The following were some of the key finding from the through traffic analysis:

- In the AM peak period, 66 percent of the southbound vehicles exiting the 134 Freeway (at Orange Grove) and the 710 Freeway (at Del Mar and California) pass through the study area exiting at Fremont Avenue and Orange Grove.
- A total of 1,835 southbound vehicles pass through the study area in the peak AM one hour.
- At various locations, through traffic constitutes between 35 to 45 percent of the total southbound AM peak hour volume on Orange Grove Avenue.
- On Pasadena Avenue south of California, as much as 80-90 percent of the southbound AM peak traffic could be through trips from the 710/210 and 134 freeways destined outside the study area.
- In the PM peak period, 92 percent of the northbound vehicles entering the City on Orange Grove and Fremont, pass through the study area to get on the 710/210 and 134 freeways.
- A total of 1,856 vehicles pass through the study area in the peak PM one hour.
- At various locations, through traffic constitutes between 25 to 50 percent of the total northbound PM peak hour traffic volume on Orange Grove Boulevard.
- On Pasadena Avenue south of California, as much as 80-90 percent of the northbound traffic could be through trips destined to the 710 and 134 freeways.
- A total of over 2,100 vehicles in the AM peak period, equivalent to nearly 800 trips in the highest peak hour, connect between the 134 and 710 freeways and the Pasadena (110) Freeway.
- Over 2,000 vehicles in the PM peak period, equivalent to nearly 740 trips in the highest peak hour, exit the 110 freeway and head north, through the study area, eventually connecting with the 710 and 134 freeways.

Through Traffic East of Arroyo Parkway

A large portion of the peak hour traffic on the north-south streets in the eastern parts of the study area (east of the Arroyo Parkway) is also not generated by the residential land uses in the immediate area. Much of it is commute traffic passing through the residential areas, although not all of it would be considered through traffic for the City as a whole, since it is travelling to/from other areas of Pasadena.

Using the City's Travel Demand Model, patterns and approximate magnitude of through traffic in the eastern residential parts of the study area were identified. This area is generally south of Del Mar Boulevard and east of Arroyo Parkway. Based on the results of the model runs, estimates were developed on magnitude and patterns of through traffic through this area of the City. It should be pointed

out that through traffic is considered traffic that is not directly to and from this immediate neighborhood, but a large portion of it could be, and is, to and from other areas of Pasadena.

The following are some of the key findings from this through traffic analysis:

- Seventeen percent of the total northbound traffic entering the study area from the south on Marengo, Los Robles, El Molino and Oak Knoll travels through the study area to the 134 and 210 freeways. Similarly 17 percent of the total southbound traffic exiting the study area at the south end on Marengo, Los Robles, El Molino and Oak Knoll travels through the study area originating from the 134 and 210 freeways.

- Thirty eight percent of the total northbound traffic entering the study area from the south on Marengo, Los Robles, El Molino and Oak Knoll travels through the study area and exits north of Del Mar Boulevard. Similarly, 49 percent of the total southbound traffic exiting the study area at the south end on Marengo, Los Robles, El Molino and Oak Knoll comes from points north of Del Mar Boulevard

- The nature and patterns of through traffic on each of the main four north-south arterials on the east side of the study area (Marengo, Los Robles, El Molino and Oak Knoll) have very different characteristics. Marengo carries most of the freeway-bound through traffic. Los Robles and Oak Knoll carry mostly through traffic that is to and from other points in the City north of the study area. El Molino carries relatively very little through traffic.

It should be emphasized that these results are based on "select link" analysis using the City's travel demand model. The select link runs were validated against the license plate survey results conducted in the Orange Grove/I-710 area and a very close match was found using this technique. It should be pointed out that due to the coarseness of the model zone structure and the network, the results are aggregate in nature, and may not precisely match actual ground conditions. The through traffic percentages may tend to be slightly on the high side due to zone access configurations. However, they present a fairly close representation of patterns and general magnitude of through traffic volumes in this area.

In addition, data collected by the City of San Marino as part of its Circulation Element update indicated that during peak hours between 50 and 80 percent of the traffic on Oak Knoll, El Molino and Los Robles was through traffic passing through San Marino. This represented approximately 23,000 daily commute trips on these three streets through San Marino. As noted above, the percentages of through traffic on these same routes in Pasadena would be lower because one end of the trip is probably located in other areas in Pasadena, but to residents of these streets the traffic represents through traffic. While it may not be in the best interests of the City of Pasadena business district to attempt to divert these trips from the north-south access routes, it would be desirable to slow the traffic as it passes through residential areas and to encourage the use of alternate routes on commercial arterials.

Summary of Through Traffic in the Study Area

During the PM peak hour, the five streets which are designated by the City's Mobility Element for traffic deemphasizing (i.e. Orange Grove, Marengo, Los Robles, El Molino and Oak Knoll) plus the Pasadena/St. John couplet, at approximately mid-point through the study area near California Boulevard, collectively carry a total of over 5,000 vehicles in the northbound direction. Based on the license plate

surveys conducted on the west side and modeling analysis performed on the east side, it can be concluded that nearly 3,550 of these trips are passing through the Southwest Pasadena study area during the PM peak hour. This constitutes a large portion --over 70 percent-- of the PM peak hour northbound traffic near California Boulevard on these north-south streets. This through traffic is divided relatively equally east and west of Arroyo Parkway, at 1,700 and 1,850 vehicles per hour, respectively. The summary of estimated through traffic on various north-south streets in the Southwest study area are shown in Figure 5.

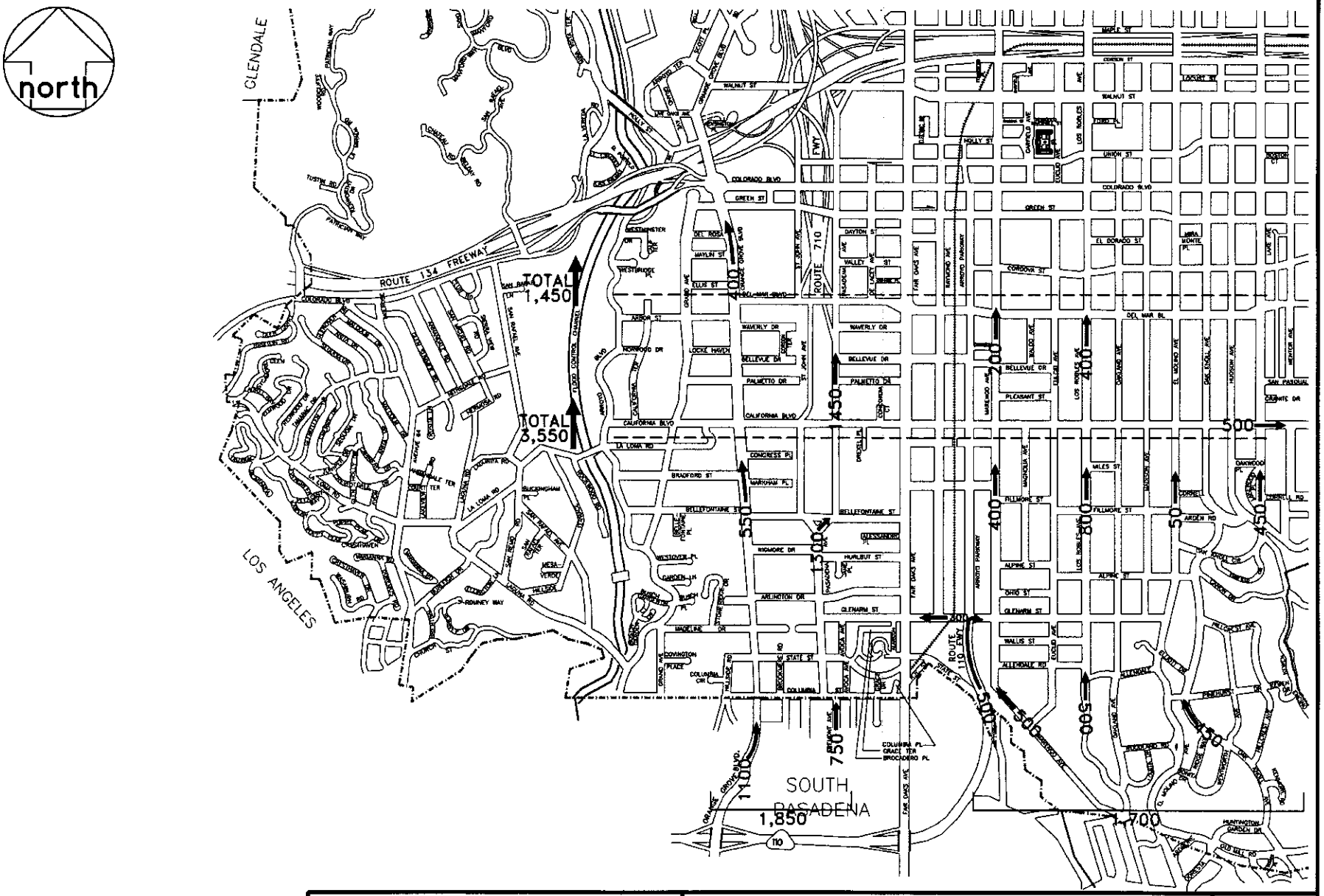
A separate critical intersection capacity analysis was conducted as part of this study on the designated north-south Mobility Corridors in the study area (i.e. Fair Oaks, Raymond and Arroyo Parkway). This analysis concluded that, even if it were possible to divert all of this through traffic to the three designated Mobility Corridors, there would not be sufficient capacity to absorb the additional traffic while still maintaining the critical intersections at acceptable levels of service. These streets collectively only have an excess capacity (intersection operation below level of service F) of just under 2,000 vehicles per hour in the northbound direction. With some intersection improvements, it may be possible to increase that capacity to a total of 2,550 vehicles per hour, which still would fall short of accommodating the additional through traffic by 1,000 vehicles per hour. Figure 6 graphically shows the local vs through traffic comparison on the north-south streets.

2.5 Other Concerns Identified by the Public

Comments from the various groups and citizens concerned with traffic conditions in the Southwestern Pasadena area were summarized to provide a picture of the issues which were relevant to this neighborhood traffic study. The comments can generally be grouped into the following concerns: through traffic incursion into the residential neighborhoods, a need to de-emphasize certain streets, excessive speeds, the need for truck prohibitions and the need to install/modify traffic control devices at various locations.

Of the five issues, the presence of through traffic in the neighborhood appeared to be the primary concern among the citizens and an impetus to other concerns. Actual through traffic problems were discussed in more detail in previous sections of this memo. Comments related to de-emphasizing streets and installing/modifying traffic control devices generally were raised by citizens concerned with the through traffic, who have also made suggestions on ways to mitigate the situation. Streets which have been identified by the citizens as needing de-emphasizing include the following:

- Orange Grove Boulevard between Colorado Boulevard and the south City boundary
- St. John Avenue between Colorado Boulevard and the south City boundary
- Pasadena Avenue between Colorado Boulevard and the south City boundary
- Marengo Avenue between Del Mar Boulevard and the south City boundary
- Los Robles Avenue between Del Mar Boulevard and the south City boundary
- El Molino Avenue between Colorado Boulevard and Arden Road
- Oak Knoll Avenue between Colorado Boulevard and Arden Road
- La Loma Road between the west City boundary and San Rafael Avenue



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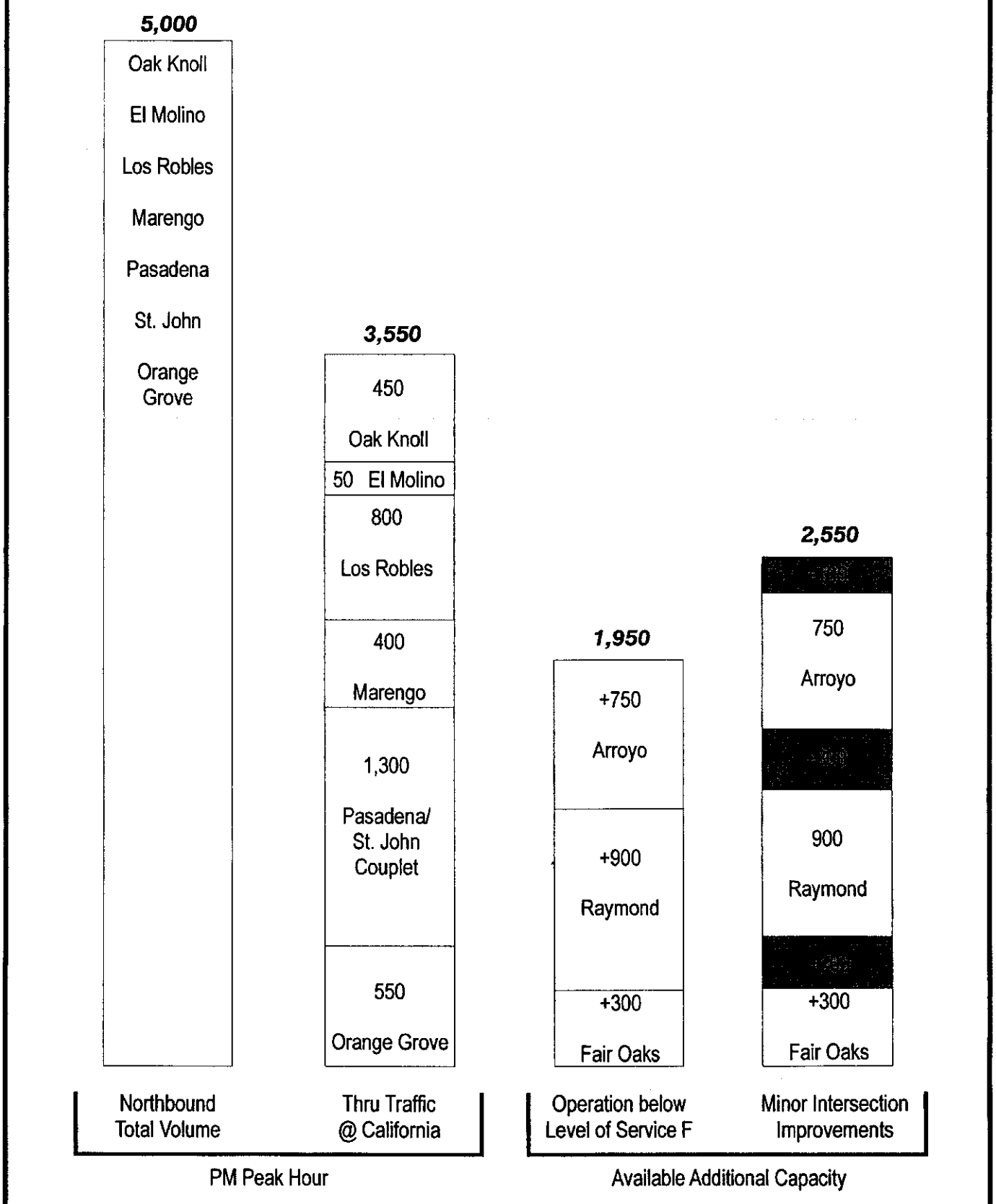
Summary of Estimated Through Traffic
Southwest Pasadena Traffic Study

FIGURE **5**

FIGURE5.DWG 12-31-96



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Comparison of Volumes and Through Traffic
Southwest Pasadena Traffic Study

FIGURE 6

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Excessive speeds appear to be the second most important issue of concern for the citizens. Radar speed survey data and posted speed limit information compiled for selected streets were discussed in detail in the spot speed survey section of this technical memorandum. The streets where excessive vehicular speed have been noted as a concern by the citizens are summarized below:

- Avenue 64 between Colorado Boulevard and the south City boundary
- Orange Grove Boulevard between Colorado Boulevard and the south City boundary
- Los Robles Avenue between Del Mar Boulevard and the south City boundary
- Oak Knoll Circle between El Molino Avenue and Arden Road

Truck prohibitions were suggested on various street segments in the neighborhood. The following is a list of the locations suggested by citizens:

- La Loma Road between the west City boundary to the bridge spanning the flood control channel
- San Rafael Avenue between La Loma Road and Laguna Road
- Los Robles Avenue between Del Mar Boulevard and Glenarm Street

An ordinance was presented to the City Council and approved in October 1996 to take the above streets out of the truck route system.

3.0 IDENTIFIED ALTERNATIVE IMPROVEMENT/TRAFFIC CONTROL MEASURES

3.1 Alternatives Considered

During the two years of the Southwest Pasadena Traffic Study, many individual alternatives and composite packages of alternatives were considered, pros and cons of each strategy were identified. The measures were evaluated for effectiveness individually or as part of packages using the City travel demand model and other analyses. Results were presented to the Ad Hoc Committee for consideration and were modified and re-tested as appropriate. Details of these intermediate steps are included in the Technical Appendix to this report, which includes all of the technical memoranda presented to the Ad Hoc Committee. At the end of this process, the Ad Hoc Committee developed a recommended list of improvements designated as Plan A which basic component of which is to divert traffic from Orange Grove Boulevard, Pasadena, St, John, Marengo, Los Robles and Oak Knoll Avenues to the mobility corridors using a series of diverters and turn restrictions. The mobility corridors were identified in the General Plan as Fair Oaks Avenue, Raymond Avenue and Arroyo Parkway, Diverting significant volumes of traffic from Pasadena and St. John Avenues would require a General Plan Amendment. Plan A was presented to the community. The majority of citizens in the Oak Knoll Avenue area did not agree with the plan in concept because the analysis indicated that the implementation of the plan would move traffic from streets that have historically carried large volumes of traffic to streets that have not. Oak Knoll Avenue under Plan A would see a large reduction in traffic and streets such as Old Mill Road, Alpine Street, and others would see a substantial increase in traffic. This shifting of traffic through the use of diverters has the effect of moving the traffic problem from one street to another.

As a result of the Oak Knoll residents concerns, staff developed alternatives to the use of diverters and turn restrictions as central control strategies. Plan B was developed with the basic components of calming traffic on residential collectors and facilitating mobility corridors without major volume shifts.

Plan B seeks to divert traffic from Orange Grove Boulevard, Marengo, Los Robles and Oak Knoll Avenues to Fair Oaks Avenue, Arroyo Parkway and Raymond Avenue. Plan B concentrates on a reduction of traffic speed with a diversion of traffic onto the mobility corridors. Traffic would be calmed through the use of chokers, restricted turn movements, stop signs, traffic signals and speed humps,

A new series of community meetings were held to present both Plan A and Plan B of the Southwest Traffic Study to the residents in the study area and to receive community input. Outlines of Plan A and Plan B are presented in the following sections.

3.2 Summary of Plans

PLAN A

Basic Component: Divert Traffic from 710 Freeway, Pasadena Ave., St. John Ave., Marengo Ave., Los Robles Ave., and Oak Knoll Ave. to Mobility Corridors.

- Signage program to direct regional traffic to Arroyo Parkway, Raymond Avenue and Fair Oaks Avenue.
- De-emphasize Orange Grove Boulevard (4 lanes to 2 lanes).
- Speed reduction measures on Avenue 64, La Loma and Arroyo Boulevard.
- Restrict westbound traffic from 710 freeway (stub) to Del Mar Boulevard and California Boulevard.
- Signal modifications to discourage north/south and facilitate east/west travel to the mobility corridor (Arroyo, Raymond & Fair Oaks).
  - Lake Avenue at California Boulevard
  - Los Robles Avenue at Cordova Street
  - Los Robles Avenue at Del Mar Boulevard
  - Marengo Avenue at Cordova Street
  - Marengo Avenue at Del Mar Boulevard
- Divert traffic from Marengo, Los Robles, El Molino and Oak Knoll Avenues (through the use of restricted turn movements, raised channelization islands, diverter islands, stop signs, traffic signals, and speed humps) to other north/south streets.
- Divert traffic from Pasadena and St. John Avenues (convert to two-way residential streets with T-intersections at Bellefontaine Street) to other north/ south streets.

PLAN B

Basic Component: Calm Traffic on Residential Collectors and Facilitate Mobility Corridors.

- Signage program to direct regional traffic to Arroyo Parkway, Raymond Avenue and Fair Oaks Avenue.
- De-emphasize Orange Grove Boulevard (4 lanes to 2 lanes).
- Speed reduction measures on Avenue 64, La Loma Road and Arroyo Boulevard.
- Restrict westbound traffic from 710 freeway (stub) at Del Mar Boulevard and California Boulevard.
- Signal modifications to discourage north/south travel and facilitate east/west travel to the mobility corridor (Arroyo, Raymond & Fair Oaks).
  - Lake Avenue at California Boulevard
  - Los Robles Avenue at Cordova Street
  - Los Robles Avenue at Del Mar Street
  - Marengo Avenue at Cordova Street

- Marengo Avenue at Del Mar Boulevard

- Calm traffic on Marengo, Los Robles, El Molino and Oak Knoll Avenues (through the use of chokers, restricted turn movements, stop signs, traffic signals and speed humps).

- Facilitate traffic movement to the mobility corridors by increasing capacity of Green and Columbia Streets.

3.3 Disadvantages of the Specific Elements of Plan A

Accessibility to Businesses & Community Sites

- Presents potential economic impacts to the business community
- Restricts access to businesses in Old Pasadena & South Lake
- Impacts access to prime commercial property in West Gateway area
- Impacts user access to the Rose Bowl / Brookside Park / Aquatics Center
- Potentially impacts all development projects in the City
- Creates circuitous routes for local trips as well as through trips

Shifting Traffic Volumes

- Will shift traffic from streets that have historically carried large volumes of traffic to some streets that have not, such as:
  - Allendale
  - Alpine
  - Arroyo Blvd
  - Fillmore
  - Grand
  - Oakland
  - Old Mill Road

- Diverts the North-South traffic volumes onto East-West streets that will not be able to accommodate the additional volumes
- Moves traffic from the state and regional highway system to our local street system
- Creates a major intrusion of through traffic into residential neighborhoods
- Impacts the Light Rail crossing since significant volumes of traffic will be E/W
- Creates impacts (congestion and delay) to the mobility corridor (Arroyo / Fair Oaks)

Services to the Community

- Affects 9 transit lines (rerouting & rescheduling would be required)
- Causes a major impact on emergency services and their response time
- Creates congestion in the vicinity of the Del Mar Transit Center
- Affects general services to the residents / business community

Restrictions on Implementation

- Violates a law - can only close a street if necessary to implement the City's circulation element and if the street is not part of a regionally significant road network
- Changes to the CMP Network (Pasadena / St. John) are not allowed
- Would require an amendment to the Land Use and Mobility Element of the General Plan (ruling from Planning)
- Would require environmental clearance due to potential significant negative impacts (ruling from Planning)
- Would require Caltrans approval
- Not technically or economically feasible based on review of available capacity on the mobility corridors
- Not possible to implement within the short term time frame of this project
- Very expensive

Impacts Beyond Pasadena

- Proposes a major change to the character of a state highway
- Impacts go beyond the study / city boundary

4.0 RECOMMENDED PLAN

Based on all of the information received, the project team developed a series of recommended actions to provide traffic management/ improvements in the Southwest study area. These recommendations are similar to Plan B with many adjustments to address specific items raised during the various community meetings. The proposed recommendations are as follows:

- Recommendation 1: Traffic calming measures in the Southwest Traffic Study area
- Recommendation 2: Facilitating Traffic on Mobility Corridors
- Recommendation 3: St. John Avenue/Pasadena Avenue Corridor Improvements

The three sets of recommendations were analyzed in order to determine the potential impacts of the proposed actions, The analysis showed moderate levels of traffic being moved from the residential areas onto the mobility corridors. These proposed improvements conform with the guidelines set forth in the City's General Plan Mobility Element and therefore do not require any amendments to the document. The proposed traffic management plan is shown in Figure 7. The effects of the proposed traffic management plans were analyzed using the City's travel demand model. Figure 8 summarizes the results of this analysis showing the potential increase or decrease of traffic volumes on the study area's streets as a result of the implementation of the plan.

4.1 Traffic Calming Measures

This group of recommendations include a large list of proposed traffic improvements to reduce or mitigate the adverse impacts of through traffic on the residential street system, This list of proposed actions include those that were widely accepted at the community meetings. These traffic calming strategies include the potential installation of speed humps, chokers, pavement markings, traffic control devices, and signal improvements to slow traffic on local residential streets. These proposed traffic calming techniques will cause some traffic congestion and may result in through traffic seeking alternative routes. It is proposed that series of directional signs be installed to guide motorists to the mobility corridors,

ARLINGTON DRIVE:

- Candidate for speed humps between Pasadena Avenue and Fair Oaks Avenue

ARROYO BOULEVARD:

- Install double yellow centerline with raised pavement markers from Arroyo Drive to South City Limit

AVENUE 64:

- Stripe parking lane (4" white) along entire length
- at Melrose Avenue: All way STOP with raised channelization at intersections
- at Nithsdale Road: Flashing school crossing signal and zebra stripe crosswalk

- at La Loma Road: Signal Modifications
  - Step 1: All red flash operation 12 a.m. - 5 a.m. and operate signal on fixed time during the day
  - Step 2: Fully actuate traffic signal to allow rest in red operation 12 a.m. - 5 a.m.
- at Burleigh Drive: Paint median islands on Burleigh to channelize the intersection for pedestrian safety.

COLORADO BOULEVARD:

- Melrose Avenue: Install additional red curb west of Melrose to increase sight distance

EL MOLINO AVENUE:

- Change signal timing at California Boulevard to shorten north/south green time
- at California Boulevard: Install southbound far side intersection choker

GLENARM STREET:

- at Los Robles Avenue: Install eastbound far side intersection choker

LA LOMA ROAD:

- at Laguna Road: Install all-way STOP
- Reroute buses from La Loma Road to Colorado Boulevard
- Install edgeline (4" white) from San Rafael Avenue to Sycamore Glen

LAGUNA ROAD:

- Candidate for speed humps between La Loma Road and Lagunita Drive

LAKE AVENUE:

- at California Boulevard: Install southbound far side choker
- at Arden Road/Hudson Avenue: Install all-way STOP and reconfigure intersection

LOS ROBLES AVENUE:

- at Allendale Road (north): Install all-way STOP with crosswalk
- at California Boulevard: Fully actuate traffic signals to allow rest in red operation and change the signal timing such that more time is allocated for east/west traffic and penalties for north/south travel.
- at California Boulevard: -Install northbound and southbound far side chokers
- at Del Mar Boulevard: Install southbound far side choker
- at Glenarrn Street: Install northbound far side choker
- at Glenarm Street: All red flash operation 12 a.m. - 5 a.m. and change the signal timing such that more time is allocated for east/west traffic and penalties for north/south travel.

MADISON AVENUE:

- Candidate for speed humps between Del Mar Boulevard and California Boulevard
- Candidate for speed humps between California Boulevard and Fillmore Street
- Candidate for speed humps between Fillmore Street and Alpine Street

MARENGO AVENUE:

- at Allendale Road: Install all-way STOP with crosswalk
- at California Boulevard: Fully actuate traffic signals to allow rest in red operation and change the signal timing such that more time is allocated for east/west **traffic** and penalties for north/south travel.
- at California Boulevard: Install northbound and southbound far side chokers at Del Mar Boulevard: Install southbound far side choker at Glenarm Street: Install northbound far side choker at Glenarm Street: All red flash operation 12 a.m. - 5 a.m. and change the signal timing such that more time is allocated for east/west traffic and penalties for north/south travel.

OAK KNOLL AVENUE:

- Candidate for speed humps between Del Mar Boulevard and California Boulevard
- Candidate for speed humps between California Boulevard and Cornell Road
- at Hillcrest Avenue (south): Install all-way STOP w/crosswalk
- at Hillcrest Avenue (north): Install all-way STOP w/crosswalk
- at Pinehurst Drive: Install all-way STOP w/crosswalk
- Install edgeline (4" white) between Alpine Street and Old Mill Road

ORANGE GROVE BOULEVARD:

- at Green Street: Install dual left-turns southbound
- Reduce signal progression speed to 35 MPH
- Signal modifications
  - Step 1: All red flash operation 12 a.m. - 5 a.m.
  - Step 2: Fully actuate traffic signals to allow rest in red operation 12 a.m. - 5 AM

STATE STREET:

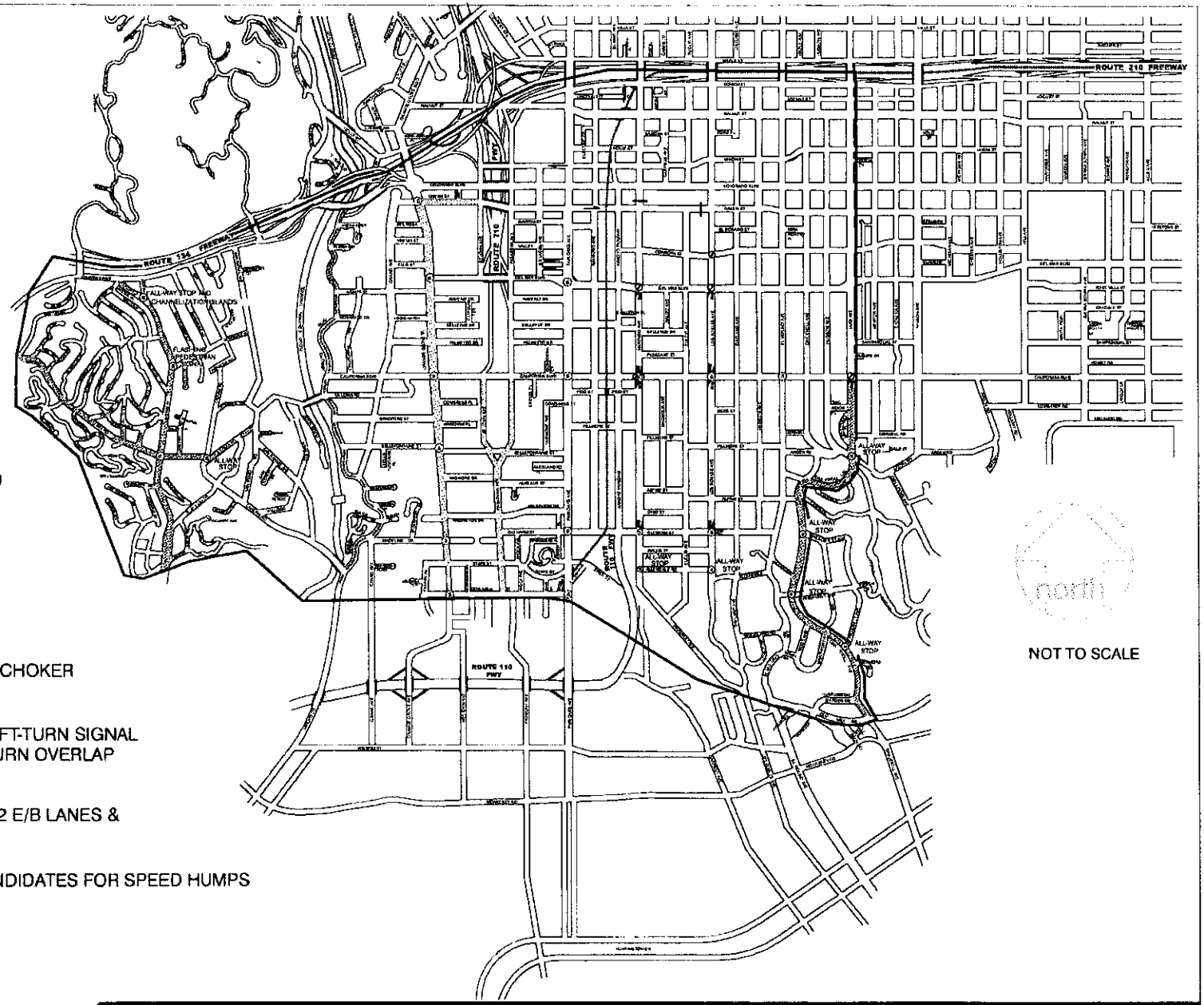
- Candidate for speed humps between Avoca Avenue and Fair Oaks Avenue

WENTWORTH AVENUE:

- Candidate for speed humps between Oak Knoll Avenue and Ridge Way

GENERAL IMPROVEMENT:

- Median island treatment will be installed on streets with two-way left turn-lanes, where appropriate, to deter illegal through travel.



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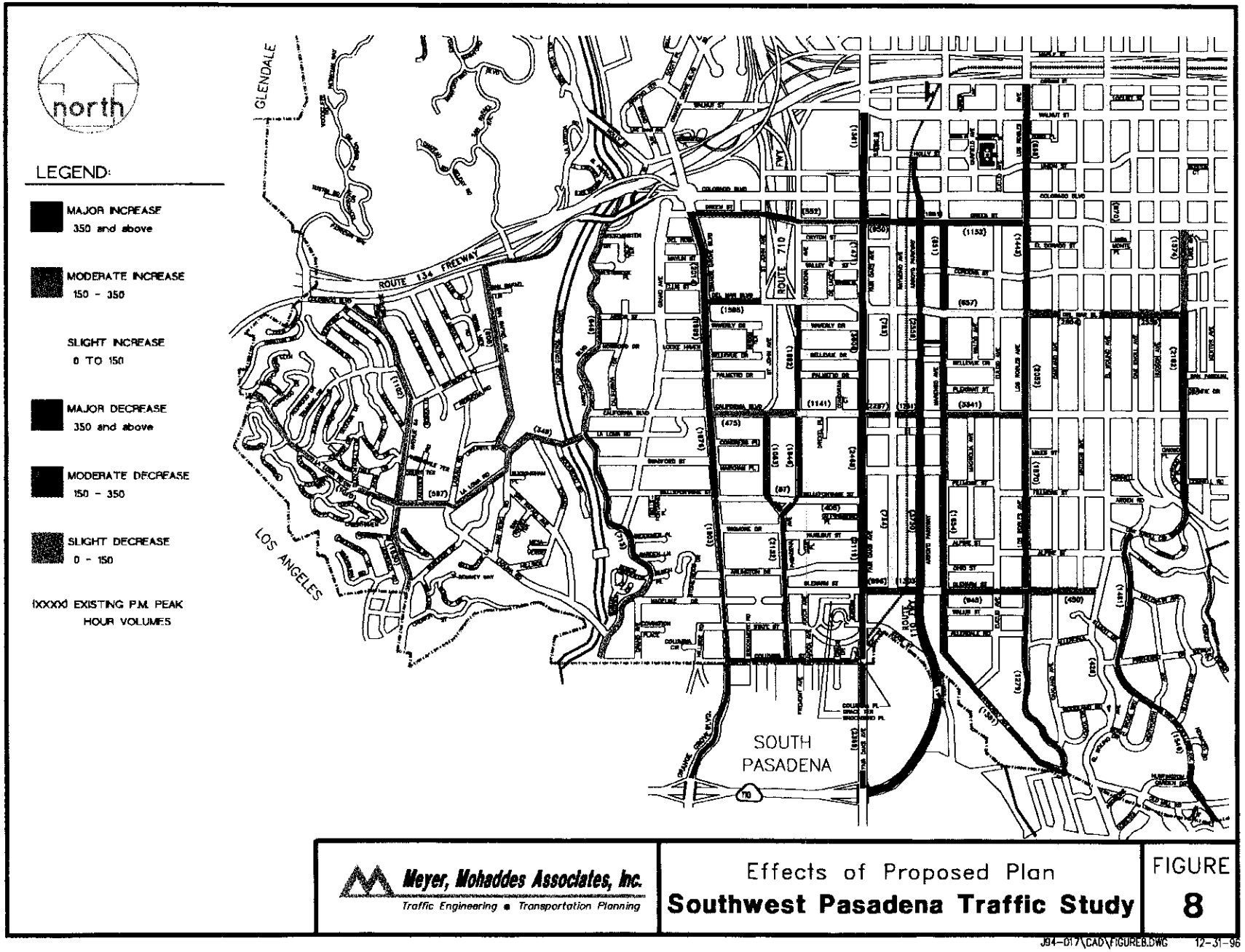
Proposed Traffic Mitigation Plan
Southwest Pasadena Traffic Study

FIGURE
7


north
LEGEND:
MAJOR INCREASE
350 and above
MODERATE INCREASE
150 - 350
SLIGHT INCREASE
0 TO 150
MAJOR DECREASE
350 and above
MODERATE DECREASE
150 - 350
SLIGHT DECREASE
0 - 150
(XXXX) EXISTING P.M. PEAK HOUR VOLUMES
GLENDALE
ROUTE 134 FREEWAY
ROUTE 710
LOS ANGELES
SOUTH PASADENA
ROUTE 110
Meyer, Mohaddes Associates, Inc.
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Effects of Proposed Plan
Southwest Pasadena Traffic Study
FIGURE
8
J94-017\CAD\FIGURE8.DWG 12-31-96

4.2 Traffic Diversion Measures

This group of recommendations include proposed improvements to facilitate traffic to the mobility corridors, as identified in the General Plan, within the study area. Traffic will be facilitated along Fair Oaks Avenue, Arroyo Parkway, and Raymond Avenue through the installation of signs and signal system improvements to provide for a more efficient north/south flow of traffic. These mobility improvements are common to all plans in that, to move any traffic from the local street system, there needs to be identified mobility corridors that are able to accommodate the additional traffic. The improvements along these corridors are necessary to support light rail, future development citywide and local and regional growth. These recommendations were widely accepted by the residential and business communities.

