

*Readers' Guidance:*

*This chapter reflects modifications to the proposed project that occurred subsequent to issuance of the Draft EIR/EIS in April 2004. Changes are shown in ~~strikeout~~ and underline format so that the reader can compare updated information to that shown in the draft environmental document.*

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# CHAPTER 1 - PURPOSE AND NEED

## 1-1 STUDY AREA AND STUDY CORRIDOR

A general Study Area was defined to encompass 13 adjoining cities that lie along I-210 and a railroad right-of-way, between Pasadena on the west and Montclair on the east. The study area includes the cities of Pasadena, Arcadia, Monrovia, Duarte, Irwindale, Azusa, Glendora, San Dimas, La Verne, Pomona, and Claremont in Los Angeles County. In San Bernardino County, it includes the cities of Montclair and Upland.

For the purposes of environmental analysis, a Study Corridor was defined within the broader Study Area. **Figure 1-1** shows the Study Area and Study Corridor.

The Study Corridor was defined to be 1,000 feet in width, along either side of the rail alignment. This 2,000-foot width was selected because most environmental impacts that would potentially be generated by the proposed LRT service would occur within this band. The 2,000-foot band is the area of potential impact (API) for all environmental assessment topics except traffic and cultural resources. For traffic, the API was determined on a case-by case basis in consultation with corridor cities to reflect traffic patterns of the cities around proposed stations and at at-grade rail crossings. For cultural resources, the Area of Potential Effect (APE) was defined by the Federal Transit Authority (FTA), with concurrence of the State Historic Preservation Officer, to meet the needs for assessing impacts in accordance with Section 106 of the National Historic Preservation Act. The APE was defined to be the proposed railroad alignment and one parcel beyond sites to be used for stations or parking. This definition included the caveat that the APE could be refined to account for project elements that would not be known until later in the design development process, such as noise barriers.

For convenience and to reflect geographic limits of the two LRT alternatives, the ~~Phase II Foothill Extension~~ Study Corridor was divided into two segments. Segment 1 includes Pasadena east of the Sierra Madre Villa Station, and the cities of Arcadia, Monrovia, Duarte, Irwindale and Azusa. Segment 2 includes the cities of ~~Azusa~~, Glendora, San Dimas, La Verne, Pomona, Claremont, and Montclair. ~~and Upland~~.

The rail right-of-way in Los Angeles County was acquired by the Los Angeles County Metropolitan Transportation Authority (LACMTA), and is currently under the control of the ~~Los Angeles to Pasadena Blue Line Construction Authority~~ Metro Gold Line Foothill Extension Construction Authority (the Authority). The rail right-of-way within San Bernardino County is owned by the San Bernardino Associated Governments (SANBAG).

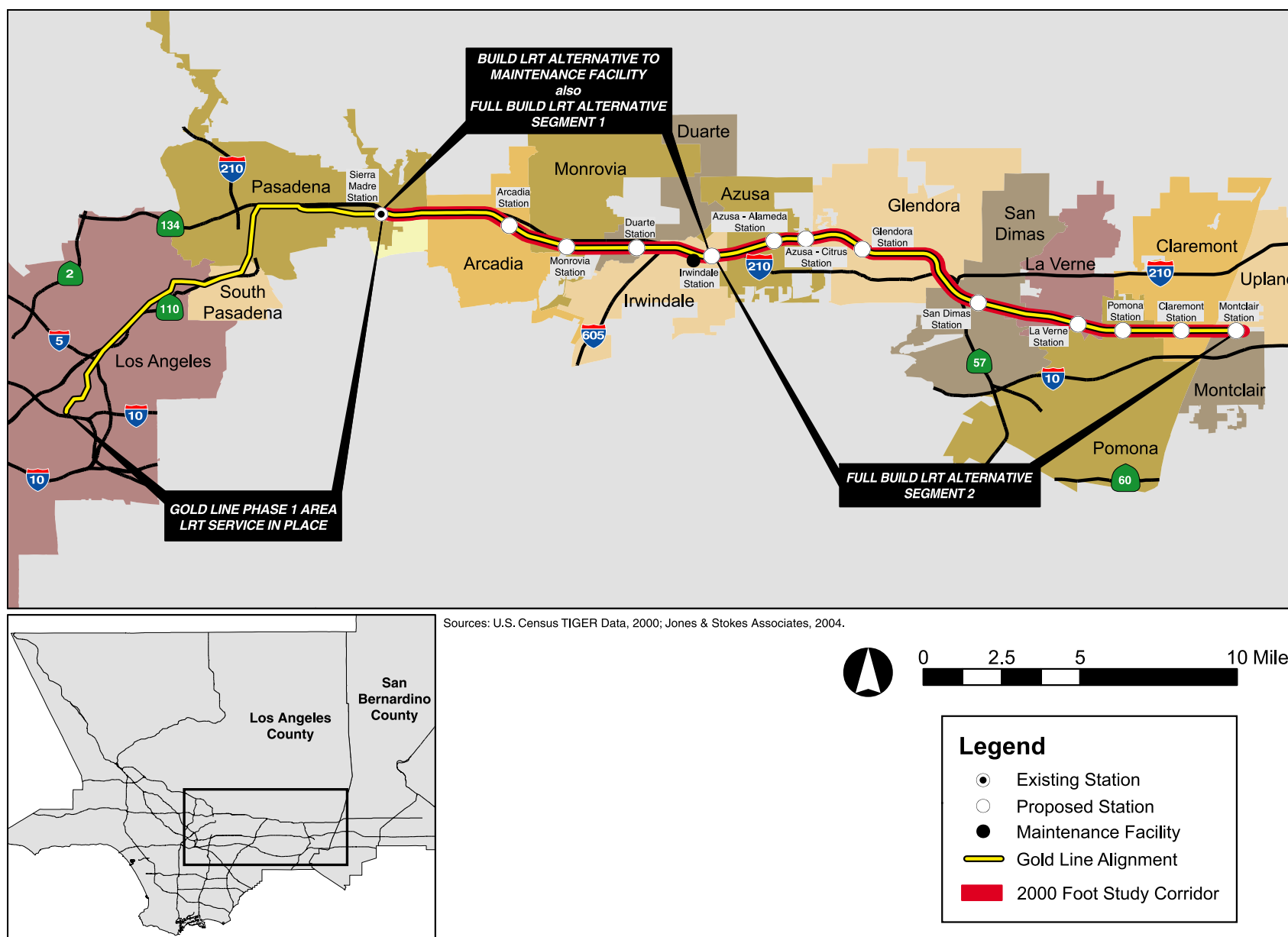


Figure 1-1: Gold Line Phase II Study Area and Study Corridor

## 1-2 SUMMARY STATEMENT OF PURPOSE AND NEED

The purpose of the proposed Gold Line ~~Phase II~~ Foothill Extension project would be to address the transportation problems and deficiencies, as well as the environmental problems and issues, identified in the discussions below. Proposed transportation solutions must address the following five basic needs:

**1. Provide a high-capacity improvement that responds to problems associated with the corridor's only freeway:**

- *Highway capacity in the study corridor is not sufficient to accommodate current and forecasted peak hour demands.*
- *Substantial congestion exists during peak periods and will increase over time.*
- *Travel times on freeways are currently substantial and will increase over time.*
- *There are no alternative highway routes to provide relief.*

**2. Provide transportation improvements that respond to transit issues identified in the corridor:**

- *Commuter rail service is available only in the eastern quarter of the study corridor and is linked only to downtown Los Angeles.*
- *Transit service between the end points of the study corridor is limited to 3 bus routes.*
- *The available bus routes do not connect all of the downtowns in the study corridor.*
- *The available routes do not serve several major activity centers in the corridors.*
- *Bus service is subject to traffic congestion and incidents, resulting in some trips being of unpredictable durations.*

**3. Provide transportation improvements that respond to problems associated with the corridor's arterial network:**

- *East-west arterials that potentially provide alternative routes to I-210 are discontinuous.*
- *Travel times on arterials are slow and subject to congestion and incidents that affect their viability as alternate routes across the study area.*

**4. Provide transportation improvements that respond to issues associated with population and employment conditions and forecasts:**

- *Access between areas of current and forecasted population and locations of current and forecasted employment must utilize transportation facilities that are currently at or over capacity during peak periods.*
- *Existing transit services connect only some of the activity centers in the corridor.*
- *Existing transit service between activity centers is infrequent, even during peak hours.*
- *The corridor is expected to grow substantially in population and employment through 2025 and such growth would place ever-increasing demands on the transportation infrastructure.*
- *Communities recognize and have undertaken planning to accommodate forecasted growth; many community plans call for transit improvements to help manage that growth.*

**5. Provide transportation improvements that respond to environmental goals for the region and corridor:**

- *Transportation improvements must support achievement of the region's air quality plan.*
- *Transportation improvements should avoid or minimize impacts to natural and manmade environments.*

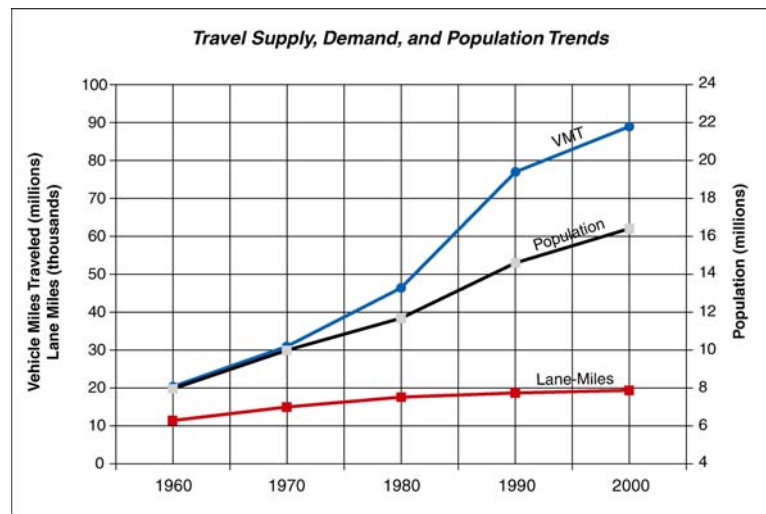
## 1-3 TRANSPORTATION CONDITIONS, PROBLEMS AND ISSUES

### 1-3.1 General Transportation Conditions and Problems

#### 1-3.1.1 Highways and Congestion

##### *a. Highway Network Constraints*

Southern California suffers from a long-term disparity between population growth and increases in transportation capacity. The Southern California Association of Governments (SCAG) in its adopted 2001 Long Range Transportation Plan (2001 RTP) and ~~Draft~~ 2004 Long Range Transportation Plan (~~Draft~~ 2004 RTP) notes that population more than doubled between 1960 and 2000, yet freeway miles increased less than 30 percent. Accompanying this disparity are increases in vehicle miles traveled (VMT) each year, reflecting longer distances traveled between residences and workplaces. **Figure 1-2** from SCAG illustrates this situation. These circumstances cause congestion levels to continue to grow on the region's freeway network. A review of Census 2000 data indicates that the average travel time to work in much of the study corridor is between 26 and 35 minutes.<sup>1</sup>



Source: Southern California Association of Governments.

**Figure 1-2: Growth in Transportation Compared to Population**

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<sup>1</sup> SCAG 2002 - State of the Region, Southern California Association of Governments.

### *b. Highway Congestion and Travel Times*

Mobility tracking of the Los Angeles area by the Texas Transportation Institute (TTI) for the past two decades consistently ranks the metropolitan area as having the highest amount of annual travel delay in the country. Data beginning in 1982 show that more than 50 percent of the annual delay is categorized as recurring delay (i.e., delay attributed to system deficiencies and use levels that exceed the design capacity, as opposed to delays caused by incidents). Since 1998, recurring delay has been reported at 57 percent of the total annual delay, which is 52 hours per person per year. Texas Transportation Institute also reports that 75 percent of the freeway and street network was congested in 2000, resulting in daily rush hours spanning 8-hour durations. The cost of congestion was estimated at over \$1,000 per person per year.

