25	A
Douglas to Aviation	Secondary Arterial	53,000	14,000	0.26	A
HUGHES WAY					
Sepulveda to Nash	Secondary Arterial	53,000	27,000	0.51	A
Nash to Douglas	Secondary Arterial	53,000	4,000	0.08	A
IMPERIAL HIGHWAY					
Vista Del Mart to Main	Secondary Arterial	58,300	33,000	0.57	A
Main to California	Secondary Arterial	58,300	46,000	0.79	C
California to Sepulveda	Secondary Arterial	58,300	45,000	0.77	C
Sepulveda to Nash	Secondary Arterial	58,300	66,000	1.13	F
Nash to Douglas	Secondary Arterial	58,300	62,000	1.06	F
Douglas to Aviation	Secondary Arterial	58,300	63,000	1.08	F
IMPERIAL AVENUE					
Main to Center	Collector (2-lane)	14,000	8,000	0.57	A
MAIN STREET					
Imperial Hwy to Maple	Collector (4-lane)	31,000	16,000	0.52	A
Maple to Mariposa	Collector (4-lane)	31,000	14,000	0.45	A
Mariposa to Grand	Collector (4-lane)	31,000	15,000	0.48	A
Grand to El Segundo	Collector (4-lane)	31,000	10,000	0.32	A
MAPLE AVENUE					
Sepulveda to Continental	Collector (4-lane)	31,000	6,000	0.19	A
Continental to Nash	Collector (4-lane)	31,000	7,000	0.23	A
MARIPOSA AVENUE					
Main to Center	Collector (2-lane)	14,000	10,000	0.71	C
Center to Sepulveda	Collector (2-lane)	14,000	14,000	1.00	E
Sepulveda to Continental	Secondary Arterial	53,000	23,000	0.43	A
Continental to Nash	Secondary Arterial	53,000	24,000	0.45	A
Nash to Douglas	Secondary Arterial	53,000	18,000	0.34	A
Douglas to Aviation	Secondary Arterial	53,000	4,000	0.08	A

TABLE L (Con't)

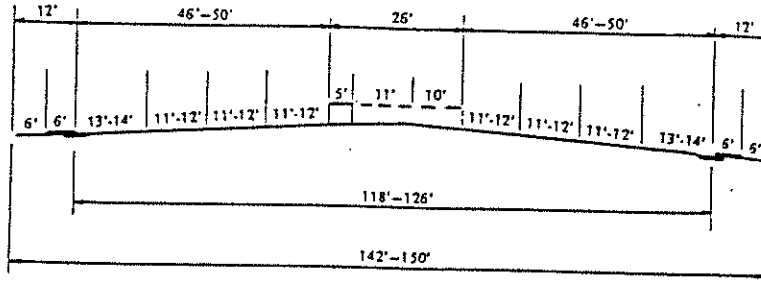
COMPARISON OF DAILY TRAFFIC VOLUMES
TO ESTIMATED DAILY ROADWAY CAPACITIES
RECOMMENDED MASTER PLAN OF STREETS
CURRENT GENERAL PLAN BUILDOUT
OPTIMISTIC TRANSIT & TDM

ROADWAY SEGMENT	CLASSIFICATION (a)	ROADWAY CAPACITY	ADT	V/C Ratio(b)	LOS(c)
MASH STREET (ONE WAY SOUTHBOUND)					
Imperial Hwy to Connector Rd	Secondary Arterial	53,000	20,000	0.38	A
Connector Rd to Maple	Secondary Arterial	53,000	20,000	0.38	A
Maple to Mariposa	Secondary Arterial	53,000	21,000	0.40	A
Mariposa to Grand	Secondary Arterial	53,000	13,000	0.25	A
Grand to El Segundo	Secondary Arterial	53,000	20,000	0.38	A
MASH STREET (TWO WAY)					
El Segundo to Hughes	Secondary Arterial	53,000	23,000	0.43	A
Hughes to Rosecrans	Secondary Arterial	53,000	18,000	0.34	A
ROSECRANS AVENUE					
Vista Del Mar to Sepulveda	Major Arterial	77,000	41,000	0.53	A
Sepulveda to Nash	Major Arterial	77,000	66,000	0.86	D
Nash to Douglas	Major Arterial	77,000	83,000	1.08	F
Douglas to Aviation	Major Arterial	77,000	84,000	1.09	F
SEPULVEDA BOULEVARD					
Imperial Hwy to Maple	Major Arterial	77,000	84,000	1.09	F
Maple to Mariposa	Major Arterial	77,000	83,000	1.08	F
Mariposa to Grand	Major Arterial	77,000	79,000	1.03	F
Grand to El Segundo	Major Arterial	77,000	78,000	1.01	F
El Segundo to Hughes Way	Major Arterial	77,000	78,000	1.01	F
Hughes Way to Rosecrans	Major Arterial	77,000	90,000	1.17	F
UTAH AVENUE (Hughes Way)					
Douglas to Aviation	Secondary Arterial	53,000	12,000	0.23	A
VISTA DEL MAR					
Grand to Rosecrans	Secondary Arterial	53,000	31,000	0.58	A

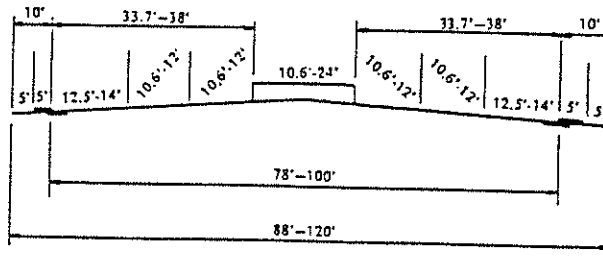
(a) Per Recommended Master Plan of Streets

(b) Ratio of daily traffic volume to capacity.

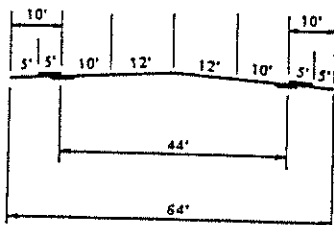
(c) Level of Service, determined on basis of V/C Ratio, describes operating conditions on the roadway. LOS "A" is generally free-flowing. LOS "E" represents capacity. LOS "C" and "D" are typical in urban conditions. LOS "F" represents severe congestion.



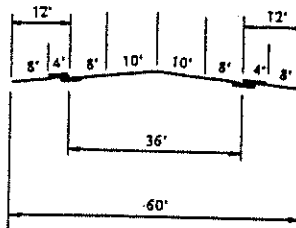
MAJOR ARTERIAL (8 LANES MINIMUM)



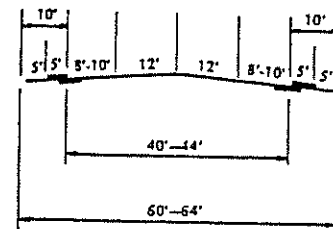
SECONDARY ARTERIAL



COLLECTOR



LOCAL STREET
(RESIDENTIAL)



LOCAL STREET
(COMMERCIAL)

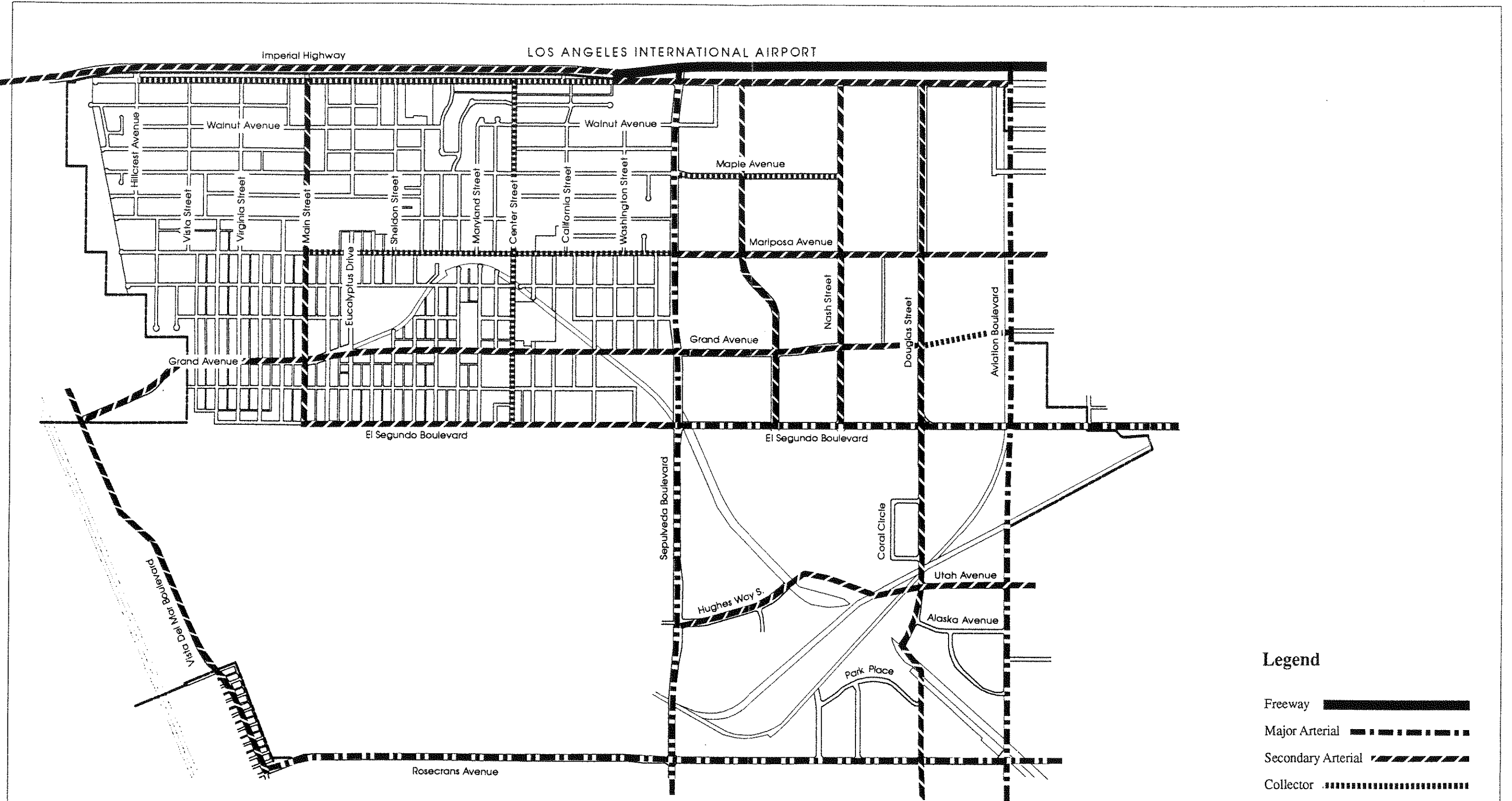
CITY OF EL SEGUNDO • GENERAL PLAN

STREET CLASSIFICATIONS AND STANDARDS
IN CURRENT CIRCULATION ELEMENT

exhibit

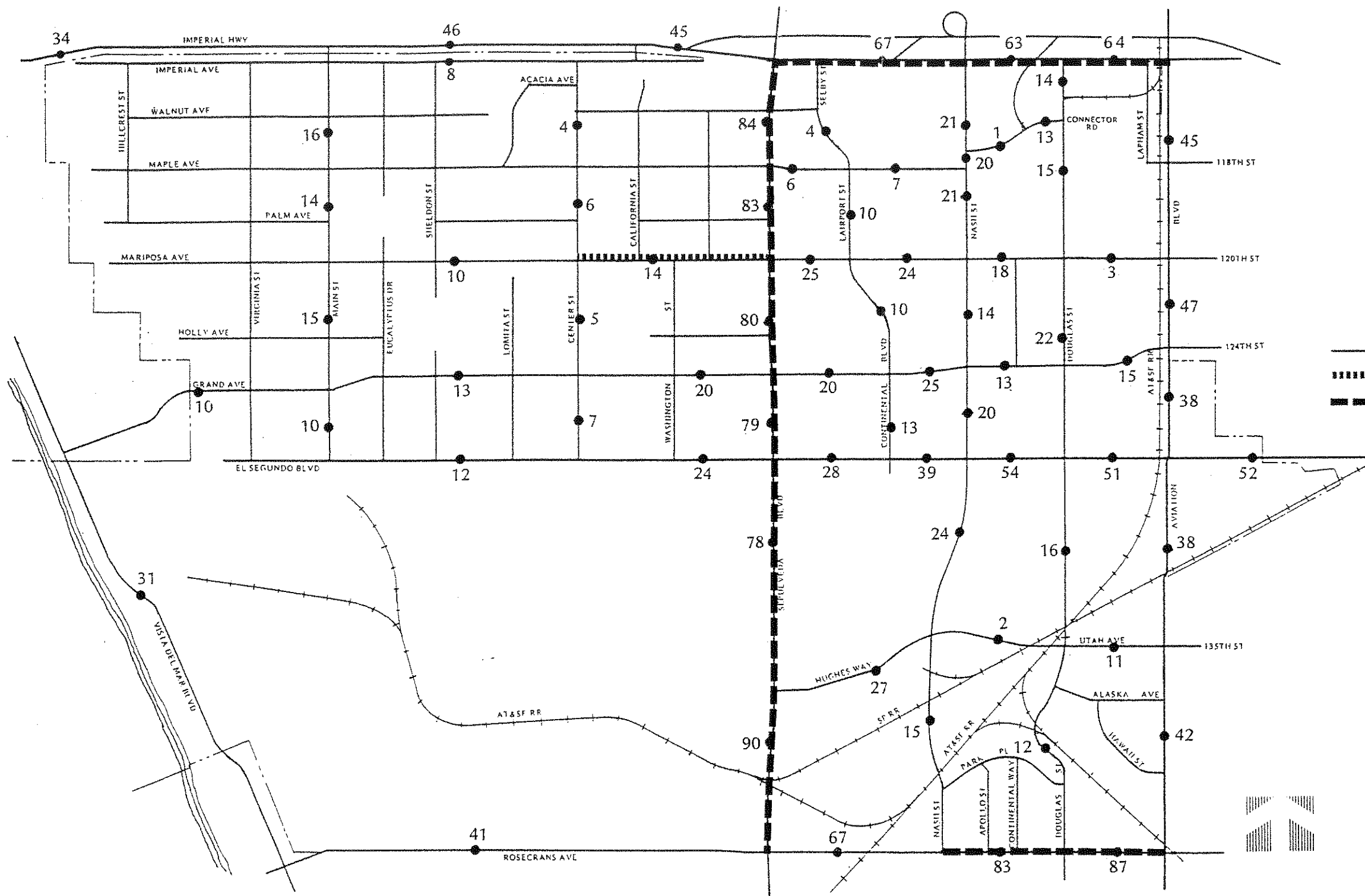
7

Current Master Plan of Streets



City of El Segundo • General Plan EIR

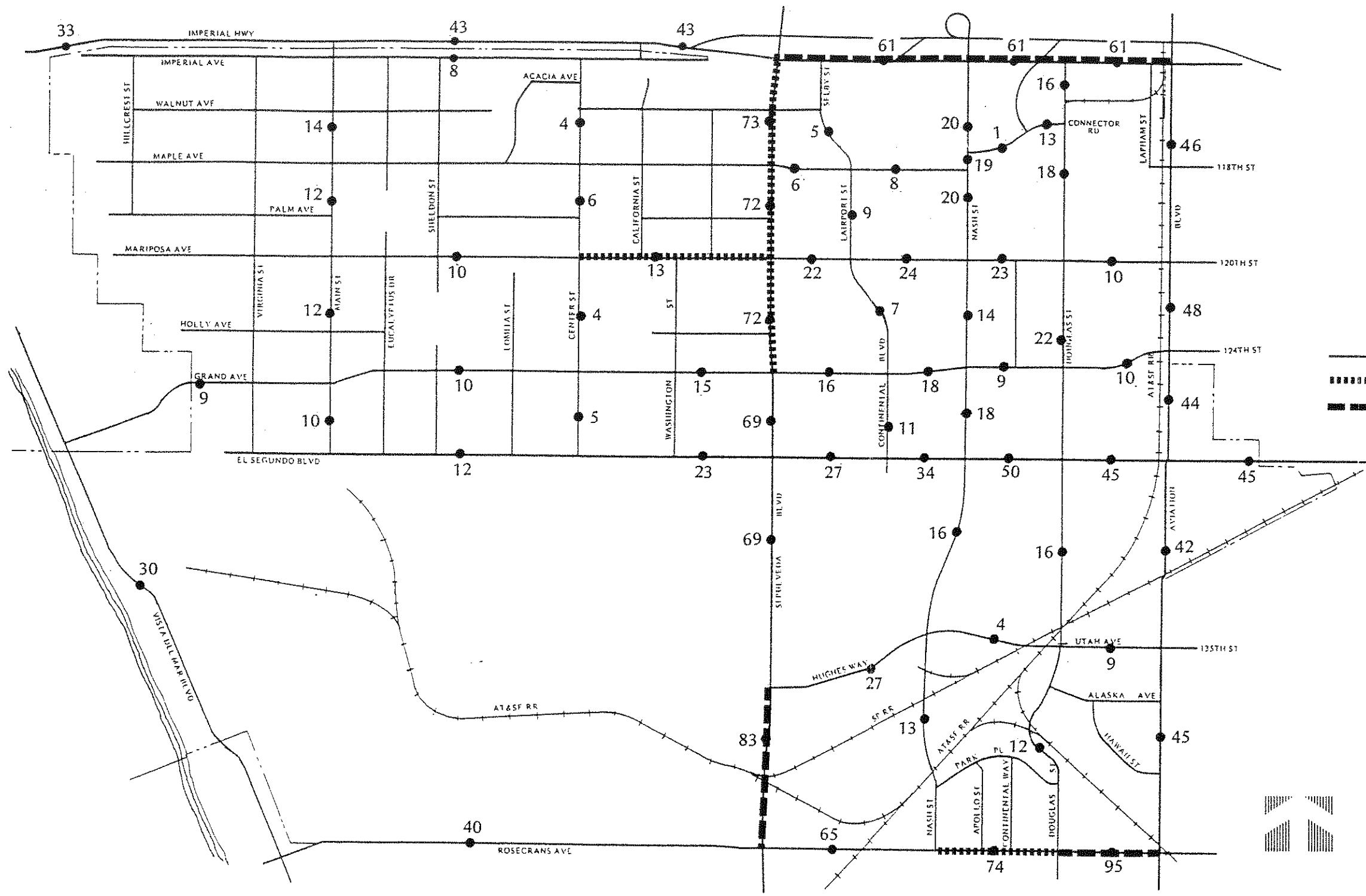
SOURCE: CITY OF EL SEGUNDO GENERAL PLAN, 1991



SOURCE: BASMACIYAN-DARNELL, INC. (1991)

CITY OF EL SEGUNDO • GENERAL PLAN

PROJECTED DAILY TRAFFIC VOLUMES AND ROADWAY ANALYSIS
CURRENT GENERAL PLAN BUILDOUT - OPTIMISTIC TRANSIT AND TDM SCENARIO



LEGEND

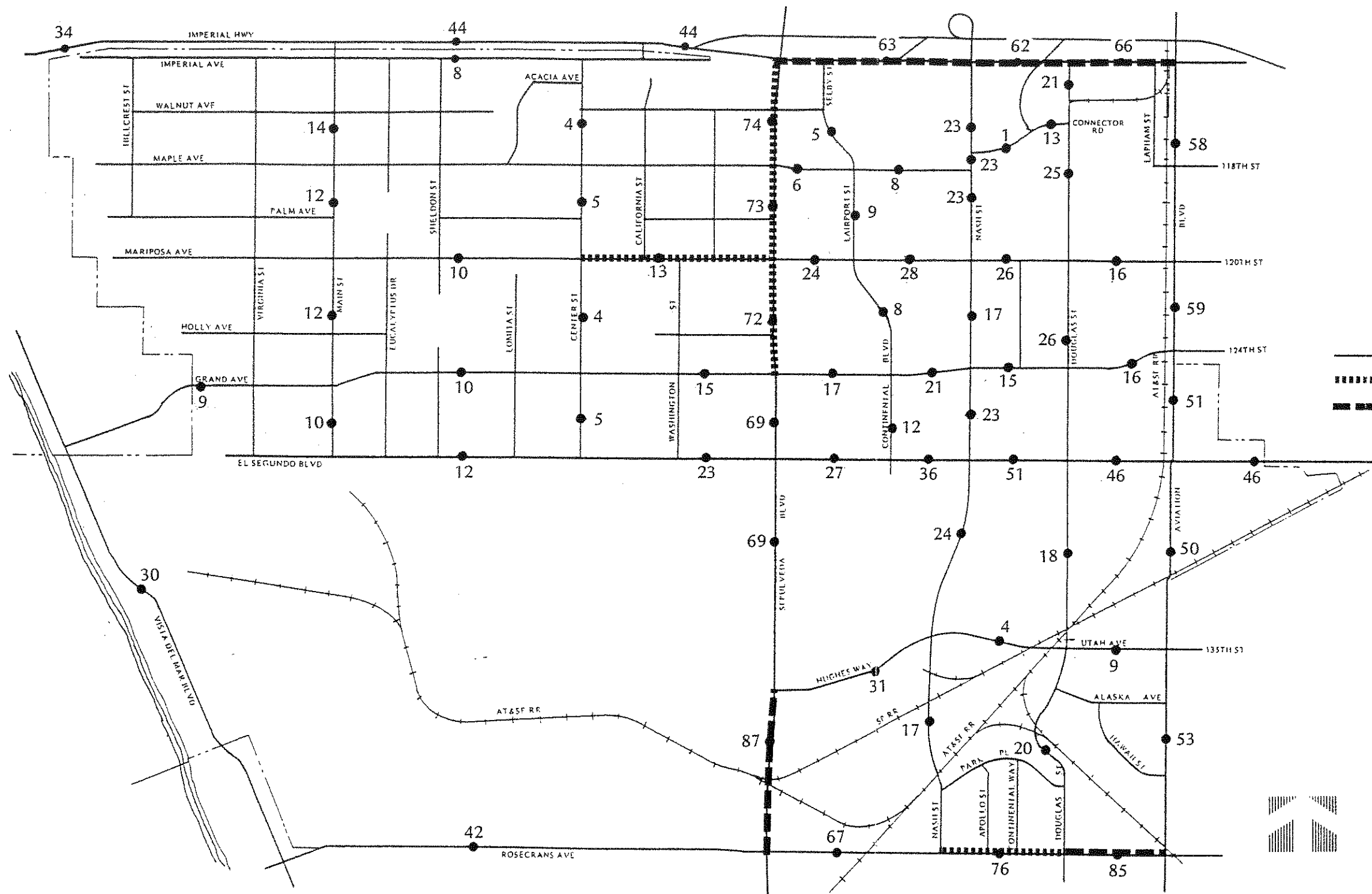
XX = PROJECTED DAILY TRAFFIC VOLUMES
(IN THOUSANDS)

———— = LOS D OR BETTER
 - - - - - = LOS E
 - - - - - = LOS F

SOURCE: BASMACIYAN-DARNELL, INC. (1991)

CITY OF EL SEGUNDO • GENERAL PLAN

PROJECTED DAILY TRAFFIC VOLUMES AND ROADWAY ANALYSIS
PREFERRED LAND USE PLAN - MIXED USE AT FAR OF .9 OPTIMISTIC TRANSIT AND TDM SCENARIO



LEGEND

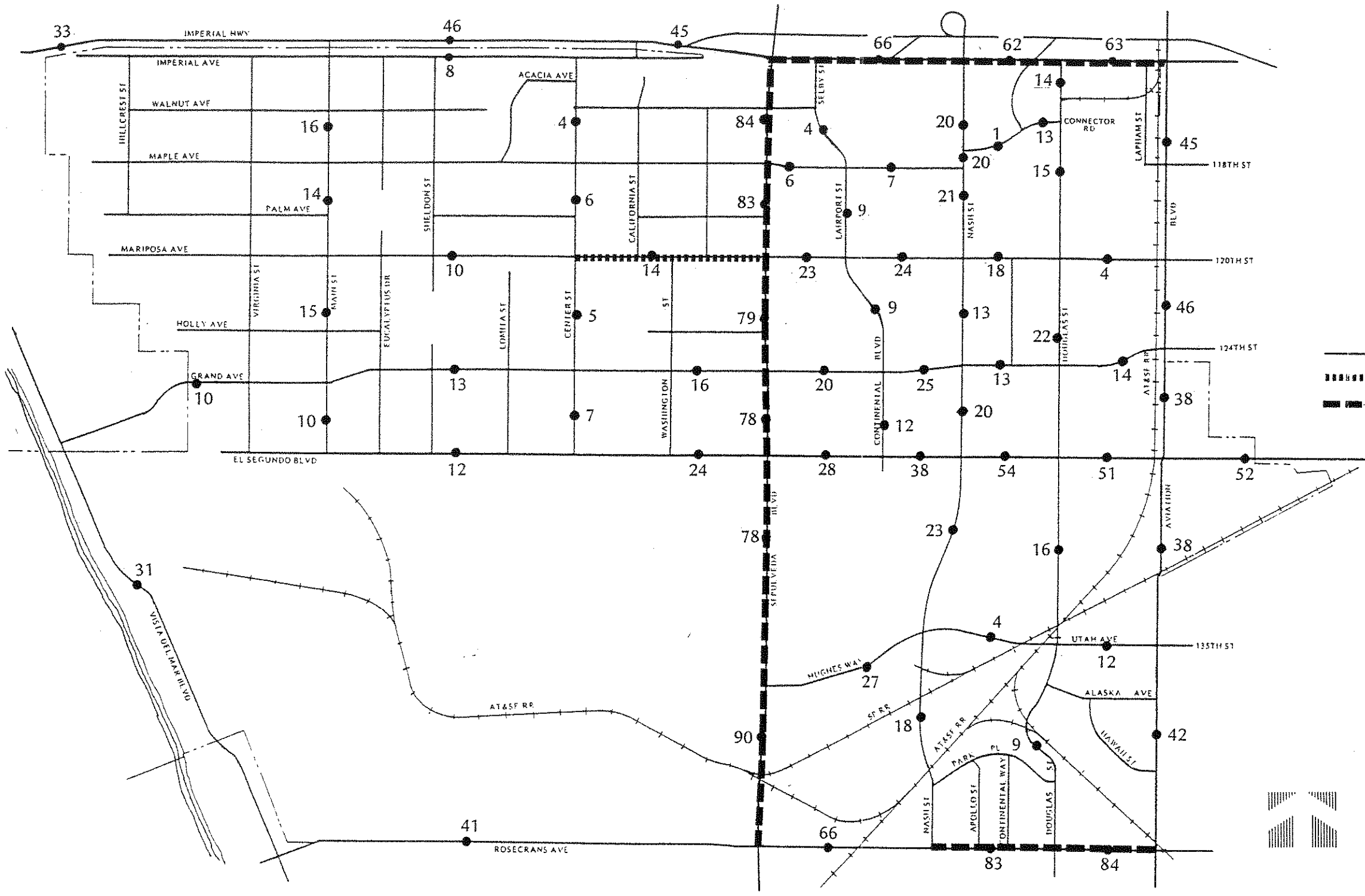
XX = PROJECTED DAILY TRAFFIC VOLUMES
(IN THOUSANDS)

———— = LOS D OR BETTER
 - - - - - = LOS E
 - - - - - = LOS F

SOURCE: BASMACIYAN-DARNELL, INC. (1991)

CITY OF EL SEGUNDO • GENERAL PLAN

PROJECTED DAILY TRAFFIC VOLUMES AND ROADWAY ANALYSIS
PREFERRED LAND USE PLAN - MIXED USE AT FAR OF 1.5 OPTIMISTIC TRANSIT AND TDM SCENARIO



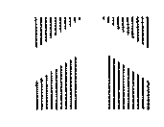
LEGEND

XX = PROJECTED DAILY TRAFFIC VOLUMES
(IN THOUSANDS)

———— = LOS D OR BETTER

----- = LOS E

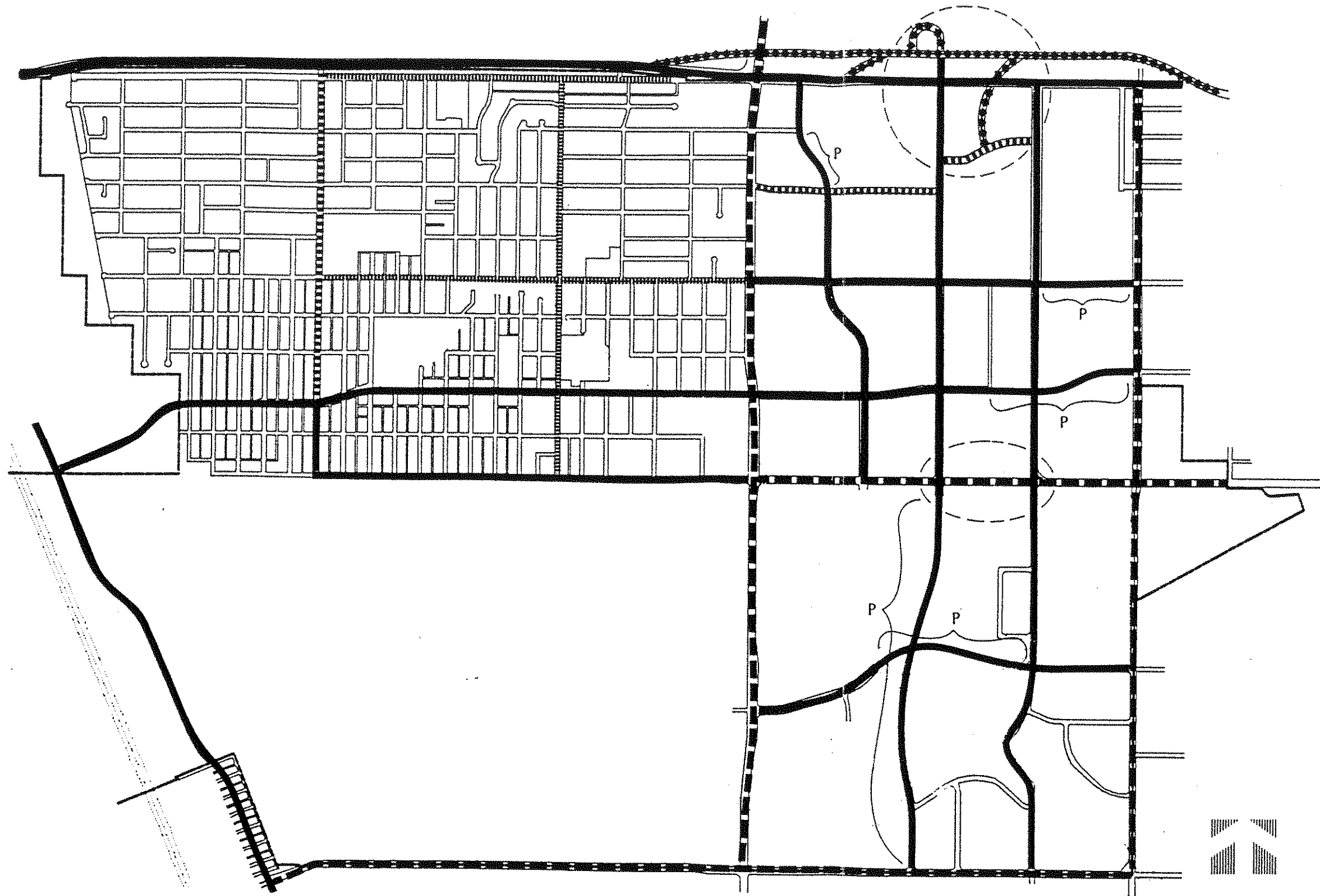
----- = LOS F



SOURCE: BASMACIYAN-DARNELL, INC. (1991)

CITY OF EL SEGUNDO • GENERAL PLAN

PROJECTED DAILY TRAFFIC VOLUMES AND ROADWAY ANALYSIS
CURRENT GENERAL PLAN BUILDOUT - OPTIMISTIC TRANSIT AND TDM SCENARIO



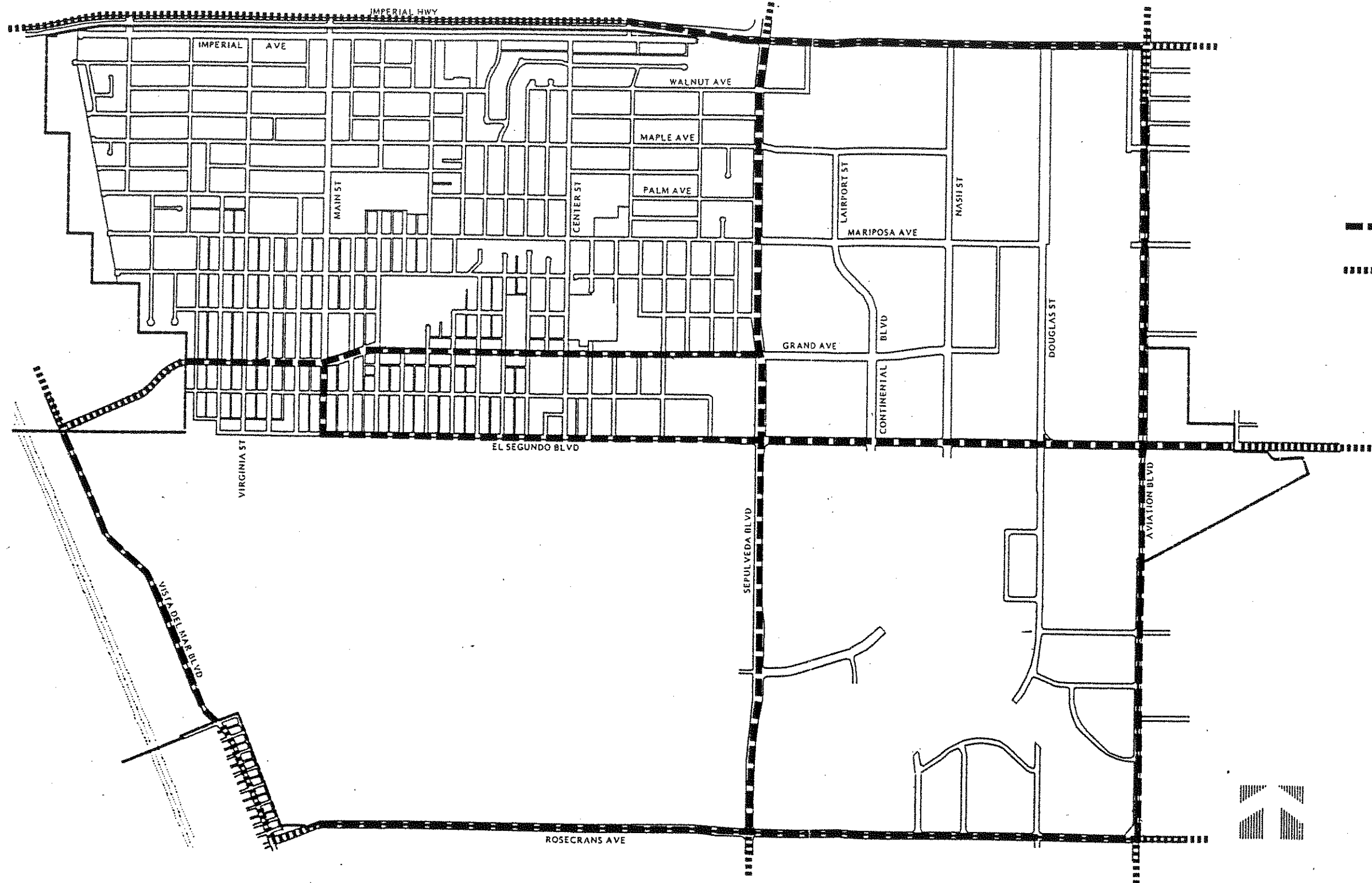
- LEGEND
- ◆◆◆◆◆◆◆◆◆◆ FREEWAY AND FREEWAY RAMPS
 - MAJOR ARTERIAL
 - SECONDARY ARTERIAL
 - - - - - 2-LANE COLLECTOR
 - 4-LANE COLLECTOR
 - LOCAL
 - TRANSITION OF ROADWAY FROM ONE-WAY TO TWO-WAY OPERATION TO BE EVALUATED
 - P PRECISE ALIGNMENT TO BE DETERMINED FOR NEW ROADWAY

SOURCE: BASMACIYAN-DARNELL, INC. (1991)