ARROYO PARKWAY:

- Smart Corridor Improvements:
  - Install detection circuits at intersections to provide traffic responsive control
  - Install additional closed circuit television cameras
  - Extend the hours of the Parking Prohibition from 7 AM-9 AM and 4 PM-6 PM to 6 AM-9 AM and 3 PM-7 PM

CALIFORNIA BOULEVARD:

- Lengthen the left turn signal phase from westbound California to southbound Arroyo Parkway

FAIR OAKS AVENUE:

- Smart Corridor Improvements:
  - Install detection circuits at intersections to provide traffic responsive control
  - Install closed circuit television cameras
  - Signal upgrades on Columbia Street, Glenarm Street, California Boulevard and Del Mar Boulevard to improve traffic mobility

GLENARM STREET:

- Widen between Fair Oaks Avenue and Raymond Avenue to four lanes

GREEN STREET:

- Orange Grove Boulevard to St. John Avenue: Restripe for two eastbound lanes and one westbound lane

LOS ROBLES AVENUE:

- at Cordova Street: Install protected left turn signal with right turn overlap - southbound right turn/eastbound left turn

- at Del Mar Boulevard: Install protected left turn signal with right turn overlap southbound right turn/eastbound left turn

MARENGO AVENUE:

- at Del Mar Boulevard: Install protected left turn with right turn overlap - southbound right turn/eastbound left turn
- at California Boulevard: Install protected left turn with right turn overlap - southbound right turn/eastbound left turn

LAKE AVENUE:

- at California Boulevard: Install protected left turn signal/right turn overlap - southbound right turn/eastbound left turn

110/210/134/710 FREEWAY:

- Change freeway signage to direct through traffic onto the mobility corridors (Arroyo Parkway/Raymond Avenue/Fair Oaks Avenue)

4.3 Measures for Pasadena/St. John

These proposed improvements attempt to address the residents concerns while taking into consideration the overall impact to mobility. The traffic management strategies on Pasadena and St, John Avenues include a reduction of the signal progression speed along with lane use changes to control the speed of traffic on this corridor.

PASADENA AVENUE:

- Allow parking on both sides of the street beyond Bellefontaine Street and California Boulevard (two through lanes only)
- Reduce signal progression speed to 30 MPH.
- at Columbia Street: change the southbound lane use to provide an exclusive left turn lane and right turn lane
- Install pedestrian warning signs near Sequoia School
- Repaint crosswalks and striping near Sequoia School

ST. JOHN AVENUE:

- at California Boulevard/710 Freeway off ramp: reconfigure the southbound approach to provide dual left turn lanes and a shared through right turn lane
- Reduce signal progression speed to 30 MPH

4.4 Costs

The total cost of the three recommended programs is estimated at $1,575,000. Of this total, $1,240,000 is for mobility corridors and traffic signal system improvements. The proposed recommendations for mobility corridors and traffic signal system upgrades are regional improvements that would be completed as part of the City's General Plan Implementation. These types of improvements will be included in the Capital Improvement Program, funded through transportation funding, developer fees, and grant sources.

The remaining $335,000 is for neighborhood traffic management improvements. There are funds available and reserved in the FY 1997 and FY 1998 CIP programs (Neighborhood Traffic Management Program, Mobility Corridor, and other project accounts) to support the implementation of the improvements identified for the Southwest Traffic Study.

4.5 Implementation and Monitoring Plan

The residential community has expressed a desire to have the neighborhood measures implemented immediately. Implementation will begin immediately and will include neighborhood measures like stop signs and striped edgeline improvements. Also, during this phase intersection chokers will be simulated through the use of paint and raised markers. The total cost for this implementation phase is estimated at $190,000. With adoption of this report, $100,000 will be available in FY 1997 for the Southwest Traffic Study Implementation and $100,000 in existing traffic programs (Mobility Corridor, Neighborhood Traffic Management and California Boulevard Traffic Improvements) to support the Southwest Traffic Study Implementation Plan.

The neighborhood improvement measures will be followed by signal upgrades, These improvements will be implemented over several years. This will include measures such as the rest on red operation and the right turn overlap signal features. The total cost for this implementation phase is $500,000. These improvements can be constructed using gas tax and other available traffic funds over the next five years.

The neighborhood and local signal improvements will be followed by regional smart corridor type improvements. These improvements will be implemented over several years. These measures will include traffic responsive signal improvements and close circuit television cameras. The total cost for this implementation phase is $885,000. These improvements will be funded through a combination of local transportation funds, developer fees and grant programs over the next five years.

4.6 Environmental Review and Impact

There have been extensive discussions during the process of developing the subject traffic management plan, that more drastic measures or changes such as closures and diverters may require environmental study and review.

This would be particularly true for changes to the circulation system, or Mobility Element of the General Plan. The staff recommendations are in concert with the General Plan and stated Council policies. They include signal controls, signage and intersection controls, channelization and speed regulation. These

types of traffic control measures fall within the administrative scope of the Public Works and Transportation Department and are generally categorically exempt from environmental review.

The Environmental Administrator has determined that the staff recommended Southwest Traffic Management Plan would be exempt from California Environment Quality Act (CEQA) under Section 15061 (B) (3) the general rule that a project which has no possibility of having a significant impact on the environment is exempt from CEQA and 15301(c) existing facilities. Since the plan is consistent with the General Plan, and the streets will not physically change and their primary function will remain the same as a result of this project.

4.7 List of Public Meetings/Hearings

The following public informational meetings/hearings, and Commission and Council meetings were held to present the results of the Southwest Pasadena Traffic Study and to solicit comments and input from the public:

Public Meetings

- May 2, 1996 at the Pacific Clinic
- May 3, 1996 at the Tournament House
- May 7, 1996 at the Huntington Memorial Hospital
- May 8, 1996 San Rafael School
- May 16, at Blair High School

Transportation Commission Meeting

- August 9, 1996 at City Hall

City Council Meetings

- October 7, 1996
- September 22, 1997

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