As part of the proposed project's initial analysis, efforts were made to determine the existing congestion levels within the study corridor. A congested freeway is defined as a segment with traffic flow at 35 miles per hour or less for three or more hours per day. This analysis revealed that congestion along I-210 can be significant during the PM peak-hour periods, resulting in more than 50 percent of all freeway lanes west of Irwindale Avenue to be operating at a Level of Service (LOS) "F" or worse. (Although LOS F is the lowest level on the LOS scale<sup>2</sup>, congestion and delay can actually be much greater than the thresholds that define LOS F.) Forty-one percent of freeway lanes east of Irwindale Avenue also operate at LOS F or worse. AM peak-period congestion ~~can also be~~ is significant.

The SCAG 2001 RTP, which includes the data sources used for transportation planning in this Environmental Impact Statement/Environmental Impact Report (EIS/EIR), includes forecasts of congestion levels in 2025 and compares them to 1997 baseline data. For I-210, SCAG forecasts that AM peak period congestion (prior to implementation of transportation improvements in the 2001 RTP) would increase 25–50 percent on about half of the freeway and 50–75 percent on the remaining portions. Comparing these levels of congestion increase to the 2000 Census data, average travel time to work in 2025 on the I-210 would be expected to range from 32 minutes (26 x 1.25) to 61 minutes (39 x 1.75). Implementation of the transportation improvements in the 2001 RTP is forecasted to lower much of the future congestion on I-210 to the 25–50-percent range, or between 32 minutes (26 x 1.25) and 52 minutes (35 x 1.5). The main projects in this corridor that appear to be the cause of this change in congestion are the opening of Gold Line Phase I and the extension of I-210 from State Route 57 (SR-57) to Interstate 215 (I-215). In addition, high-occupancy vehicle (HOV) improvements on other freeways would likely enable some shifting of east-west regional traffic, resulting in some relief to the I-210.

Mobility is also affected by the fact that there are no other freeways that serve the study corridor. The closest east-west freeway is Interstate 10 (I-10), which is located approximately 3 to 7 miles south of the project (depending on the route segment) and does not serve many of the corridor communities. In addition, I-10 is itself heavily congested. State Route (SR-60) is between 6 and 9 miles south of I-210.

I-210 not only provides the main east-west highway for automobile traffic, it is also a key link in the state and regional goods movement network. From its connection with Interstate 5 (I-5) on the north side of Los Angeles, to its current connection with I-15 in Rancho Cucamonga, the freeway is the northernmost of three east-west freeways (I-210, I-10, and SR-60) that provide for goods movement from central Los Angeles to the Inland Empire and connect to the I-15 and I-215. With the recent extension of I-210 from San Dimas to Rancho Cucamonga (I-15), a notable portion of the truck traffic that previously used I-10 appears to have shifted to I-210. When I-210 is extended further east to I-215, the volume of trucks using this northernmost route is likely to increase. Additional truck traffic would contribute to increased overall congestion, causing higher peak hour congestion levels and slower peak hour speeds.

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<sup>2</sup> Level of Service is a scale used to report the condition of traffic flow, from A (excellent) to F (failing).

There are no plans for substantially increasing I-210's capacity to the west of its intersection with SR 57 since freeway widening would result in substantial impacts to adjoining communities. Potential impacts include numerous residential and commercial property acquisitions, loss of revenue to local communities from commercial properties that lie adjacent to the freeway, and substantial traffic impacts during the construction period. Modest increases in capacity can be expected from the addition of HOV connections, higher HOV vehicle occupancy requirements (i.e., a change from 2+ to 3+), or from operational improvements such as Intelligent Transportation Systems (ITS) projects.

### *c. Highway and Congestion Problems*

*Highway capacity in the study corridor is not sufficient to accommodate current and forecasted peak hour demands.*

*Substantial congestion exists during peak periods and will increase over time.*

*Travel times on freeways are currently substantial and will increase over time.*

*There are no alternative highway routes to provide relief.*

## 1-3.1.2 Transit

### *a. Transit Network*

Transit service in the study area is provided by LACMTA, Foothill Transit, and some local communities. The primary orientation of transit service is east-west and occurs mostly along major thoroughfares. **Table 1-1** reports the thoroughfares on which transit service occurs. For the purposes of this table, service areas were defined to follow the study corridor from west to east. Service area 1 is bordered on the west by the Sierra Madre Villa Station and I-605 on the east. Service area 2 begins at I-605 on the west and North Lone Hill Avenue on the east. Service area 3 is bordered by North Lone Hill Avenue on the west, and the Claremont Transfer Station on the east. Service area 4 is the portion of the study corridor in San Bernardino County. **Figure 1-3** provides an overview of transit service serving the corridor. Please refer to Chapter 2, Section 2-2 for more detail on current fixed-route transit service, including maps of the routes that serve the study area.

<b>TABLE 1-1 TRANSIT SERVICE LOCATIONS</b>		
<b>Name of Arterial</b>	<b>Direction of Travel</b>	<b>Location in Study Corridor</b>
Rosemead Blvd (State Route 19)	North/South	Area 1
E. Colorado Blvd. (Historic Route 66)	East/West	Area 1
Santa Anita Ave	North/South	Area 1
Myrtle Ave	North/South	Area 1
Baldwin Ave	North/South	Area 1
E. Huntington Dr. (Historic Route 66)	East/West	Area 1 and 2
Azusa Ave (State Route 39)	North/South	Area 2
Citrus Ave	North/South	Area 2
Irwindale Ave	North/South	Area 2
S. Grand Ave	North/South	Area 2



**TABLE 1-1  
TRANSIT SERVICE LOCATIONS**

<b>Name of Arterial</b>	<b>Direction of Travel</b>	<b>Location in Study Corridor</b>
S. Glendora Ave	North/South	Area 2
Arrow Highway	East/West	Area 2 and 3
W. Alosta Ave (Historic Route 66)	East/West	Area 2 and 3
N. Lone Hill Ave	North/South	2 and 3 (Border)
W. Foothill Blvd (State Route 66)	East/West	Area 2 and 3
Bonita Ave	East/West	Area 3
S. San Dimas Ave	North/South	Area 3
N. White Ave	North/South	Area 3
N. Garey Ave	North/South	Area 3
N. Towne Ave	North/South	Area 3
S. Indian Hill Ave	North/South	Area 3
Monte Vista	North/South	Area 4
Central Avenue	North/South	Area 4
7 <sup>th</sup> Street	East/West	Area 4
Arrow Highway	East/West	Area 4
Foothill Blvd.	East/West	Area 4
Sources: Foothill Transit 2003, Omni Trans, 2003.		

Public transportation needs in the study corridor are fulfilled by a combination of traditional transit service (fixed-route bus service with scheduled stops), non-traditional transit service (special shuttle systems and demand-responsive services), and commuter rail service. Generally, the cities in the corridor contract with Foothill Transit to fulfill the sub-regional transportation needs of their citizens. **Table 1-2** provides information on the transit operators in the corridor.

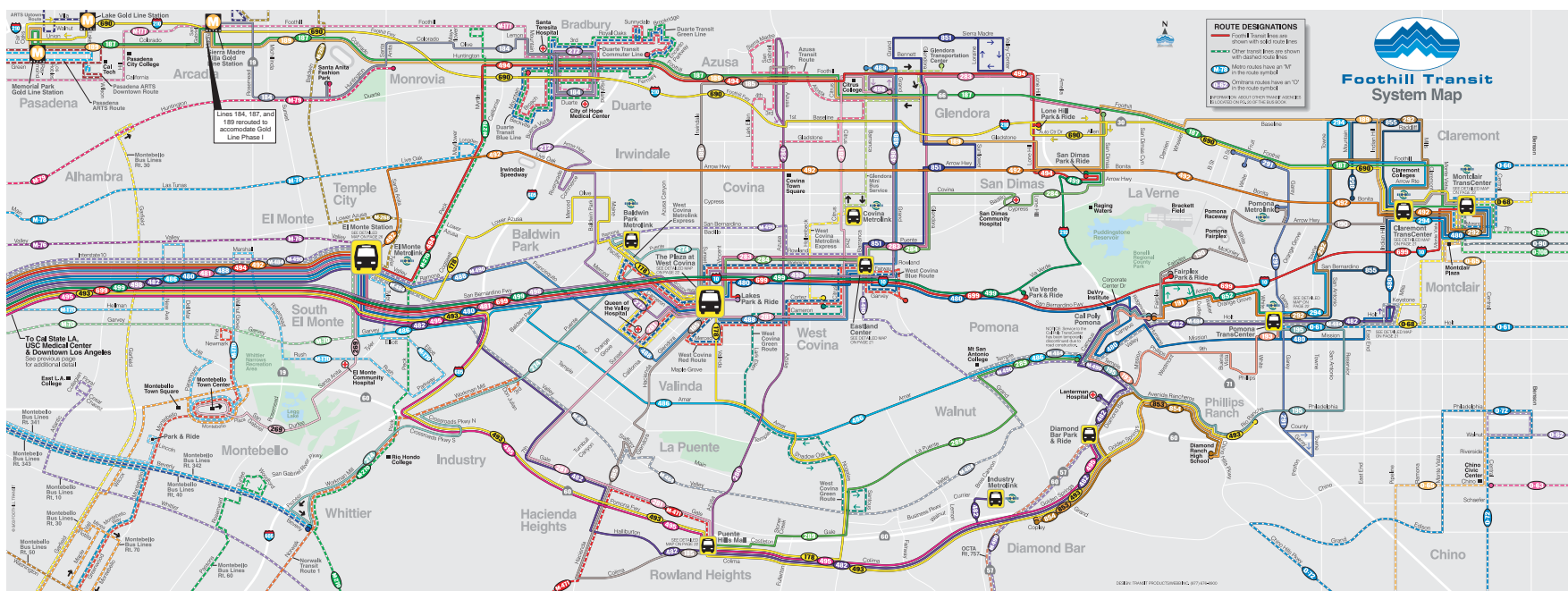


Figure 1-3: Corridor Transit Service

**TABLE 1-2  
TRANSIT OPERATORS IN GOLD LINE PHASE II FOOTHILL EXTENSION STUDY  
CORRIDOR**

<b>Operator</b>	<b>Service Objective</b>	<b>Type of Operation</b>	<b>Service Area</b>
<b>Regional</b>			
Amtrak	Commuter and Travel Rail	Fixed Route	National and Intercity
Access Services	Specialized for the Disabled Citizens. Sponsored by Los Angeles County, Los Angeles County Metropolitan Transportation Authority, Azusa Transit, Pomona Valley Transportation Authority, Foothill Transit, Omnitrans and Member Cities	As Reserved	Los Angeles County, San Bernardino County and member cities
Los Angeles County Metropolitan Transportation Authority	Public Mass Transportation (Operator and Transportation Planning Organization)	Fixed Route	Los Angeles County
	Rail	Fixed Route	Gold Line Phase I
	Bus	Fixed Route	Pasadena, Arcadia, Monrovia, Duarte only
Metrolink	Commuter Rail	Fixed Route	Regional; service only in eastern quarter of study corridor
Foothill Transit	Public Bus Transit (Operator Only)	Fixed Route	Regional; primarily within Los Angeles County
Omnitrans	Bus	Fixed Route	Regional; primarily within San Bernardino County
<b>Local</b>			
Arcadia Transit	Public Shuttle	As Reserved	Arcadia
Azusa Transit	Public Bus System	Fixed Route	Azusa
Azusa Dial-A-Ride	Senior Citizens Shuttle	As Reserved	Azusa
Azusa Pacific University Shuttle	Student Shuttle between Azusa Pacific campuses	Fixed Route	Azusa and Glendora
Claremont Dial-A-Ride	Public Shuttle	As Reserved	Claremont
Get About	Senior and Disabled Citizens Shuttle	As Reserved	Claremont
Duarte Transit Service	Public Bus System	Fixed Route	Duarte
Glendora Mini-Bus	Senior and Disabled Citizens Shuttle	Per Reservation	Glendora
City of Irwindale	Senior Citizens Shuttle	Per Reservation	Irwindale

<b>TABLE 1-2 TRANSIT OPERATORS IN GOLD LINE PHASE II <u>FOOTHILL EXTENSION</u> STUDY CORRIDOR</b>			
<b>Operator</b>	<b>Service Objective</b>	<b>Type of Operation</b>	<b>Service Area</b>
Get About	Senior and Disabled Citizens Shuttle	Per Reservation	La Verne
City of La Verne	Senior Citizens Shuttle	Per Reservation	For Brethren Hillcrest Homes to locations within La Verne
University of La Verne Shuttle	Public Shuttle	Fixed Route	University of La Verne and a Childcare Center at the Fairplex in Pomona
Monrovia Transit	Public Shuttle	As Reserved	Monrovia
Pasadena Area Rapid Transit System	Public Shuttle	Fixed Route	Pasadena
Dial-A-Ride	Shuttle for Senior Citizens and Disabled	As Reserved	Pasadena
Get About	Shuttle for Senior Citizens and Disabled	As Reserved	Pomona
Pomona Dial-A-Ride	Shuttle for Senior Citizens and Disabled	As Reserved	Pomona
Foothill Transit	Subsidizes Service for Senior Citizens	Fixed Schedules	San Dimas
Get About	Senior & Disabled Citizens Shuttle	As Reserved	San Dimas
Dial-a-Cab	Public Transportation	As Reserved	San Dimas
Gateway Coach (formerly Roundabout)	Public Transportation	Fixed Routes	Sierra Madre
Dial-A-Ride	Senior and Disabled	As Reserved	Sierra Madre
Sources: Service providers, 2003.			

A review of the transit routes in the study corridor indicates that the main transit demand is for east-west travel, which is the same as the travel demand on I-210 and arterial streets. This east-west demand can be attributed to several factors associated with development of the study area:

- The presence of the San Gabriel Mountains to the north serves as a barrier.
- The communities in the study corridor originally arose around station stops along the Atchison Topeka and Santa Fe Railroad.
- Historic Route 66, the primary national highway route into Los Angeles from the 1930s until the 1960s, traversed many of the communities. The highway was also important for goods movement

within the region. Both employment centers and residential growth tended to be located along the route, expanding upon the initial development that had been driven by the railroad.

- The creation of I-210 reinforced the growth of employment centers and residential areas along the freeway spine.

### *b. Transit Travel Times*

Commuter rail service is available from the eastern part of the study corridor to downtown Los Angeles. There are Metrolink commuter rail stations in Pomona, Claremont, and Montclair; there are no commuter rail stations in the communities west of Pomona along the study corridor. The scheduled weekday travel time from Montclair (the most easterly station in the study corridor) to downtown Los Angeles is approximately 55 minutes; from Pomona the scheduled travel time is approximately 47 minutes. The scheduled travel time for express bus service from Montclair to downtown Los Angeles is approximately 126 minutes; this route (Foothill 480/481) includes travel in areas well south and outside of the ~~Phase II~~ Foothill Extension study corridor and uses I-10 to reach downtown.

Foothill Transit currently operates twelve bus lines that are contained either entirely or partially within the study corridor. Three of them run east/west along Foothill Boulevard, Huntington Drive, and Arrow Highway for substantial portions of their routes across the Pasadena Gold Line ~~Phase II~~ Foothill Extension study corridor. Bus Lines 187 and 189 from Pasadena to Montclair operates in the traditional, frequent-stop mode. The weekday Express Bus Line 690, uses I-210 for some segments of its route, and makes only four stops between Pasadena and Montclair. Each of these bus lines serve only a portion of the ~~Phase II~~ Foothill Extension study corridor, thus linking only some of the individual downtowns and activity centers, and also leaving some sections of the study corridor unlinked by public transportation. The scheduled travel time on Lines 187/189 from Colorado Boulevard and Sierra Madre Boulevard to the Montclair Transcenter is approximately one and one-half hours during the weekday, and just over one hour on the weekend. The scheduled travel time from Lake Avenue and I-210 to the Montclair Transcenter is approximately one and one-quarter hour on weekdays on Line 690. Line 690 does not operate on the weekend. It should be noted that transit trips along arterials and the freeways are subject to the same delays as other traffic using those facilities.

### *c. Transit Problems*

*Commuter rail service is available only in the eastern quarter of the study corridor and is linked only to downtown Los Angeles.*

*Transit service between the end points of the study corridor is limited to 3 bus routes.*

*The available bus routes do not connect all of the downtowns in the study corridor.*

*The available routes do not serve several major activity centers in the corridors.*

*Bus service is subject to traffic congestion and incidents, resulting in some trips being of unpredictable durations.*

### 1-3.1.3 Arterials

#### *a. Arterial Network*

The study corridor includes an extensive network of arterial streets, which generally form a grid pattern. This grid offers some opportunities for travel that are alternatives to the use of I-210. However, despite the presence of very long east-west arterials such as Route 66/Foothill Boulevard/ Huntington Drive or Arrow Highway/Live Oak Avenue/Las Tunas Drive, these east-west arterials are not continuous. The longest segments of the major east-west arterials cross a few communities before a break occurs, usually requiring trip-makers to drive about a mile north or south to connect to another long segment. As a result, there are no street arterials, or linked arterials, that create an uninterrupted route across the study corridor. This discontinuity affects automobile and truck movements, as well as transit service, and tends to push those drivers who need to make longer trips onto I-210.

The arterial network serves two, sometimes competing, functions. In addition to providing access across the general area, the arterials also function as primary distributors for traffic in each city. The mix of through traffic, traffic bound for local destinations, and traffic bound for activity centers located adjacent to arterials, can overburden the network in some locations or at particular times.

#### Arterial Travel Times

Posted speed limits on arterials in the study area are generally 35 miles per hour. However, actual travel speed through the corridor is greatly influenced by frequently occurring intersections and congestion at intersections. Travel data gathered in Fall 2003 for 117 intersections throughout the study area indicate that 13 percent of them functioned as a level of service (LOS) with substantial amounts of delay (LOS D, E or F) in the morning period, with congestion increasing to about 16 of the intersections in the afternoon period. Data were not gathered for all roadways on which transit occurs, but the conditions identified are consistent with field observations.

#### *b. Arterial Network Problems*

*East-west arterials that potentially provide alternative routes to I-210 are discontinuous.*

*Travel times on arterials are slow and subject to congestion and incidents that affect their viability as alternate routes across the study area.*

### 1-3.2 Population and Employment Factors

Among the indicators of demand for transportation improvements are the population and employment characteristics of a corridor. The ~~Phase II~~ Foothill Extension study area has continually increased in population over time and is forecasted to have substantial growth through 2025. In addition to population growth, the corridor has had a strong increase in employment over time, with a forecast of robust increases in employment throughout the corridor.

#### 1-3.2.1 Population

The study area includes 13 cities, each of which is a well-established community that is intricately linked to the Los Angeles metropolitan area's characteristic of widespread, decentralized employment and

residential areas. As shown in **Table 1-3**, these communities grew in population between 1990 and 2000 and are forecast to continue to grow through 2025. In total, the cities in the study corridor contain more than 690,000 persons, with a predicted increase of almost 23 percent by 2025. Individual communities are expected to grow between 3 and 56 percent, with about half of them in the 20–30 percent range. These levels of growth are a result of planned expansions or redevelopment at higher densities. The data reflect the situation pointed out in Figure 1-2, a growing population that has and will outstrip planned increases in the transportation network.

<b>TABLE 1-3 LOCAL AND REGIONAL POPULATION CHANGE 2000 TO 2025</b>					
<b>City</b>	<b>1990 Population</b>	<b>2000 Population</b>	<b>Percent Change 1990–2000</b>	<b>Forecasted Population 2025</b>	<b>Percent Change 2000–2025</b>
Arcadia	48,290	53,054	+9.9	54,783	+ 3.1
Azusa	41,333	44,712	+8.2	51,595	+15.4
Claremont	32,503	33,998	+4.6	39,575	+16.4
Duarte	20,688	21,486	+3.9	27,101	+26.1
Glendora	47,828	49,415	+3.3	56,992	+15.3
Irwindale	1,050	1,446	+37.7	2,256	+56.0
La Verne	30,897	31,638	+2.4	37,411	+18.2
Montclair	28,434	33,049	+16.2	41,464	+25.5
Monrovia	35,761	36,929	+3.3	45,743	+23.9
Pasadena	131,591	133,936	+1.8	173,643	+29.6
Pomona	131,723	149,473	+13.5	189,687	+26.9
San Dimas	32,397	34,980	+8.0	40,488	+22.6
Upland	63,374	68,393	+7.9	88,166	+28.9
<b>Study Area</b>	<b>645,869</b>	<b>692,509</b>	<b>+7.2</b>	<b>848,904</b>	<b>+22.6</b>
LA County	8,863,164	9,519,338	+7.4	12,338,000	+29.6
SB County	1,418,380	1,709,434	+20.5	2,787,000	+63.0

Sources: U.S. Bureau of the Census, 2000 (SF1). Forecasts: 2001 SCAG RTP.

### 1-3.2.2 Employment

It is important to note that the study corridor is not composed of bedroom communities. Rather, there are substantial areas of employment, as shown in **Table 1-4**. The study corridor contained more than 346,000 jobs in 2000. The employment forecasts from SCAG indicate that by 2025 an additional 85,425 jobs will be created within the corridor, a 24.6 percent increase over 2000. **Table 1-5** describes the activity centers located in the corridor within one mile of the proposed alignment. This impressive number of activity centers along the study corridor is a reflection of the historic development pattern that occurred in the San Gabriel Valley. The individual towns, built along and linked by the railroad, originally created a series of individual residential and employment nodes. Over time, as these towns expanded, additional employment and activity centers developed along the rail line and the communities' arterial street network.

**TABLE 1-4  
CHANGE IN EMPLOYMENT 2000 TO 2025**

City	2000	2005	2010	2015	2020	2025	Percent Change 2000–2025
Arcadia	23,744	24,274	24,800	25,172	25,393	25,644	+8.0
Azusa	14,505	15,047	15,635	15,998	16,282	16,613	+14.5
Claremont	11,960	12,246	12,563	12,797	12,940	13,104	+9.5
Duarte	9,914	10,824	11,758	12,338	12,816	13,330	+34.4
Glendora	18,018	18,444	19,157	19,607	19,925	20,269	+12.5
Irwindale	32,550	37,886	43,322	46,550	49,432	51,512	+58.2
La Verne	8,996	9,504	10,130	10,523	10,835	11,172	+24.2
Montclair	17,357	19,649	22,296	23,833	25,198	26,653	+53.5
Monrovia	22,083	23,046	23,978	24,588	25,038	25,525	+15.6
Pasadena	93,287	96,502	99,749	101,977	103,578	105,366	+12.9
Pomona	50,609	52,726	54,948	56,404	57,453	58,644	+15.9
San Dimas	15,422	16,549	17,641	18,326	18,854	19,476	+26.3
Upland	28,313	32,398	37,080	39,821	42,263	44,875	+58.5
Study Area	346,758	369,096	393,057	407,934	420,007	432,183	+24.6
LA County	4,312,264	4,655,000	4,890,000	5,029,000	5,156,000	5,291,000	+22.7
SB County	735,589	715,000	852,000	933,000	1,007,000	1,086,000	+47.6
Sources: U.S. Bureau of the Census, 2000; Forecasts: revised 2001 SCAG RTP.							

**TABLE 1-5  
MAJOR ACTIVITY CENTERS**

City	Name	Type of Usage
Pasadena	East Foothill Industrial Center	Manufacturing & Employment
	Hastings Village	Commercial and Employment
Arcadia	Los Angeles County and State Arboretum	Recreation and Special Events
	Santa Anita Race Track	Recreation and Employment
	Arcadia County Park and Santa Anita Golf Course	Recreation and Special Events
	Westfield Shoppingtown Santa Anita Mall	Commercial and Employment
	Arcadia Civic Center	Public Service & Employment
	Civic Center Athletic Field and Recreation Area	Recreation



**TABLE 1-5  
MAJOR ACTIVITY CENTERS**

<b>City</b>	<b>Name</b>	<b>Type of Usage</b>
	Huntington Shopping Center	Commercial and Employment
	Huntington Drive Redevelopment Area	Commercial and Employment
	Methodist Hospital of Southern California	Public Service & Employment
Monrovia	Old Town Monrovia	Commercial and Employment
	Monrovia Center	Commercial and Employment
	Huntington Oaks Center	Commercial and Employment
	*Hi-Tech Corridor	Industrial and Employment
Duarte	City of Hope National Medical & Research Center	Public Service and Employment
	Duarte Performing Arts Center	Recreation and Employment
	Santa Teresita Hospital	Public Service & Employment
	Rancho Duarte Golf Course	Recreation
	Duarte Sports Park	Recreation
	Otis Gordon Sports Park	Recreation
Irwindale	Santa Fe Flood Control Basin	Public Service & Employment
	Santa Fe Dam Recreation Area	Recreation and Employment
	Miller Brewery	Employment
Azusa	Azusa Square	Commercial and Employment
	Azusa-Pacific University	Education and Employment
	Foothill Center	Commercial and Employment
	Costco	Commercial and Employment
	Rainbird	Manufacturing & Employment
	Wynn Oil Company	Manufacturing & Employment
	Morris International	Manufacturing & Employment
	Monrovia Nursery	Agriculture / Commercial and Employment
	Aerojet Gencorp.	Manufacturing & Employment
	TH Molding	Manufacturing & Employment
	Pierre Fabre	Manufacturing & Employment
	Best Quality Furniture	Manufacturing & Employment
	Tru Wood Products	Manufacturing & Employment
	Artisan Screen Process	Manufacturing & Employment
	California Amforge	Manufacturing & Employment
	Hansen's Juices, Inc.	Manufacturing & Employment

**TABLE 1-5  
MAJOR ACTIVITY CENTERS**

<b>City</b>	<b>Name</b>	<b>Type of Usage</b>
Glendora	Citrus College	Education and Employment
	Foothill Presbyterian Memorial Hospital	Public Service and Employment
	Glendora Community Hospital	Public Service & Employment
	Glendora Auto Centre	Commercial and Employment
	Mayflower Center	Commercial and Employment
	Lone Hill Center	Commercial and Employment
	Louis Pompei Sports Park	Recreation
	South Hills Park	Recreation
	Glendora County Club	Recreation and Employment
	Huntington East Valley Hospital	Public Service and Employment
	Wal-mart	Commercial and Employment
	Glendora Market Place	Commercial and Employment
	Caltrol, Inc.	Manufacturing & Employment
	National Hotrod Association	Manufacturing & Employment
	CCC Information Services	Manufacturing & Employment
San Dimas	Target Shopping Center	Commercial and Employment
	Frank G. Bonelli Regional County Park	Recreation
	Frontier Village	Commercial and Employment
	Lowes/Levitz Center	Commercial and Employment
	ADP/Gilead Sciences	Manufacturing & Employment
	Bausch & Lomb	Manufacturing & Employment
	Overland Court Corporate Center	Manufacturing & Employment
	San Dimas Sheriff's Dept.	Public Service & Employment
	San Dimas Community Hospital	Public Service & Employment
	Life Bible College	Education and Employment
	Raging Waters	Recreation and Employment
La Verne	University of La Verne	Education and Employment
	Brackett Field	Airport and Employment
	Classic Canvas	Manufacturing & Employment
	San Polo Business Park	Manufacturing & Employment
	Old Town La Verne	Commercial & Employment
	Arrow Corridor Businesses	Manufacturing & Employment
	Hillcrest Homes	Public Service & Employment
	Metropolitan Water District, Weymouth Treatment Facility	Public Service & Employment
	Princeland Properties	Manufacturing & Employment

**TABLE 1-5  
MAJOR ACTIVITY CENTERS**

<b>City</b>	<b>Name</b>	<b>Type of Usage</b>
	Paper Pak Industries	Manufacturing & Employment
	La Verne Recreation Park	Recreation
	David and Margaret Home	Public Service & Employment
	Damien High School	Public Service & Employment
	1300 Palomares Industrial Park	Manufacturing & Employment
Pomona	Los Angeles County Fairplex	Recreation, Employment and Special Events
	Garey Center	Commercial and Employment
	The Valley Center	Commercial and Employment
	Martin-Lockheed Electro-Optical	Manufacturing & Employment
	Verizon Communications	Commercial and Employment
	Pomona Paper Stock Company	Commercial and Employment
	Coast Foundry and Manufacturing	Manufacturing & Employment
Claremont	Claremont Village	Commercial and Employment
	Claremont Colleges	Education and Employment
	Claremont Auto Center	Commercial and Employment
	Visiting Nurses Association and Hospice	Public Service & Employment
	Hi-Rel Connectors, Inc.	Manufacturing & Employment
	**Claremont Manor	Public Service and Employment
	Pilgrim Place	Public Service and Employment
	Blaisdell Community Building	Recreation and Public Service
	Blaisdell Park	Recreation
	College Park	Recreation
Montclair	Town Square Center	Commercial and Employment
	Montclair Plaza	Commercial and Employment
	Doctors Hospital Medical Center of Montclair	Public Service and Employment
	Mountain Green Center	Commercial and Employment
	Mountain Square	Commercial and Employment
Upland	Cable Airport	Airport and Employment
	Upland Center	Commercial and Employment
	New Orleans Square	Commercial and Employment
	Upland Square	Commercial and Employment
	The Plaza	Commercial and Employment
<p>* There are over 48 hi-tech businesses located in this corridor.</p> <p>** There are two Claremont Manors.</p>		

Notable among these employment centers are historic downtowns, as well as major activity areas such as the Los Angeles County Arboretum, Santa Anita Park, Westfield Shoppingtown Santa Anita Mall, City of Hope National Medical Center, Miller Brewing, Azusa Pacific and Citrus Colleges, University of La Verne, the Pomona Fairplex, and the Claremont Colleges. This series of closely spaced activity centers provide an unusual opportunity to create a regional employment corridor linked by transit. Within this employment corridor, the institutional and recreation resources provide a set of particularly stable set of employment and activity generators. The range of employment locations across the corridor creates the proverbial two-edged sword: opportunities for some people to live near where they work, and the need for others to travel substantial distances to jobs located within the corridor or in other employment centers located outside of the ~~Phase II Foothill Extension~~ study area.

These activity centers are indicative of demand for improved transportation facilities. For instance, the recreational resources at Santa Anita and Fairplex are on-going sources of high-volume visits and special events. The three hospitals in the corridor have high employment levels per square foot, partly as a result of their 24-hour operations. The four colleges provide substantial employment opportunities, plus student populations that often make multiple trips per day (including the evening) to and from the campuses.

