

Gold Line *Phase II*



ALTERNATIVES ANALYSIS **Final Report Draft**

January 9, 2003

**GOLD LINE PHASE II EXTENSION
PASADENA TO CLAREMONT
ALTERNATIVES ANALYSIS**

FINAL DRAFT REPORT

January 9, 2003

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Chapter 1: INTRODUCTION AND BACKGROUND

- The purpose of this Alternatives Analysis (AA) is to consider transportation strategies that will address the mobility needs of the Gold Line Phase II Corridor.
- The AA is part of a federal process developed to efficiently and methodically review a range of potential solutions by using comparative analyses tools to identify what type of transportation improvement(s) would best meet the 20-year mobility needs of a corridor.
- The Pasadena to Claremont Gold Line Phase II Corridor is a 23-mile corridor in the San Gabriel Valley made up of residential, commercial, institutional, industrial and railroad uses.

1.1 Introduction

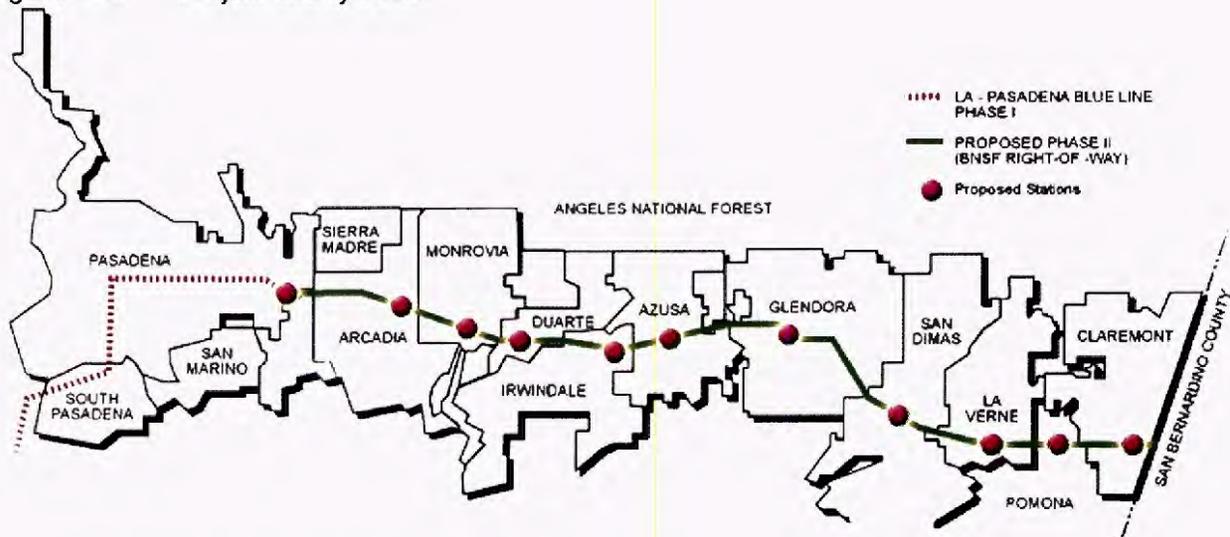
The Metro Blue Line Construction Authority (Authority) and the Federal Transit Administration (FTA) sponsored the Pasadena to Claremont Gold Line Phase II Alternatives Analysis (AA), initiated in the fall of 2001 and concluded in January 2003. The AA was conducted and technical documents prepared to support a decision on a Locally Preferred Alternative (LPA). Once a decision on an LPA along with a funding strategy is made, it will be adopted into the Southern California Association of Government's financially constrained long-range plan, marking the conclusion of the alternatives analysis study process. Although the AA report does not recommend an alternative, it does provide a focused analysis and evaluation of each alternative considered and how they address the mobility needs of the Corridor. The overall goal of the Gold Line AA is to develop an effective and efficient transportation strategy that improves access and mobility in the corridor, supports economic revitalization in each Corridor city, and contributes to the preservation and enhancement of the natural environment.

The objective of this report is to summarize the process, describe public and agency involvement, identify problems and needs of the Corridor, present the goals and objectives for the project, describe the alternatives and their ability to meet the Corridor needs and objectives, and identify funding opportunities. The report also explains how and when an LPA will be selected and identifies future steps to implement the project.

1.2 The Pasadena to Claremont Corridor

The Pasadena to Claremont Corridor, referred to as the Gold Line Corridor, is a 23-mile east-west corridor in the San Gabriel Valley of Southern California that generally follows the foothills of the San Gabriel Mountains from Pasadena east to the San Bernardino County line. The project area runs along the existing Burlington Northern Santa Fe (BNSF) railroad right-of-way (ROW), paralleling Interstate 210 (I-210) and Arrow Highway, and connects the historic downtowns of the cities of Arcadia, Monrovia, Duarte, Irwindale, Azusa, Glendora, San Dimas, La Verne, Pomona, and Claremont. Figure 1.1 shows the regional context.

Figure 1.1: Project Study Area



1.3 The Alternatives Analysis Study Process

The process used in the development of the Gold Line Corridor AA followed the Major Investment Study guidelines of the Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) and the Transportation Equity Act for the 21st Century (TEA-21), and the Southern California Association of Governments (SCAG) Procedures Manual for Regionally Significant Transportation Investment Studies (RSTIS). These guidelines are applicable to alternatives analyses and include the following elements:

- A cooperative and collaborative process to establish the range of alternatives to be studied and factors to be addressed;
- An evaluation of the effectiveness and cost-effectiveness of alternative investments or strategies in attaining local, state, and national goals and objectives;
- Consideration of the direct and indirect costs of alternatives, and factors such as mobility improvements; social, economic and environmental effects; safety; operating efficiencies; land use and economic development; financing; and energy consumption;
- A proactive public involvement process that provides opportunities for the public and various interests to participate; and
- Documentation of the consideration given to alternatives and their impacts.

The Gold Line AA report contains all of this required information, has completed alternatives analysis, and, therefore, is positioned to seek Section 5309 New Starts funding. Funding strategies have also been developed and are discussed in Chapter 4. The following technical reports have been prepared as part of the AA:

- | | |
|---|----------------|
| • Preliminary Strategies to Fund the Capital Costs of Phase II ¹ | October, 2001 |
| • Public Involvement Plan ² | November, 2001 |
| • Conceptual Definition of Alternatives Report | November, 2001 |

¹ Prepared by Sharon Greene and Associates

² Prepared by Arellano and Associates

- Mobility Problem and Purpose and Need Statement April, 2002
- Conceptual Alternatives Plan Set April, 2002
- Environmental Impacts Report May, 2002
- Operations Plan Report April, 2002
- Traffic Analysis Report April, 2002
- Ridership Results Report June, 2002
- Transit Oriented Development: Prospects and Opportunities for the Gold Line Corridor Report April, 2002
- Draft Alternatives Analysis Report April, 2002

These reports are available for review at the Authority office in South Pasadena and at city halls and public libraries located in the Corridor cities, including Arcadia, Monrovia, Duarte, Irwindale, Azusa, Glendora, San Dimas, La Verne, Pomona, and Claremont.

Chapter 2: PURPOSE AND NEED

- The San Gabriel Valley represents one of the region's most significantly congested areas. A number of transportation problems have been identified for the Corridor, including:
 - increasing congestion on Interstate 210;
 - limited transit lines serving only arterials; and
 - planned projects in SCAG's RTP are not sufficient to address forecasted demand.
- A large number of closely-spaced activity centers provide an unusual opportunity to create a regional employment corridor linked by transit. Approximately two-thirds of the people living in the Corridor also work there.
- Significant growth in the Corridor will occur between 2000 and 2020 at rates higher than Los Angeles County.

2.1 Activity Centers

As shown in Figure 1.1, the proposed project would begin at the Sierra Madre Villa Station at the eastern end of the Pasadena Gold Line Phase I and continue to the City of Claremont. The project would connect the historic downtowns of all of the Corridor cities, as well as major activity areas such as Santa Anita Park, City of Hope, Azusa Pacific and Citrus Colleges, University of La Verne, the Pomona Fairplex and the Claremont Colleges. Table 2.1 lists the major activity centers that can be found within one mile of the alignment. Appendix A provides more detail on the specific activity centers. One of the objectives of the Gold Line Phase II project would be to connect these activity centers.

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.

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 Corridor includes recreation resources (Los Angeles County Arboretum, Santa Anita Park and Los Angeles County Fairplex) that draw visitors from throughout the region. There are three hospitals, including the world-famous City of Hope, and four institute of higher learning (Azusa Pacific College, Citrus College, La Verne University, and the Claremont Colleges). This Corridor is also home to a number of biotech and technology firms, as shown in Figure 2.1.

Figure 2.1 Technology Corridor Map

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THE GOLD LINE TECHNOLOGY CORRIDOR



SAN GABRIEL VALLEY FOOTHILL TECHNOLOGY CORRIDOR KEY

- Hospitals
- ◆ Research Institutions
- College/Universities
- ★ Technology Companies

— Alameda Corridor East Rail Project
— Blue Line Gold Line
— L.A. Pasadena Claremont
— Blue Line Gold Line Rail Project



★ San Gabriel Valley's Largest/Growing Technology Companies

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|---|--|---|------------------------------------|---|---------------------------------------|-------------------------------|-------------------------------------|---------------------------------|
| 1. Anthony Products Co. | 13. Earthlink Networks | 25. Optical Research Associates | 37. Electro Cubic Inc. | 49. Aerojet Corporation | 61. Findlay Westam | 73. SciPharm | 85. Marshall Industries | 107. Via Space Technology |
| 2. Abbott Laboratories | 14. EMC Laboratories | 26. Parsons Engineering | 38. GNP Computers | 50. Narsac Inc. | 62. Magellan Corporation | 74. Avron Engineering Company | 86. NavCom Inc. | 108. OGEN Communications |
| 3. Bausch & Lomb Surgical | 15. English Technology | 27. Pioneer Electronics | 39. ParaSoft Marketing | 51. Opti-Radiation | 63. Gilead Sciences | 75. Barton Industries | 87. Saragat Fitcher Inc. | 109. SIMWare |
| 4. Syman Linear Supplies | 16. ESCO CAT Electric Service & Supply Co. | 28. Southern California Clinical Laboratories | 40. Starr Curphey Company | 52. Amnucorp Corporation | 64. VMM Scientific Products | 76. CTX International | 88. Linsome Electronics Corporation | 110. P-Corpus Inc. |
| 5. Lucent Technologies | 17. Genetec Technologies | 29. Swales Aerospace | 41. Sci-Biotech Technology Corp. | 53. Perkin Elmer | 65. Wescorp | 77. Ecobat Inc. | 89. Zero Electronics Solutions | 111. Van-Tronics Company |
| 6. J&K Reference Webster | 18. Idea Lab | 30. Lamer Research | 42. UniTek Miyachi Corporation | 54. Pall Corp. | 66. Markwin International Corporation | 78. Ecolab Inc. | 90. Advanced Technology Inc. | 112. Home-Grocer.com |
| 7. ASL Consultants, Inc. | 19. Jet Propulsion Laboratory | 31. Tetra Technologies | 43. Hewlett Laboratories | 67. Mitsuba Computer Systems | 80. Markwin International Corporation | 79. Fan-Hill Fasteners | 91. Genovis | 113. OAO Corporation |
| 8. Avery Dennison | 20. Kajima Engineering & Construction | 32. Xenor | 44. City of Hope | 68. H&H Coyne Inc. | 81. Jico Laboratories Inc. | 80. General Medical Corp. | 92. Eubank Engineering | 114. Honeywell |
| 9. Cal-Swiss a division of Gorko Industries | 21. McKinstry H&H Co., Inc. | 33. The Xerox Company | 45. Triody Aerospace | 69. JG Engineering | 82. MNT Technology | 81. Eubank Engineering | 93. Sensontronics | 115. Everett Charles Technology |
| 10. City Search | 22. Servo Products Company | 34. Abbott Diagnostic | 46. Pacific Scientific Corporation | 70. KC Pharmaceutical Inc. | 83. Proview Technology Inc. | 82. MNT Technology | 94. Sensontronics | 116. Charter Communications |
| 11. Clear All Micro Sensors | 23. Modern Health Care, Inc. | 35. AeroVironment Inc. | 47. Usual Aviation Inc. | 71. Orbital Sciences Corporation | 84. Quest Components | 83. Proview Technology Inc. | 95. Sensontronics | 117. Venzon |
| 12. Cyano Sciences Inc. | 24. Nanostream, Inc. | 36. Composite Structures | 48. Vision East | 72. