MEMO

TO: **Community, Economic & Human Development Committee**

FROM: **Lynn Harris, Manager, Community Development**

SUBJECT: **Compass RTP Scenario Development and Analysis**

DATE: **June 5, 2003**

SUMMARY

In April, the CEHD Committee requested to review the work to date on the Compass RTP /EIR growth scenarios. These scenarios are being developed to help set the parameters for the growth policy discussion as related to the RTP/EIR Alternatives.

BACKGROUND

As part of the Compass project, Fregonese Calthorpe Associates has been tasked with analyzing development trends and growth forecasts, and creating two 'book end' scenarios for use in the current RTP effort. The resulting two alternatives will focus projected growth using the following contrasting approaches to develop an understanding of the effects of differing policy choices:

1. The goal of the first growth alternative will be to utilize existing infrastructure and transit to the highest degree possible, and at the same time be the most land efficient. It is expected to be highly transit and pedestrian friendly, efficient in the use of land, and will keep capital costs to a minimum.
2. The second growth alternative will examine the growth potential in outlying areas of the SCAG region and seek to redistribute a portion of the projected growth to areas most amenable to increases. This scenario would potentially identify new population, employment and activity centers of varying degrees and develop an efficient transportation system to link these centers to each other as well as existing centers.

The goal of this exercise is to develop the boundaries for which growth may occur in the SCAG region. Then through technical analysis and policy debate, develop the most effective land use and transportation strategies for accommodating this growth.

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MEMORANDUM

TO: CEHD COMMITTEE

FROM: JOHN FREGONESE, PRINCIPAL, FREGONESE CALTHORPE ASSOCIATES

SUBJECT: RTP PROJECT ANALYSIS AND RECOMENDATIONS

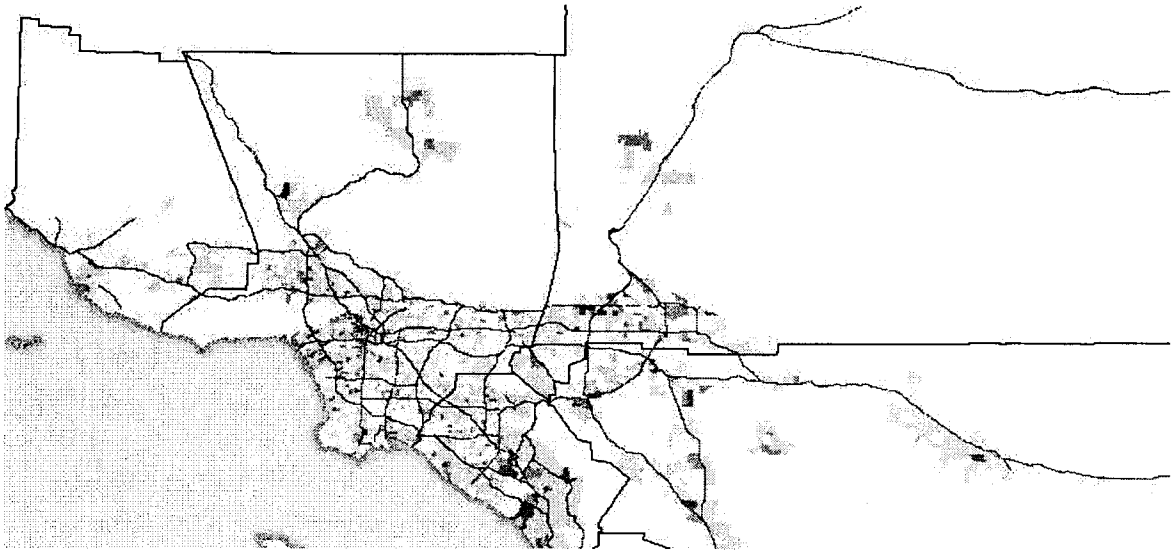
DATE: 04/22/03

As part of the Compass project, Fregonese Calthorpe Associates has been tasked with analyzing development trends and growth forecasts, and creating two 'book end' scenarios for use in the current RTP efforts.

In December of 2002 FCA held a workshop at SCAG offices to help gather input that could be used in short term creation of two alternative scenarios. In January, FCA examined the workshop feedback, trends from the last decade and current forecasting efforts to begin shaping the first of these two scenarios. The goal is to build a growth alternative that utilizes existing infrastructure and transit to the highest degree possible, and at the same time is the most land efficient. Following is a description of FCA's analysis and recommendations for this portion of the Regional Transportation Plan. The maps below only show the extent of SCAG's transportation model and Transportation Analysis Zones. ***The Compass project focuses on the entire six-county region. All scenarios developed by Compass will be for the six-county region.***

1990-2000 Census Trends: Analyzing Households

Our first task was to analyze the trend over the past decade. While a 10-year history is not necessarily long enough to predict a long-term trend, it does help identify areas that have



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grown or decreased in a shorter-term business cycle. This can be instructive in shaping alternative futures. Below, red shows an increase in households while blue located declines.

Recent trends toward more downtown residential development are likely indicative of changing patterns of future growth seen in other American cities. There has been an increasing demand for urban housing in many cities across the country, including Portland and Chicago, which has resulted in a distinct trend toward more housing in and around the downtowns. In the case of Chicago, it experienced its first increase in population during the 1990's after over 50 years of continual decline. The increase is due primarily to redevelopment near the city center, as seems to be the case in the urbanized areas of the Southern California region.

1990-2000 Census Trends: Analyzing Employment

According to employment data provided by SCAG, some areas of the region experienced significant declines in employment during the last decade. This recent downturn in employment might be due to a short-term swing in the business cycle resulting in temporary downsizing of businesses rather than permanent changes in the employment environment. More detailed information would be helpful in evaluating the impacts and duration of the recent changes. It is also a phenomenon that has been observed in other cities. Employment tends to follow household growth, and it is possible that the loss of jobs in traditional urban centers will be reversed over time with the rising tide of household growth near the core.

Orange County gained the most employment during the decade of the 1990's, as can be seen from the map below. San Bernardino also gained employment along the MetroLink and freight lines to the east of the City of Los Angeles. Again, red shows an increase in households while blue located declines.

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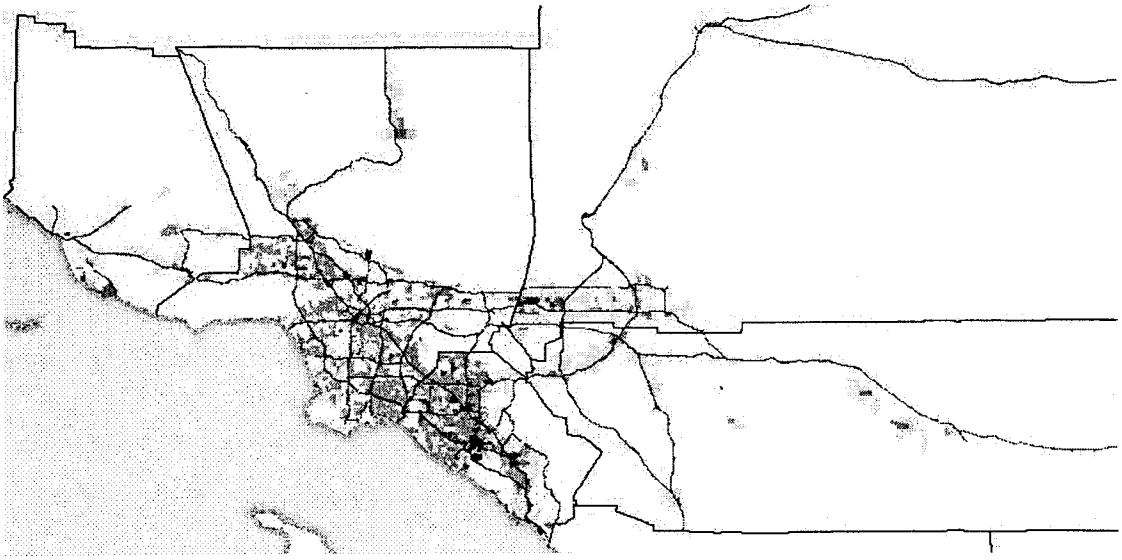
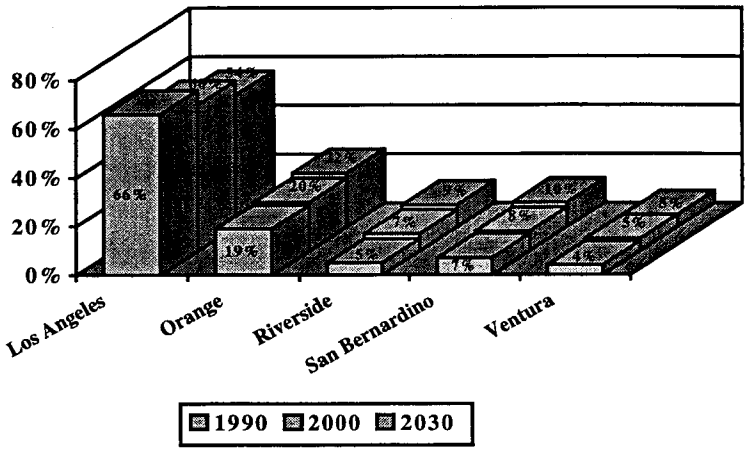


During the 1990's Los Angeles County lost a substantial amount of employment while each of the other counties in the region showed a net gain. Overall, however, the shares of total jobs remained relatively stable with Los Angeles County continuing to lose some its share to other counties in the region.



Forecasts

We were provided with two projections from SCAG staff representing a Trend Future and the same projection adjusted through local input. These were analyzed to determine the differences between the two and the 1990-2000 trends from the census.

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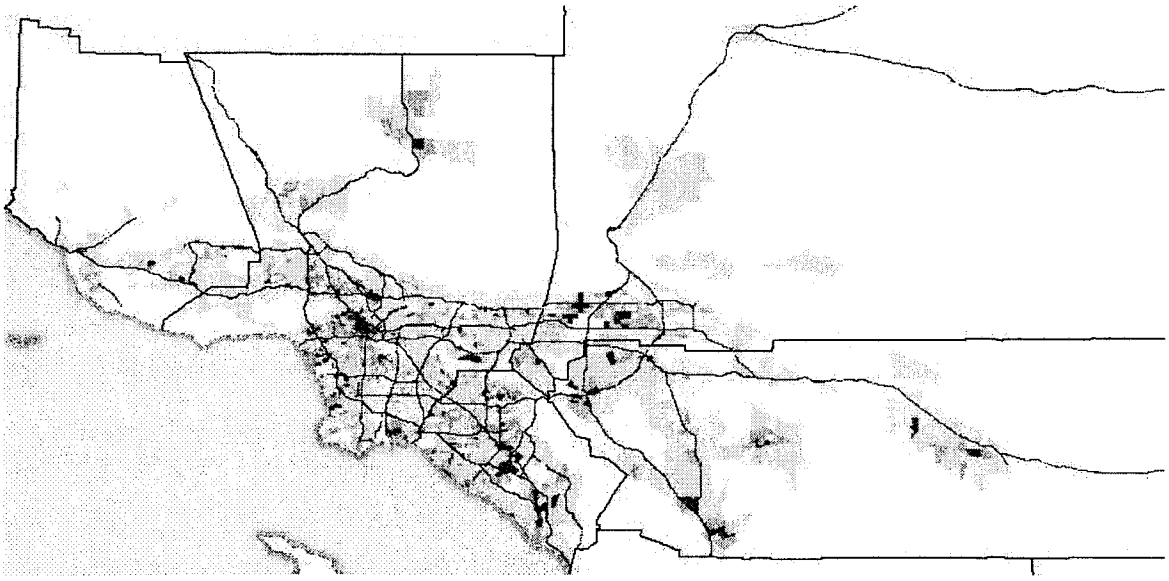
Households

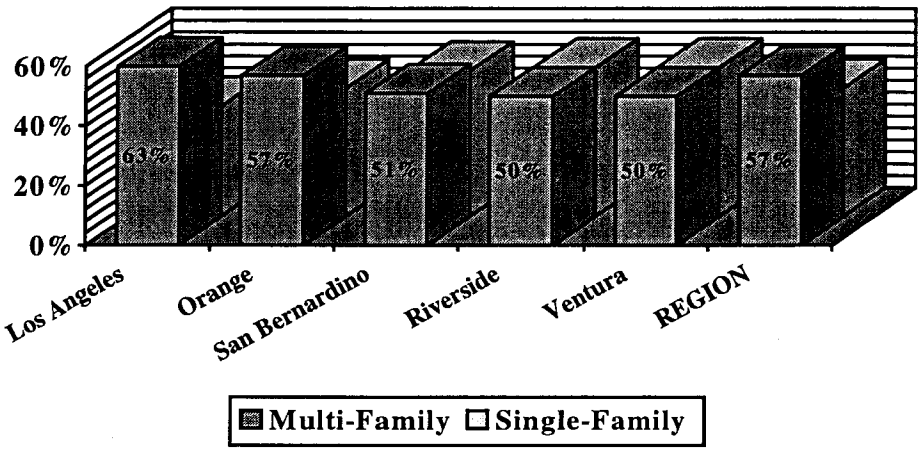
The Trend Forecast for housing follows the general census trend quite closely at the county level as well as the small-area distribution. It shows a continuation of the growth trend in the city of Los Angeles as well as increases along transportation corridors. In addition, some desert communities receive substantial increases in growth including Victorville, Palmdale and Palm Springs.



Housing Mix

The current mix of housing in the region is nearly evenly split between single-family and multi-family housing. The incremental forecast significantly increases the multi-family component to a minimum of 50% multi-family, with even higher percentages in Los Angeles and Orange Counties. The resulting mix for the region in 2030 is very nearly 50-50.

Incremental Housing Split



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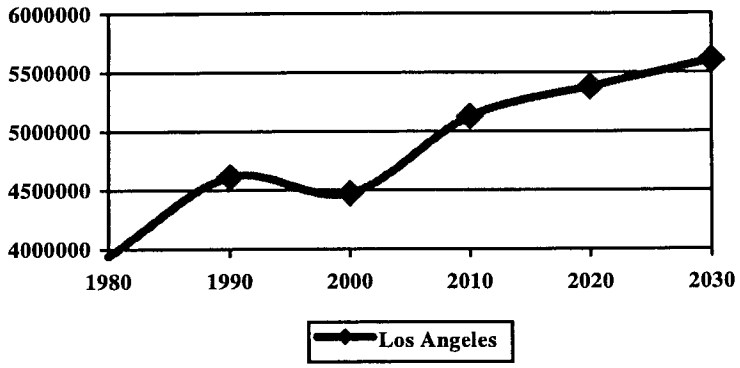
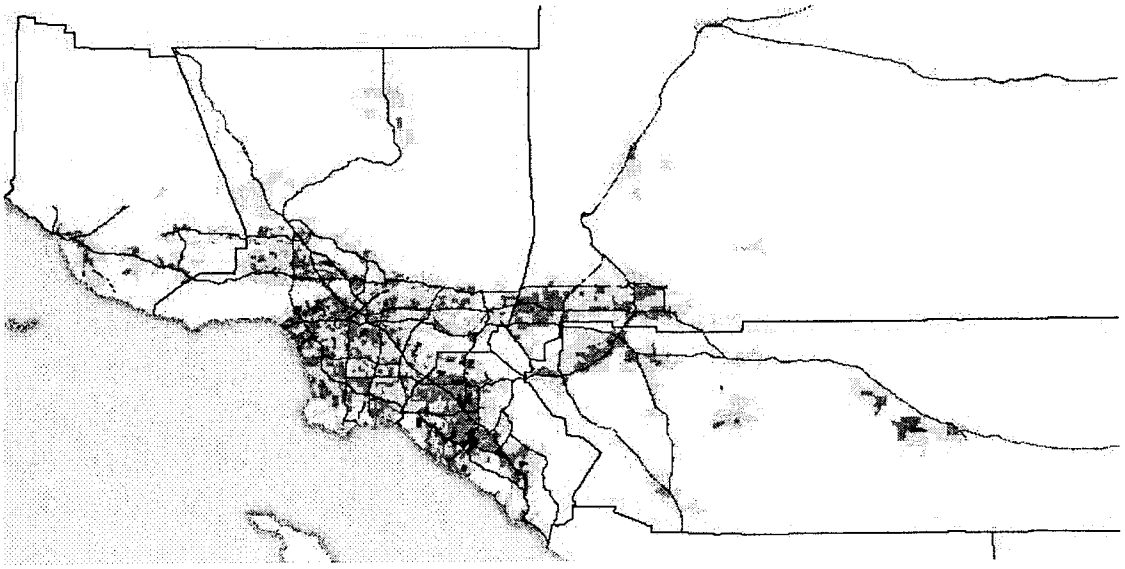
Employment

The declines in employment seen in the 1990's are reversed in the trend forecast. These include the traditional industrial areas in both Los Angeles and Orange Counties that rebound from losses and show substantial growth during the 30 years from 2000 until 2030.



When compared with the 1990-2000 trends, the 2030 projection seems ambitious. It anticipates increased employment in existing areas as well as expansion on vacant land. Although during the 1990's Los Angeles County lost nearly 150,000 employees, this trend is completely reversed in this forecast. In fact, the increase between 2000 and 2010 increases dramatically and then tapers off in the following two decades. This flattening effect is also borne out by SCAG data on the decreasing size of the workforce age group in the future.



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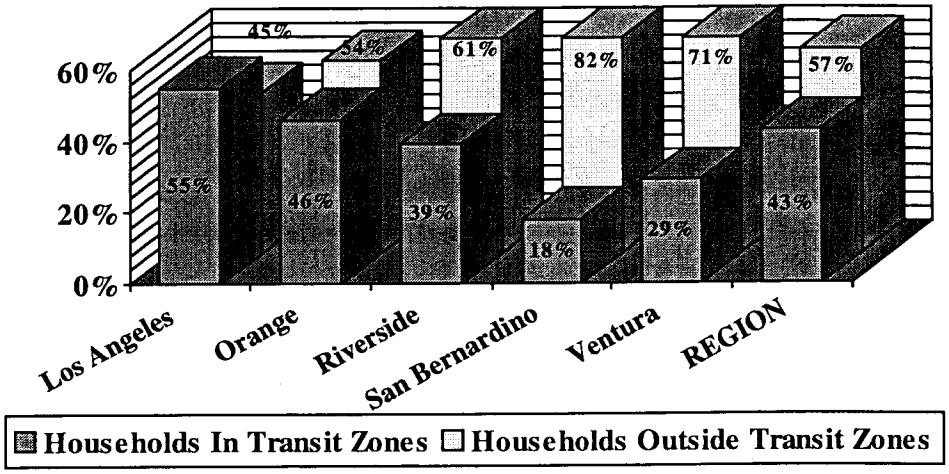
Distribution

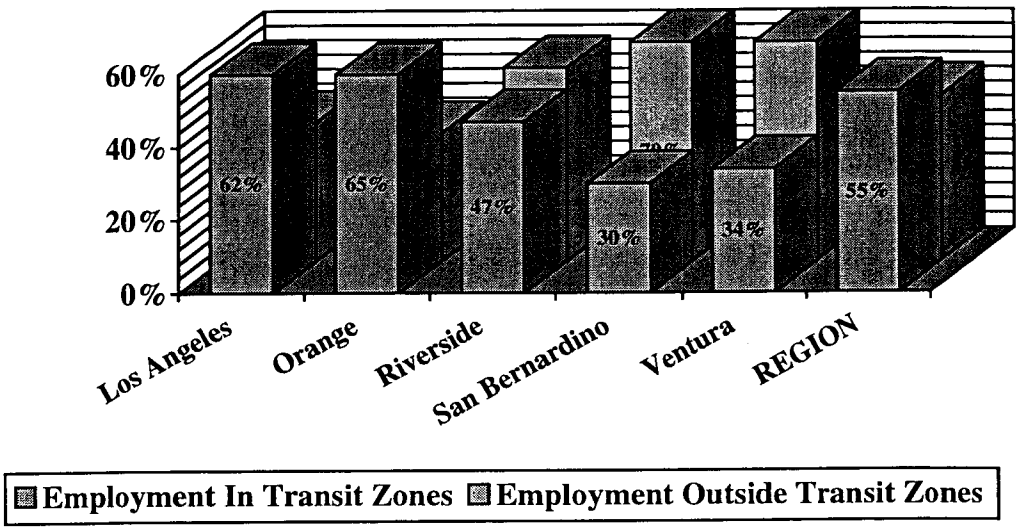
The Trend distribution of growth located much of the new growth in proximity of existing and proposed transit improvements. Overall, 43% of households and 55% of employment were within walking distance of high quality transit including light rail stations, rapid bus



lines and commuter rail stations. High quality transit was defined by the following criteria:

1 Mile from MetroLink Stations;
½ Mile from Light Rail Stations;
¼ Mile from Rapid Bus Lines.

FCA did not include Express Bus lines or high frequency local buses in this analysis. These would most likely have a substantial impact on the incremental numbers of households served.



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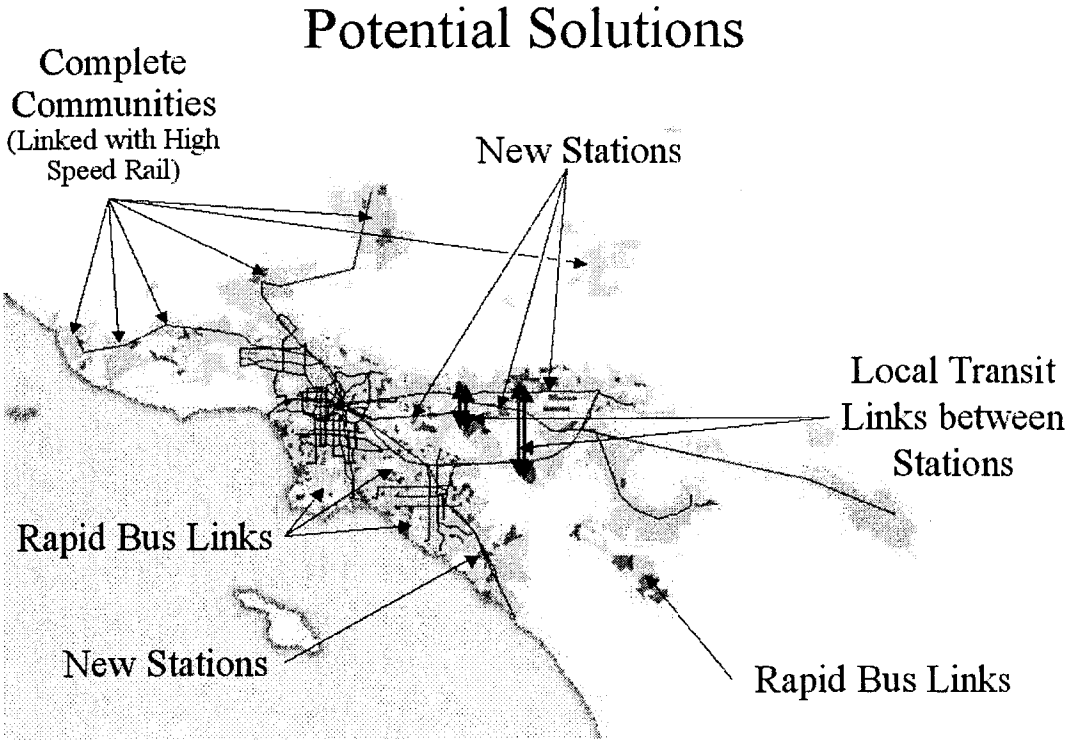
Recommended options for a Transit Friendly, Land Efficient Scenario

While nearly half of all new households are within walking distance of high quality transit, at least some of the remaining residents might be better served. In some cases considering a new rail station could effectively provide transportation choice for a number of households that are currently more likely to drive. While this might add time to the commute, there are possible solutions. An example is the Metra Lines in Chicago, where express trains that stop at fewer stations and local trains stop at all stations. Other options might include local rapid bus service or improved local bus service to broaden access the nearby neighborhoods.

Communities farther from the urban core should be designed as Complete Communities with necessary services locally available. While many people living there will continue to commute to work, other services that might require an auto trip could be met locally. This will have a major impact on vehicle miles traveled as a whole as well as shortening average trip length.

Some areas are developing without any potential rail access at present. Since some of these settlements are substantial in size providing a link to other transit using Rapid Bus in addition to building them as complete communities would likely benefit transportation.



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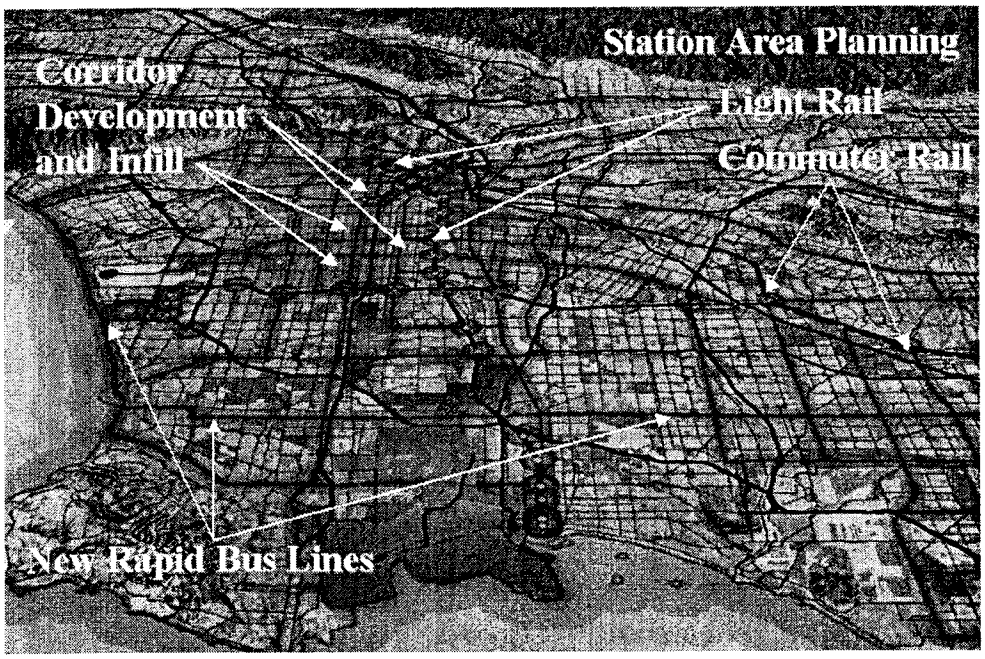
Additional Recommendations

Transit proposals in the current RTP add many new facilities to the existing options including extensions to the light rail system, many new Rapid Bus lines and extensions to the commuter rail lines. There are areas that strike us as important considerations, however, that seem to have been overlooked. These include the developed area between Orange and Los Angeles Counties that has some new Rapid Bus links but not nearly as extensive as west LA County. Given the intensity of land uses there and the extensive system of arterials it seems that this area should be seriously considered for transit improvements.

The map below highlights examples of some of the areas where FCA sees potential.

Land Use Options LA

Possible Considerations



Building on both the existing and proposed infrastructure is an efficient means of maximizing the return on a very significant investment. Overall system design should ensure that the most well suited neighborhoods are well served. It appears that land between Orange County and Los Angeles has been neglected with each jurisdiction underestimating the benefit that improved transit could provide to these neighborhoods.

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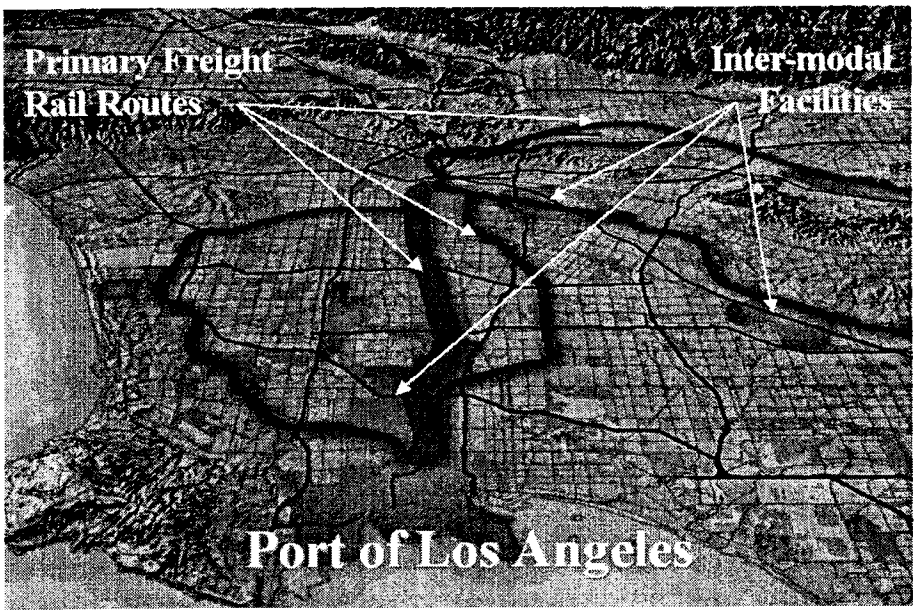
Industrial Corridors

Freight has been increasingly recognized as a primary industry in many cities in the United States. Currently the Port of Los Angeles is among the most important ports in the country, and certainly the most important Pacific facility. During the last decade much of the industrial land supporting this facility lost employment. While in the short term it may appear that this land could best be converted to new uses, it is important that the critical lands necessary to support the transportation of goods into and through the region be identified and maintained to continue to support this essential industry.

The Regional Transportation Plan includes a new inter-modal facility between Ontario and San Bernardino. To the extent possible, reducing the number of trucks that come into the urban area would benefit air quality in the region as a whole. It might also be worth considering projects that would provide power to ships in the harbor. This would eliminate the need to run their engines while anchored in the harbor and thereby reduce emissions from the low-grade fuel that powers them.

The map below highlights the relationship of the Port to the rest of the region.

Freight Movement



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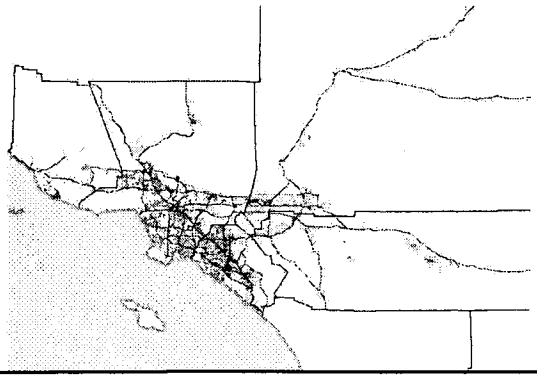
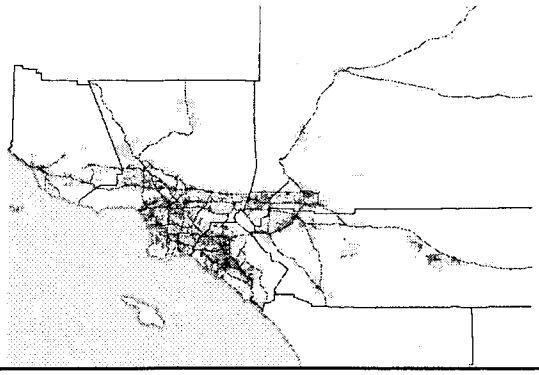
Bookend Scenarios

The above recommendations were presented to SCAG staff at a meeting on February 20th, 2003. FCA worked with them and the feedback they generated to create the first of the two alternative scenarios. This first scenario will build on these suggestions to create a growth alternative that is highly transit and pedestrian friendly, is efficient in the use of land, and keeps capital costs to a minimum. The second alternative will focus on dispersing additional growth into outlying areas of the region with high growth potential and developing additional infrastructure to support it. A preview of work done to date was delivered to the Growth Visioning Sub-committee for review and comment on March 27, 2003.

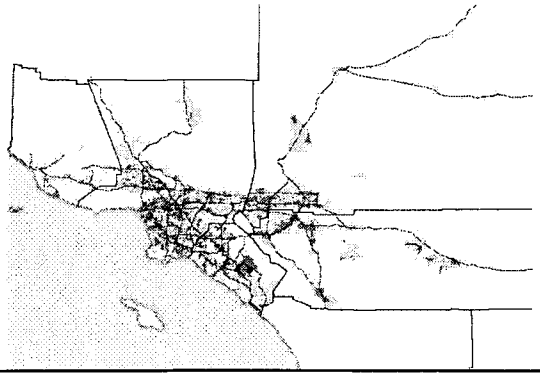
Employment 1990-2000



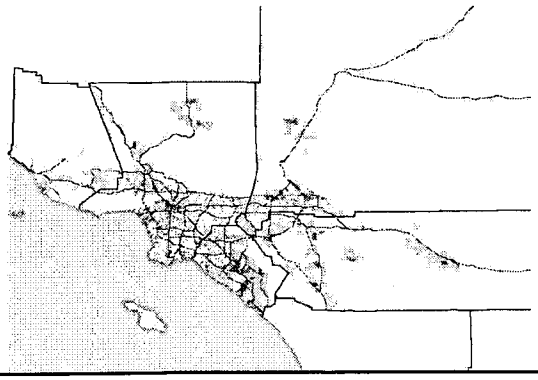
Employment 2000-2030 Trend



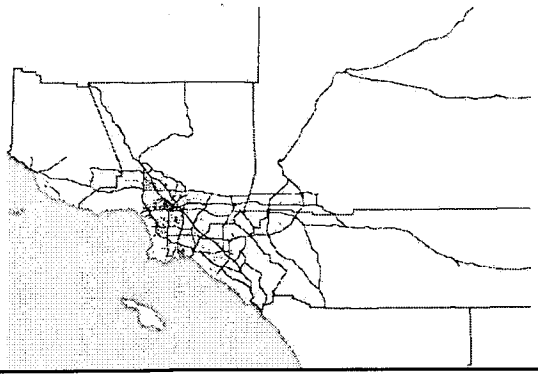
Employment 2000-2030 Local



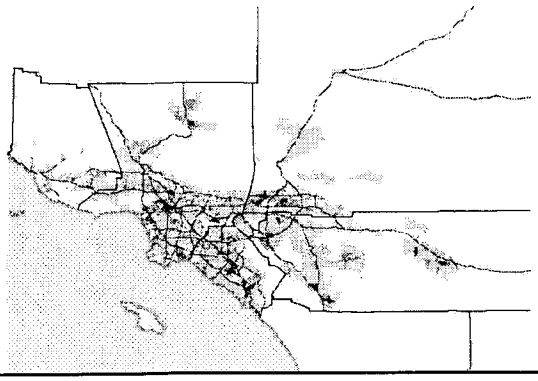
Households 1990-2000



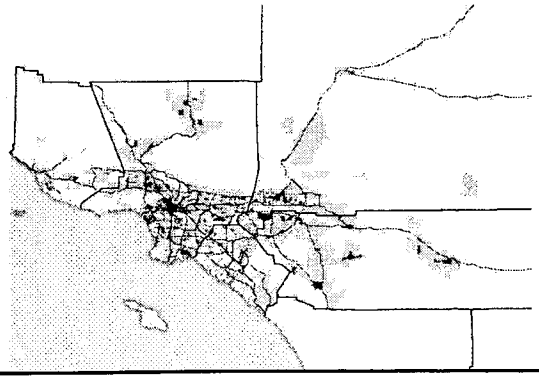
1990-2000 Infill and Redevelopment



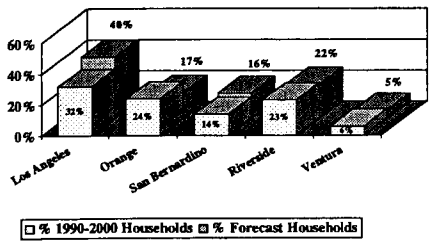
Households 2000-2030 SCAG Trend



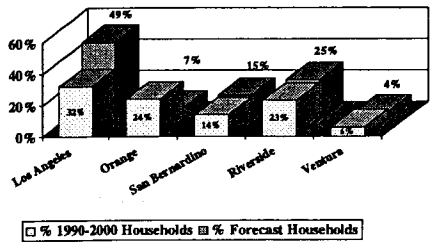
Households 2000-2030 Local Input



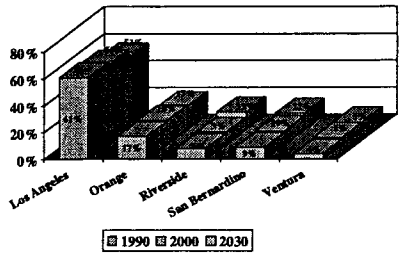
HOUSEHOLDS
1990-2000 and Trend Forecast



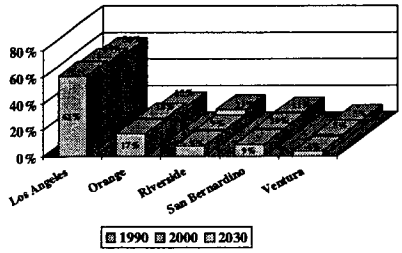
HOUSEHOLDS
1990-2000 and Local Input



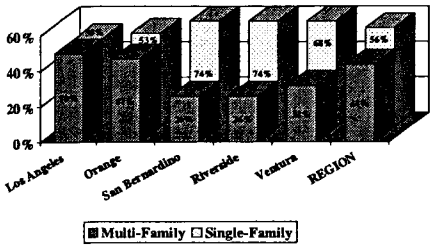
HOUSEHOLD SHARE
Trend Forecast



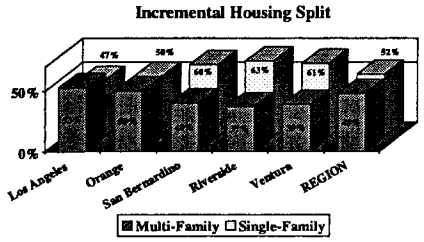
HOUSEHOLD SHARE
Local Forecast



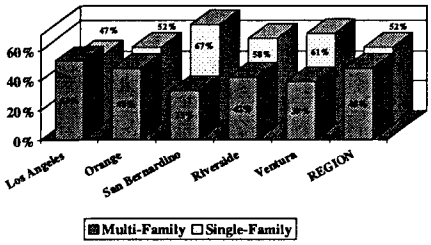
SF/MF Housing Split
2000



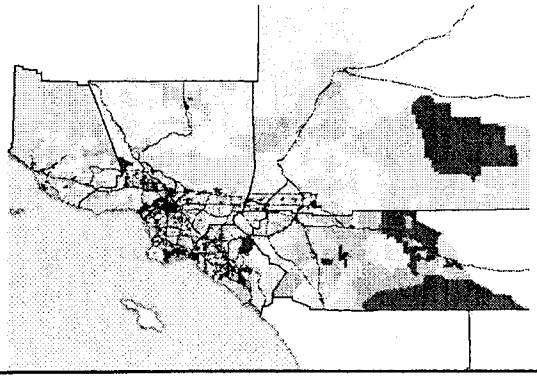
SF/MF Housing Split 2030 (Trend)



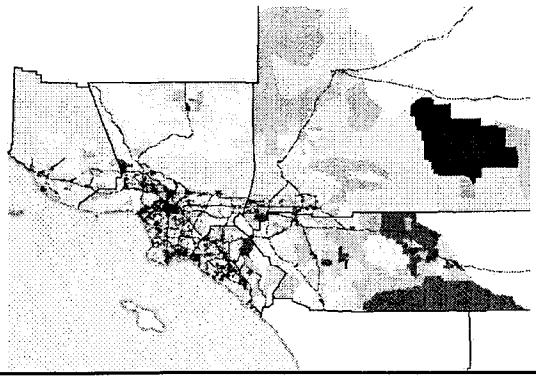
SF/MF Housing Split 2030 (Local)



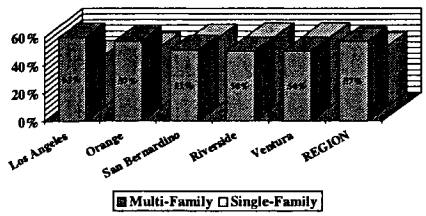
Percent Single-Family 2030 (Trend)



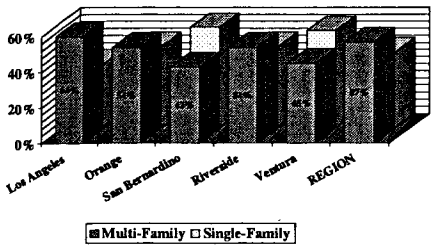
Percent Single-Family 2030 (Local)



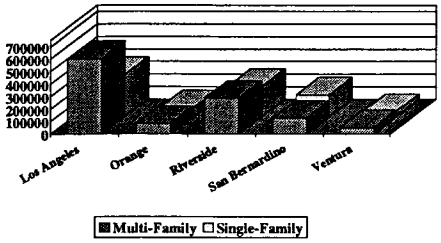
SF/MF Housing Split Incremental Growth (Trend)



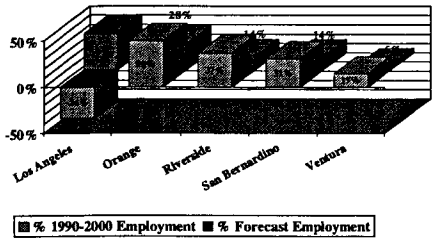
SF/MF Housing Split Incremental Growth (Local)



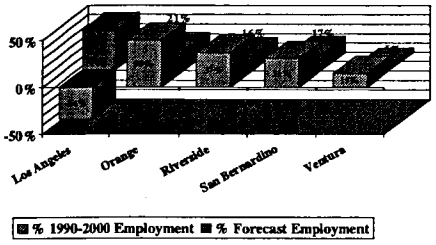
SF/MF Housing Split
Incremental Growth (Local)



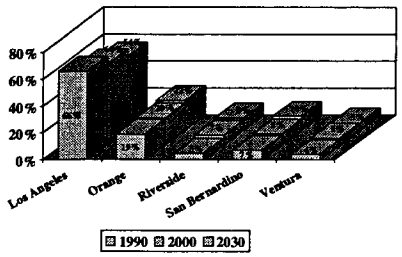
EMPLOYMENT
1990-2000 and Trend Forecast



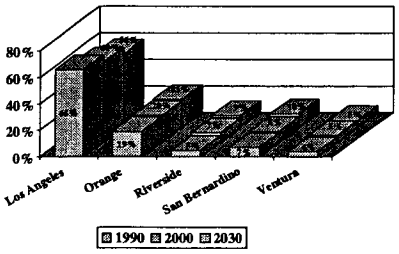
EMPLOYMENT
1990-2000 and Local Forecast



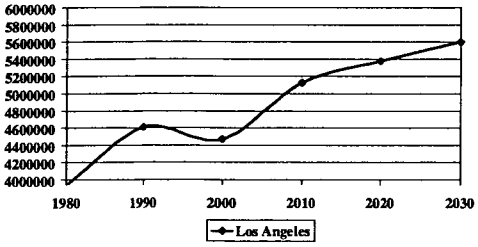
EMPLOYMENT SHARE
Trend Forecast



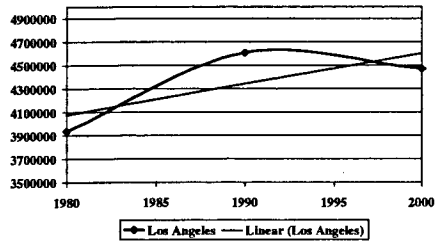
EMPLOYMENT SHARE
Local Forecast



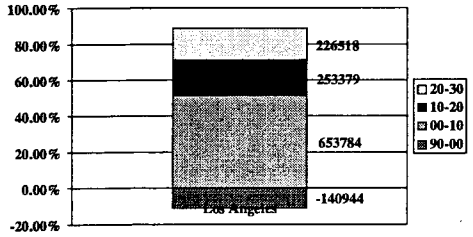
Employment Trend and Forecast
Los Angeles County



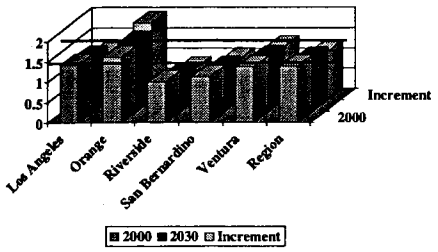
Employment Trend and Forecast
Los Angeles County



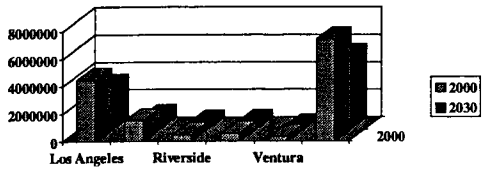
EMPLOYMENT
Trend and Forecast - Los Angeles



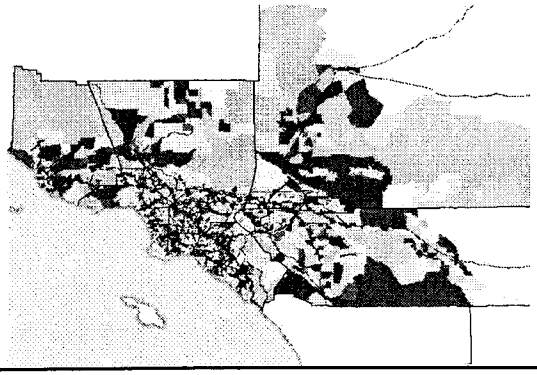
Jobs/Housing Balance



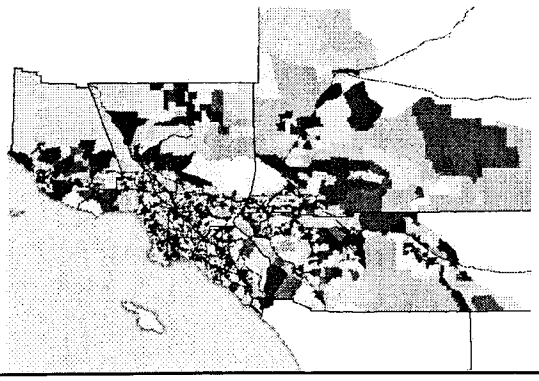
Jobs/Housing Balance



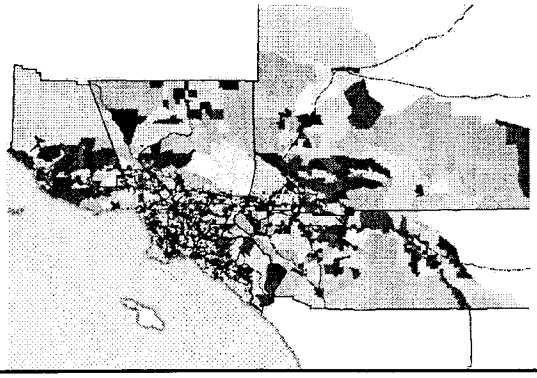
Jobs/Housing Balance 1990



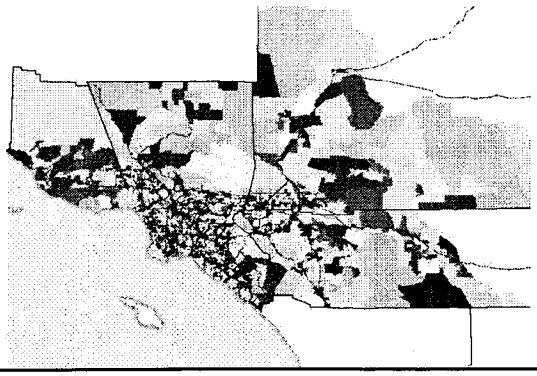
Jobs/Housing Balance 2000



Jobs/Housing Balance 2030 (Trend)



Jobs/Housing Balance 2030 (Local)

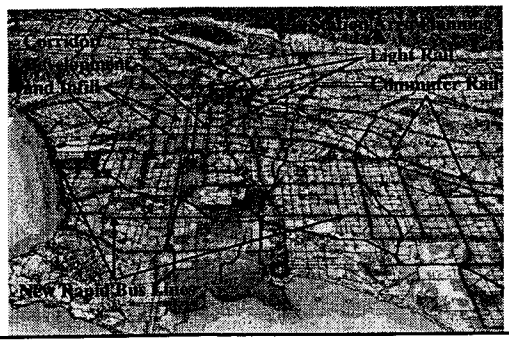


Land Use Options LA

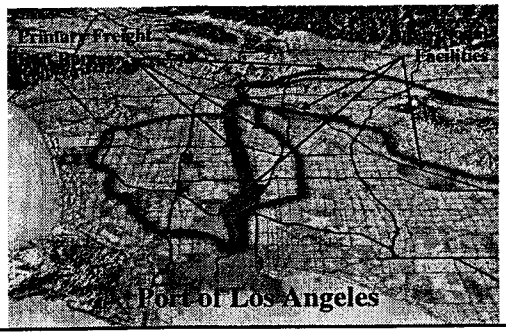
Existing RTP Transit Proposals

Land Use Options LA

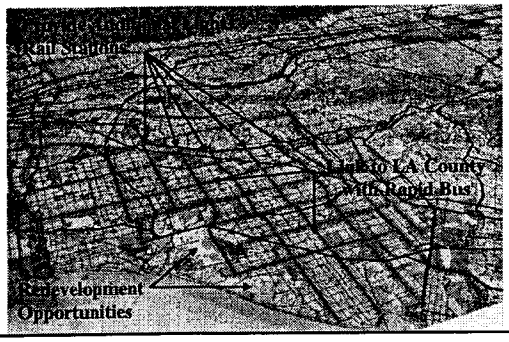
Possible Considerations



Freight Movement



Land Use Options Orange County

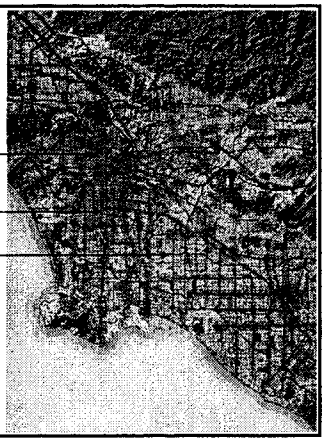


Los Angeles
Infill Alternative

Additional Growth Near the Downtown

Infill Growth Along Transit

Additional Transit Lines



Los Angeles
5th Ring Alternative

Downtown Growth Continues at Slower Pace

Infill Growth Along Transit

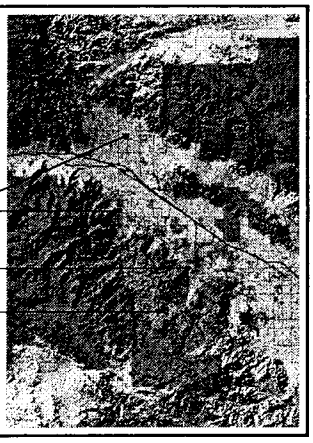
Declining Industrial Employment

Palm Springs
Infill Alternative

Growth Continues on Vacant Land with Some Infill

Single Transit Stop in Palm Springs

Increased Open Space Protection



Palm Springs

5th Ring Alternative

Growth Continues on Vacant Land with Some Infill

Additional Transit Stops Along Commuter Line

Open Space Protection and Conservation Development

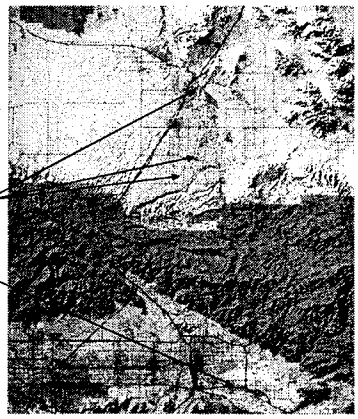
San Bernardino

Infill Alternative

Desert Communities grow on vacant land with some redevelopment near transit

San Bernardino becomes local center with light rail and expanded metrolink stations

Metrolink Stations and corridors absorb new growth along with accessible vacant land



San Bernardino

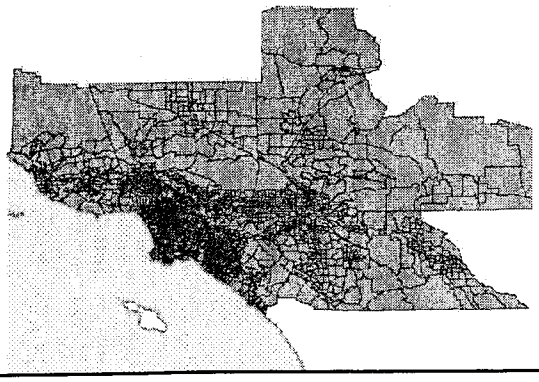
5th Ring Alternative

Desert Communities grow at a more rapid pace. Corridor development focus on transit.

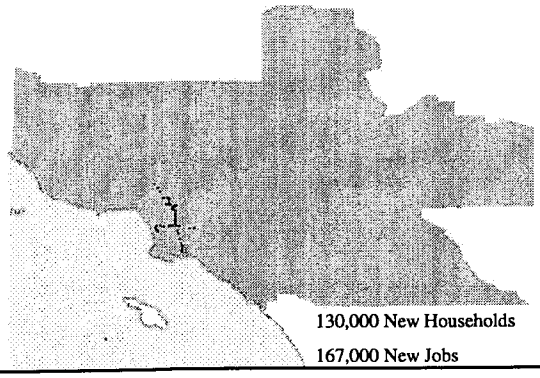
San Bernardino becomes a regional center for San Bernardino and Coachella Valley

Satellite Intermodal Facility for distribution of goods from Port of Los Angeles.

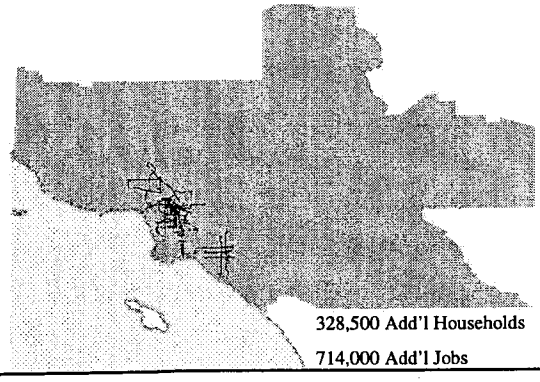
Trend Allocation by TAZ



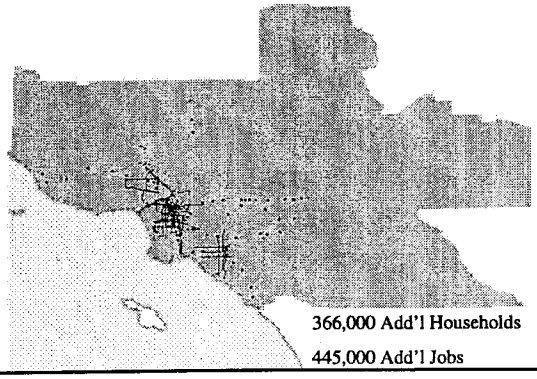
Metro Stations (½ Mile)



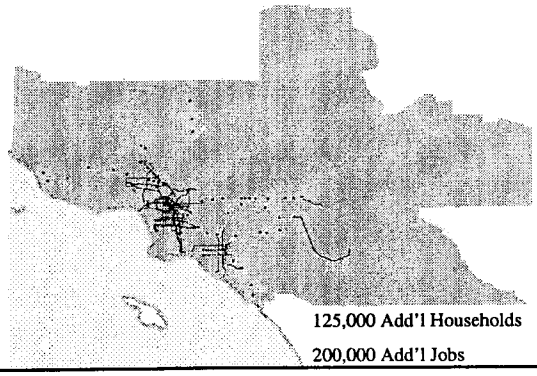
Rapid Bus Lines (1/4 Mile)



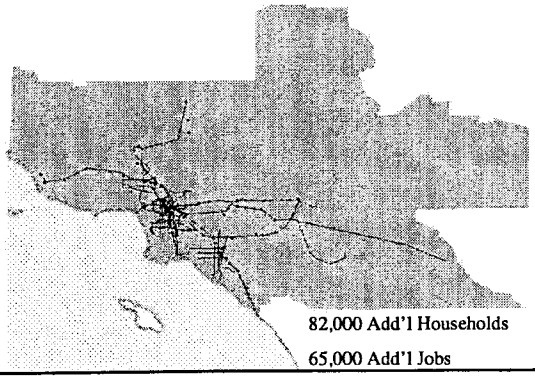
Metrolink Stations (1 Mile)



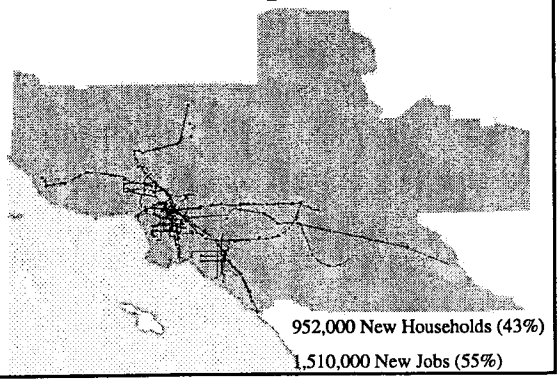
New Light Rail (1/2 Mile)



New Commuter Rail

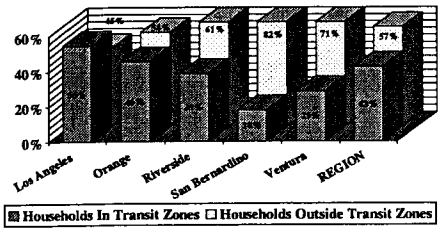


All Rail and Rapid Bus Transit



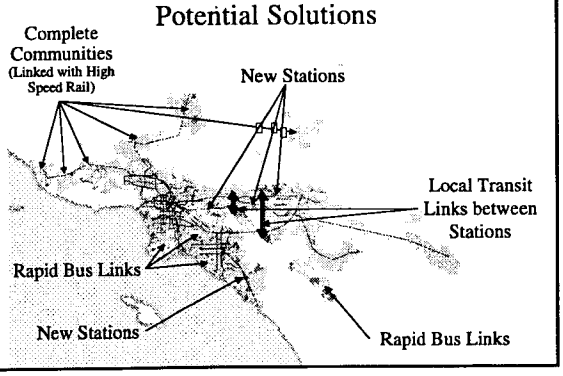
New Households with Transit Access

½ Mile from Light Rail Stations, ¼ Mile from Rapid Bus or 1 Mile from MetroLink Rail Stations



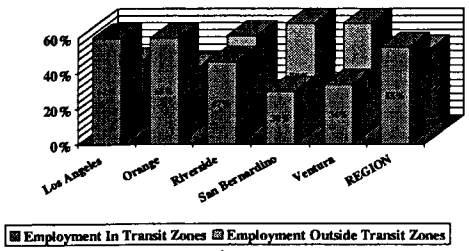
Households Without Transit

Potential Solutions



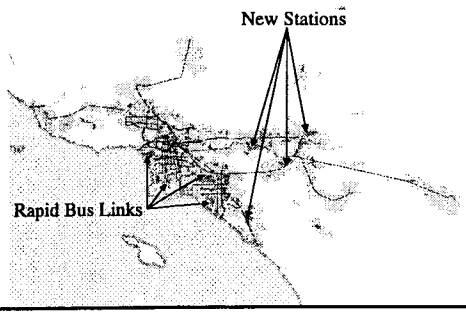
New Employment with Transit Access

½-Mile from Light Rail Stations, ¼-Mile from Rapid Bus or 1 Mile from MetroLink Rail Stations



Employment Without Transit

Potential Solutions



Designing Scenarios

Spreadsheets form the Basis for Scenario Design by building up from the Basic Components to Development Types

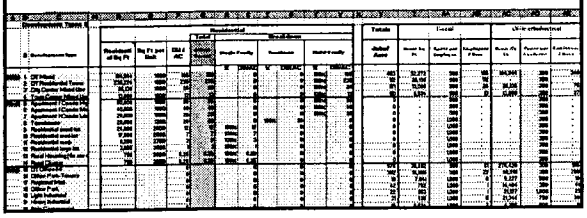
Building Types

Buildings are the most basic component of Development Types

Development Type Results

Housing Mix

Employment Mix

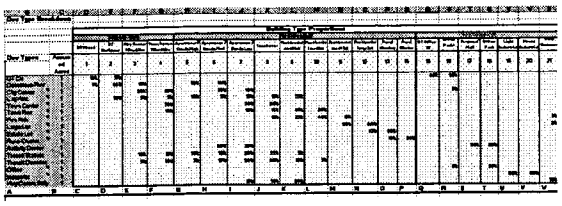


Designing Development Types

Building Types are designated by Percent Cover to Define Development Types

Development Type

Building Types



Determining Households and Employment Per Acre

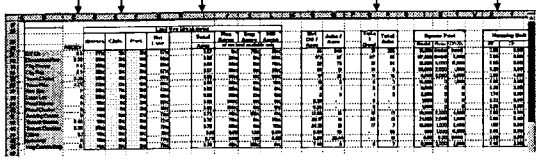
Redevelopment Assumptions

Gross-to-Net Calculations

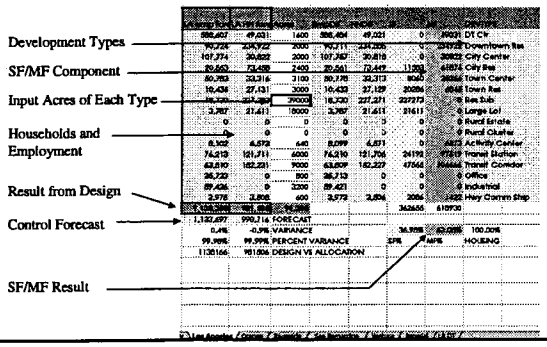
Net Acres

Housing Mix

Net Densities



Designing and Populating Scenarios



Physical Allocation

Designating Specific Development Types for a Scenario

Urban Index as an Allocation Guide

Connectivity, Housing Density, Employment Density