CITY OF EL SEGUNDO • GENERAL PLAN

MASTER PLAN OF STREETS

exhibit



LEGEND

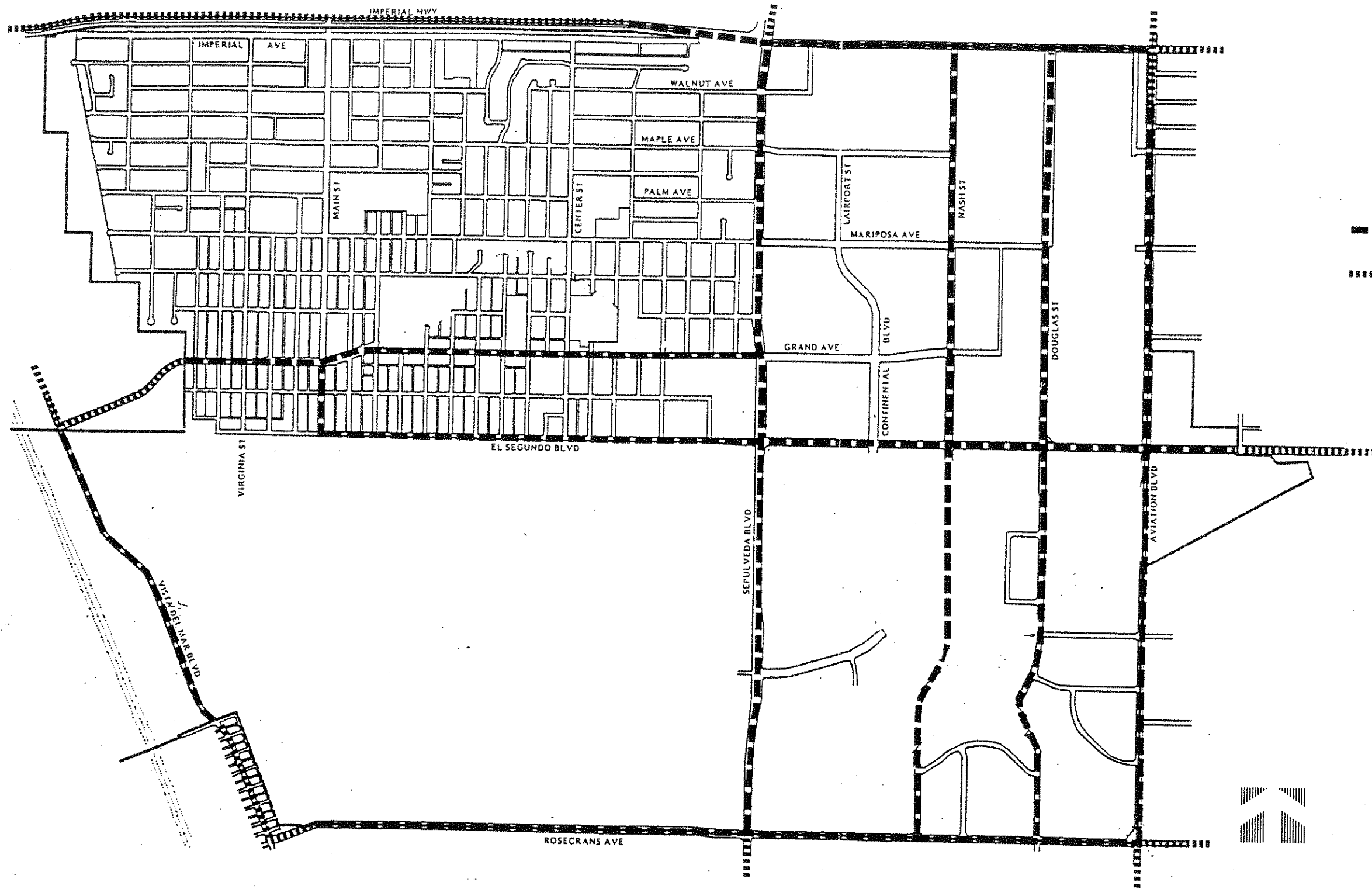
- — — — — EXISTING TRUCK ROUTES
- · · · · DESIGNATED TRUCK ROUTES IN NEIGHBORING JURISDICTIONS

SOURCE: EL SEGUNDO PUBLIC WORKS DEPARTMENT (1991)

CITY OF EL SEGUNDO • GENERAL PLAN

EXISTING TRUCK ROUTES

exhibit



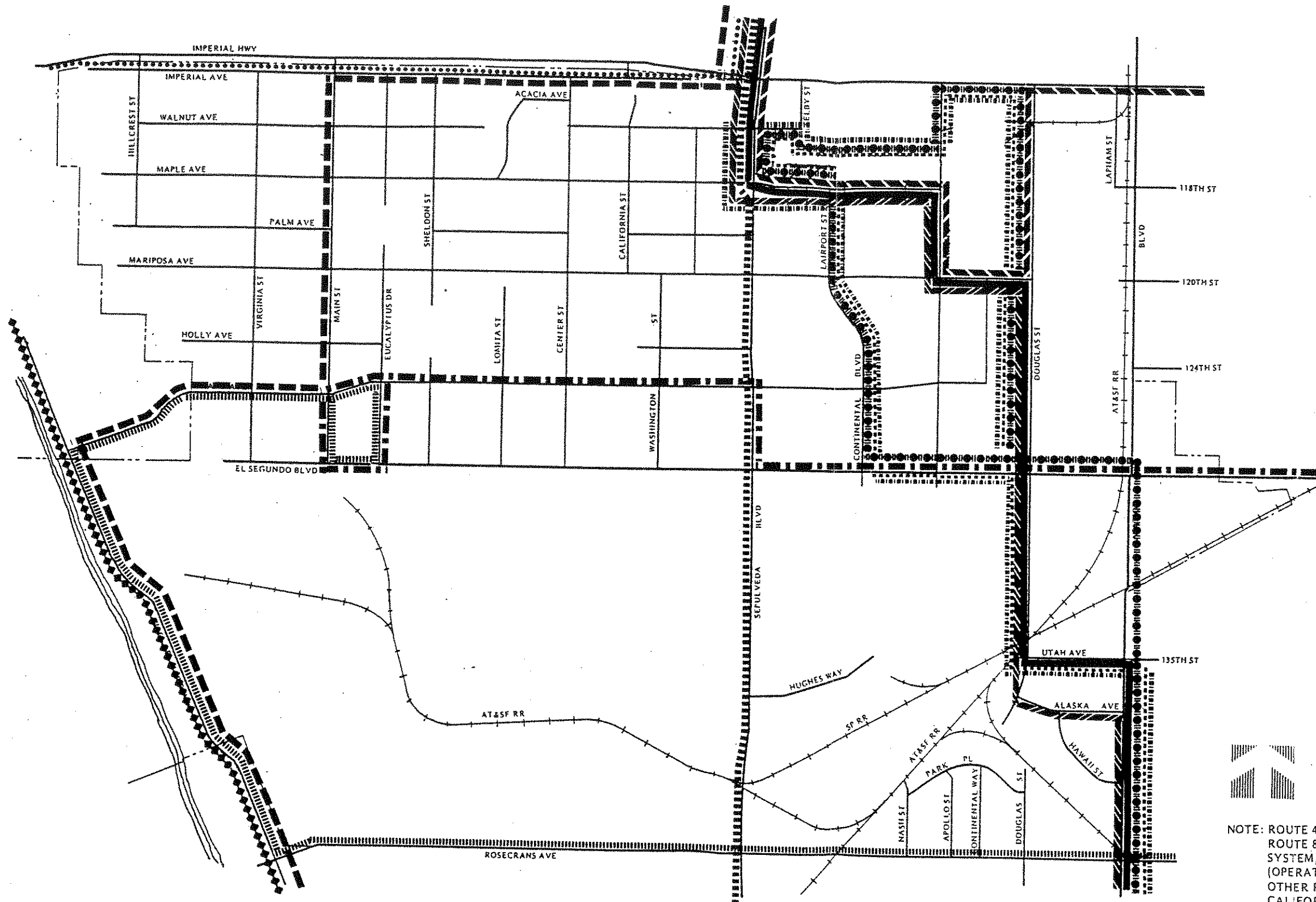
- LEGEND**
- RECOMMENDED TRUCK ROUTES
 -** DESIGNATED TRUCK ROUTES IN NEIGHBORING JURISDICTIONS

CITY OF EL SEGUNDO • GENERAL PLAN

SOURCE: BASMACIYAN-DARNELL, INC. (1991)

RECOMMENDED TRUCK ROUTES

exhibit



LEGEND

BUS ROUTE NUMBER

	120
	124
	125
	220
	225-226
	232
	438
	439
	1
	2
	3
	8

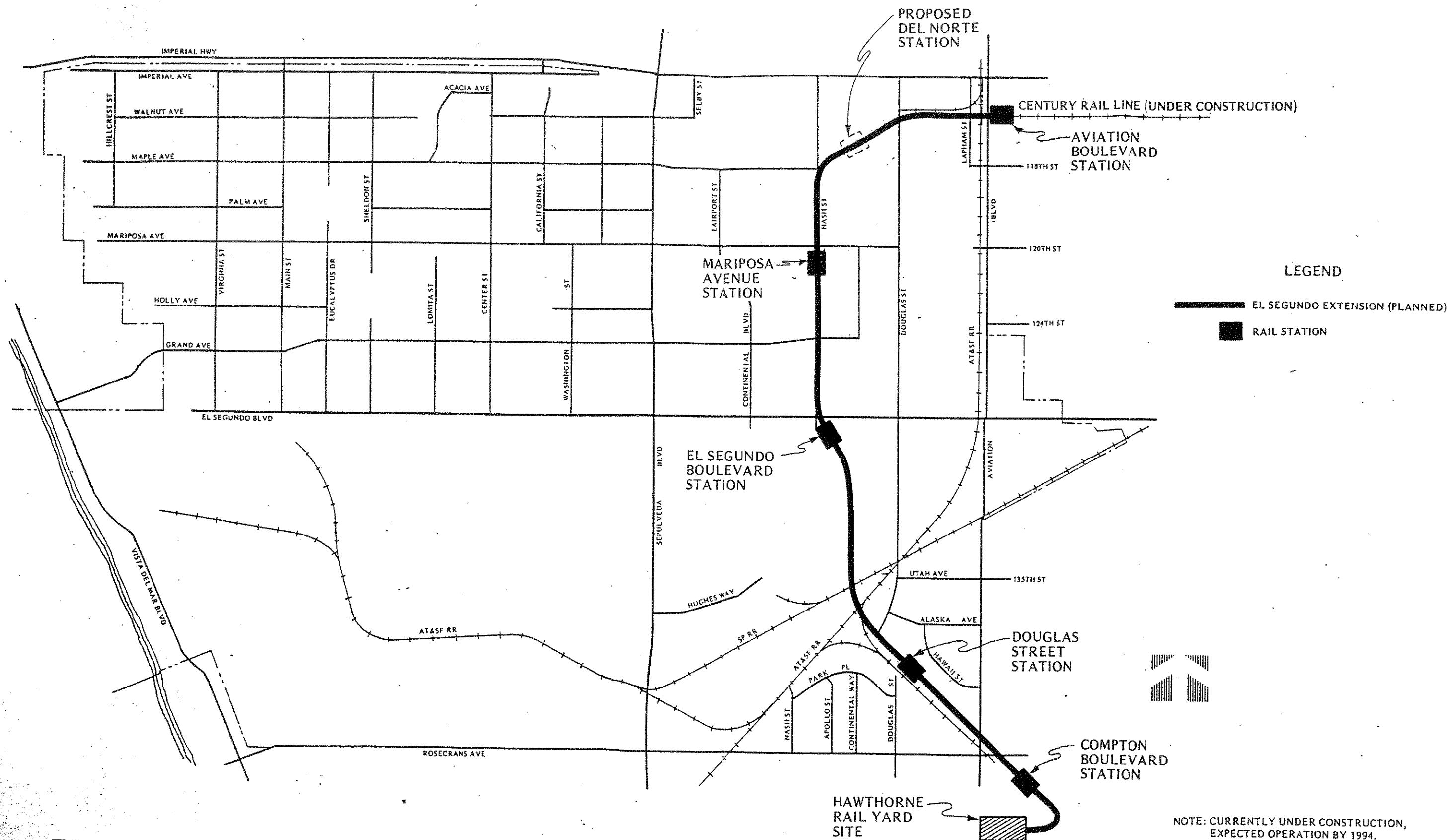
NOTE: ROUTE 438 IS A PRIVATELY OPERATED LINE, ROUTE 8 IS OPERATED BY THE TORRANCE TRANSIT SYSTEM, ROUTES 1, 2 & 3 ARE MAX TRANSIT ROUTES (OPERATED BY TORRANCE TRANSIT SYSTEM) ALL OTHER ROUTES ARE OPERATED BY THE SOUTHERN CALIFORNIA RAPID TRANSIT DISTRICT. (SCRTD)

SOURCE: ROUTE MAPS PUBLISHED BY EACH TRANSIT OPERATOR (1991)



CITY OF EL SEGUNDO • GENERAL PLAN

EXISTING TRANSIT SERVICE FIXED BUS ROUTES

exhibit



LEGEND

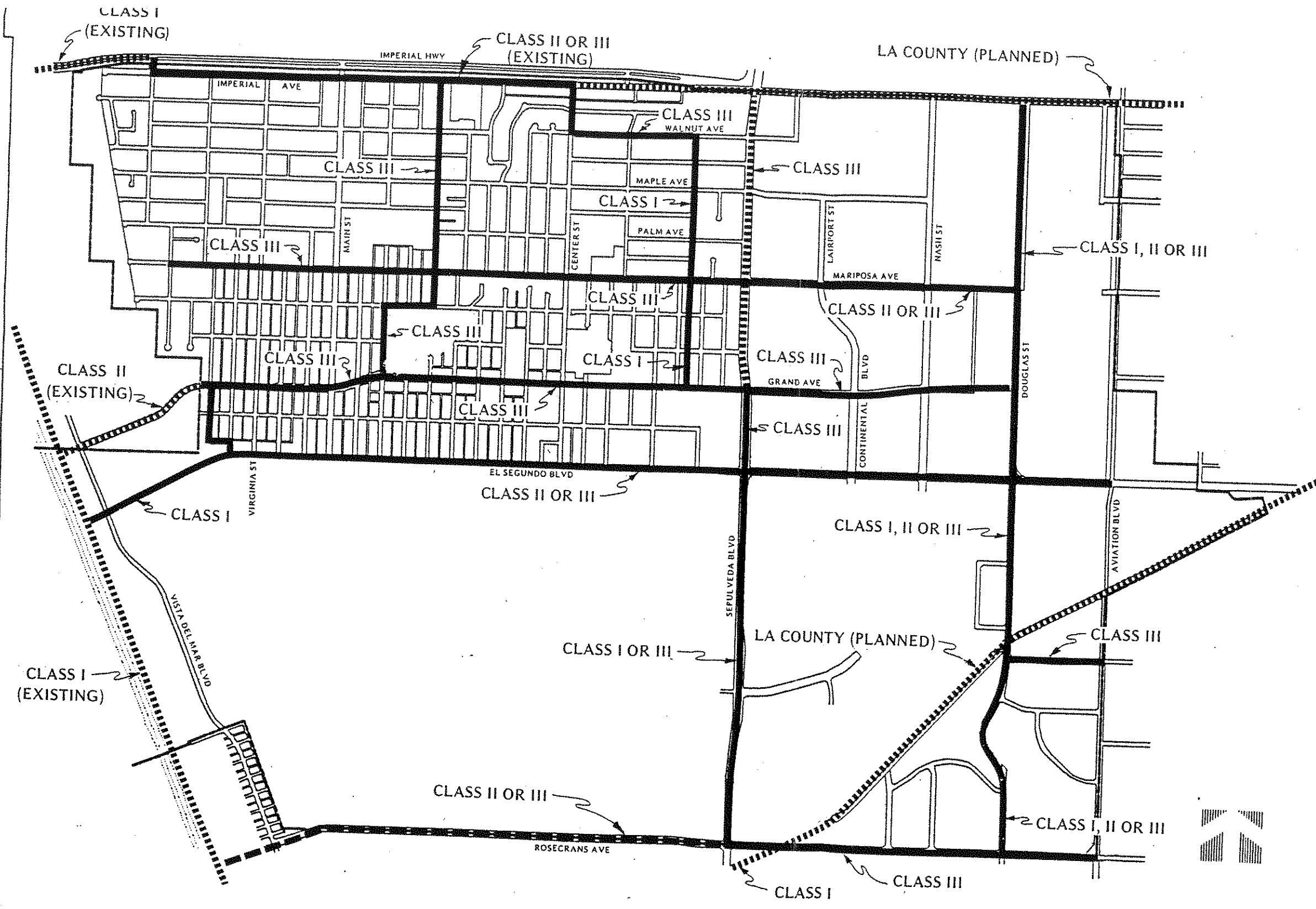
-  EL SEGUNDO EXTENSION (PLANNED)
-  RAIL STATION






NOTE: CURRENTLY UNDER CONSTRUCTION, EXPECTED OPERATION BY 1994.

CITY OF EL SEGUNDO • GENERAL PLAN

**CENTURY RAIL LINE PLANNED EXTENSION THROUGH EL SEGUNDO
ALIGNMENT AND LOCATION OF STATIONS**



LEGEND

-  EL SEGUNDO BIKE ROUTE
-  LOS ANGELES COUNTY BIKE ROUTE
-  MANHATTAN BEACH BIKE ROUTE

CLASS

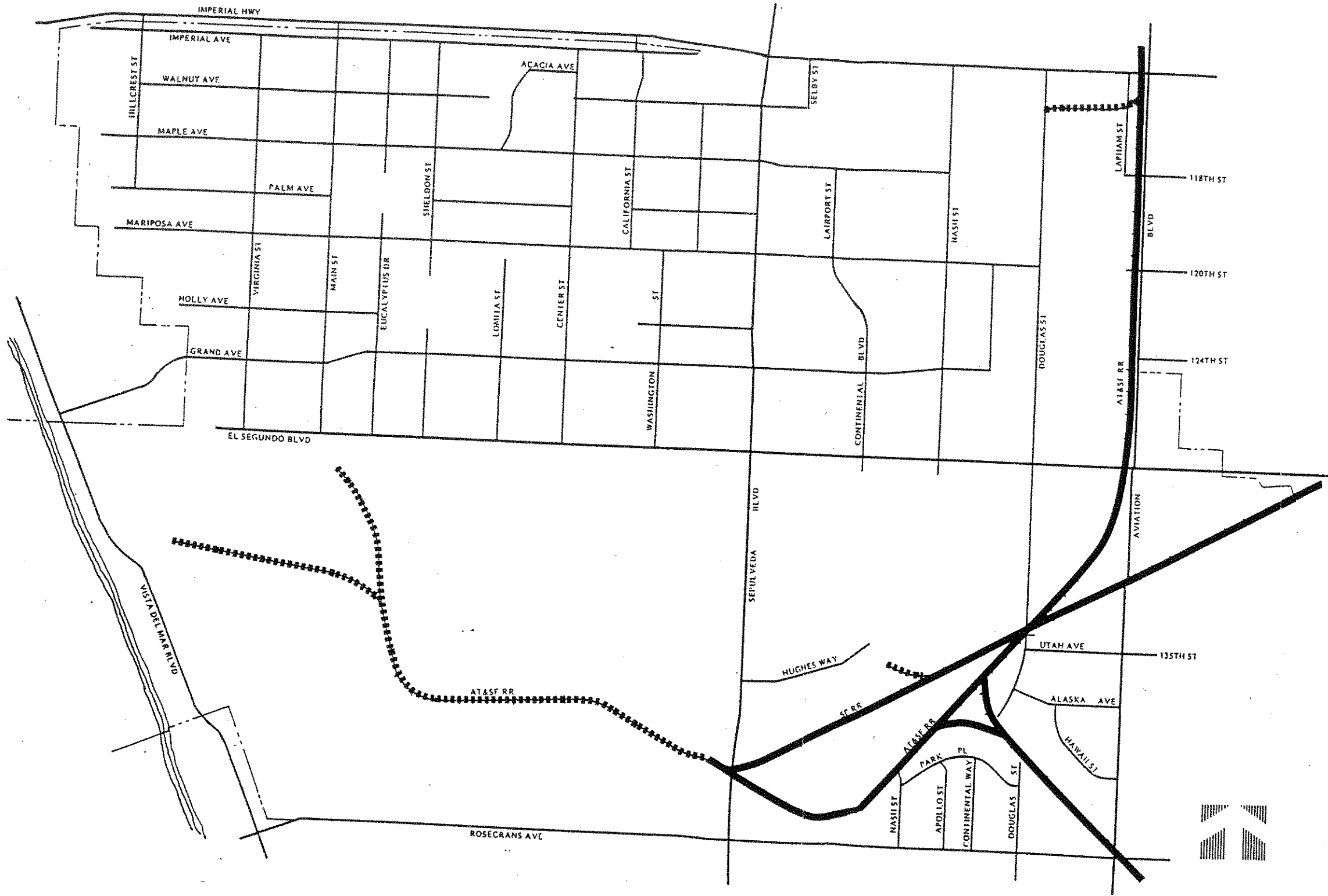
- I - BIKE PATH
- II - BIKE LANE
- III - SHARED

CITY OF EL SEGUNDO • GENERAL PLAN

SOURCE: BASMACIYAN-DARNELL, INC. (1991)

**BICYCLE MASTER PLAN
CITY OF EL SEGUNDO CIRCULATION ELEMENT**

exhibit



LEGEND
 ——— RAILROAD LINES
 - - - - - FREIGHT SPURS

CITY OF EL SEGUNDO • GENERAL PLAN

SOURCE: CITY OF EL SEGUNDO
 PUBLIC WORKS DEPARTMENT (1991)

EXISTING FREIGHT RAILROAD LINES