#### *a. Population and Employment Issues*

*Access between areas of current and forecasted population and locations of current and forecasted employment must utilize transportation facilities that are currently at or over capacity during peak periods.*

*Only some of the activity centers in the corridor are connected to existing transit services, affecting potential access to employment for persons without automobiles*

*Existing transit service between activity centers is infrequent, even during peak hours.*

*The corridor is expected to grow substantially in population and employment through 2025 and such growth would place ever-increasing demands on the transportation infrastructure.*

*Communities recognize and have undertaken planning to accommodate forecasted growth; many community plans call for transit improvements to help manage that growth.*

### 1-3.3 Environmental Considerations

The Los Angeles metropolitan area has the unfortunate distinction of having some of the most serious air quality problems in the nation. SCAG's 2004 RTP reports that during the 1990s, the region achieved consistent improvements in the number of days exceeding federal or state standards for ozone and carbon monoxide. The region exceeded the federal one-hour standard for ozone during 40 days in 2000 compared to 130 days in 1990. However, in 2002, the number of days exceeding the federal one-hour standard for ozone increased to 49 days from 36 days in 2001. The number of days for health advisory also increased from 15 to 18 days between 2001 and 2002. SCAG reports that available data for 2003 indicated that it would be even worse than in 2002.

The strategy for addressing the region's air quality concerns includes transit improvements that provide increased mobility while simultaneously reducing air emissions. Accordingly, the proposed Gold Line ~~Phase II Foothill Extension~~ project has been incorporated into the 2004 RTP and into the near-term Regional Transportation Improvement Plan.

In addition, goals and objectives identified for transportation planning in the corridor (discussed below) call for improving air quality and preserving and protecting the natural and man-made environments.

### 1-3.3.1 Environmental Issues

*Transportation improvements must support achievement of the region's air quality plan.*

*Transportation improvements should avoid or minimize impacts to natural and manmade environments.*

## 1-3.4 Corridor Transportation Planning Guidance

### 1-3.4.1 Goals and Objectives

During initial corridor planning undertaken in 2001 by the Construction Authority and the San Gabriel Valley Council of Governments, representatives of local governments established goals and objectives for transportation improvements in the study corridor. These goals and objectives are shown in **Table 1-6**. A range of transportation improvements, including those in this environmental document, could address these goals and objectives.

<b>TABLE 1-6 GOALS AND OBJECTIVES</b>		
<b>Category</b>	<b>Goal</b>	<b>Objective</b>
Land Use & City Vision	To locate stations that facilitate cities' visions for land use and development around transit stations and adjoining activity centers	Cities and transit providers to jointly select station locations that maximize transit use and further cities' plans for transit oriented development (infrastructure, parking, development, redevelopment, etc.)
	To create a system that creates/adds identity and attractiveness to San Gabriel Valley cities	To provide highly visible stations that represent the cities' senses of place
		To respect community architectural and urban design standards
		To provide safe access for pedestrians, and bicycles
		To enhance community identity
Transit Usefulness	To complement other existing transit in the corridor and optimize previous investments	To take advantage of the high visibility of the Corridor to promote transit use
		To provide efficient intra-corridor service not currently met by Metrolink, Foothill Transit or the Pasadena Gold Line Phase I
	To reduce auto dependency	To make good use of the right-of-way already purchased
		To create a system with the capability to carry at least 25 percent as many people as are carried in all I-210 travel during the day, and to offer a level-of-service capable of attracting this percent of travel.

<b>TABLE 1-6 GOALS AND OBJECTIVES</b>		
<b>Category</b>	<b>Goal</b>	<b>Objective</b>
	To improve mobility and provide connectivity to regional and local transit systems	To provide good connections to Metrolink, Foothill Transit, and the Pasadena Gold Line Phase I at Sierra Madre Villa Avenue
	To implement a project within a reasonable period of time	To implement new transit service in the corridor by 2008.
Cost Effectiveness	To develop a cost-effective transit system	To incur capital costs of less than the cost of increasing the capacity of I-210 by 25%.
		To be capable of being operated and maintained at or better than the average cost of other rapid transit systems in Los Angeles County
Environmental	To improve air quality and preserve and protect the natural and man-made environment	To avoid potential impacts by utilizing existing disturbed right-of-way
		To avoid property acquisitions to the extent possible
		To work jointly with the cities to identify potential impacts and feasible mitigation measures in order to minimize impacts
		To reduce, not add to, tailpipe emissions
Study Process	To work collaboratively with local cities throughout the Alternatives Analysis process	To ensure that the desires, policies, and concerns of corridor cities and citizens are considered in the LPA process
		To develop a public participation program in collaboration with corridor cities
		To listen to the community and explain how we have responded to comments as the study progressed

#### 1-3.4.2 Previous Analysis

An Alternatives Analysis was conducted between September 2001 and June 2002 by the Construction Authority and the San Gabriel Valley Council of Governments (SGVCOG). The Alternatives Analysis looked at transportation conditions and possible solutions for improving mobility across the corridor from Pasadena to Claremont. Seven alternatives were examined in this study and screened down to an Alternatives Analysis Locally Preferred Alternative (LPA-AA) selected by the Construction Authority

and the SGVCOG in 2002. The LPA-AA is a continuation of the light rail transit (LRT) technology from the existing Sierra Madre Villa LRT station in Pasadena to the Claremont Transit Center.<sup>3</sup> Although not sponsored by the Federal Transit Administration (FTA), the Alternatives Analysis followed FTA study procedures in assessing potential transportation solutions. The study identified transportation conditions to be addressed, developed a range of potential solutions, and systematically evaluated and compared those potential solutions.

### *a. Issues from Previous Analysis*

*Alternative transportation modes have been previously assessed. Rail modes were shown to be more effective in dealing with corridor transportation problems than either highway improvements or bus-based improvements.*

*Cities in the study corridor have expressed their support for extending LRT service along an available right-of-way, as opposed to commuter rail service.*

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<sup>3</sup> The eastern terminus was extended to the Montclair Transcenter subsequent to the adoption of the LPA-AA.

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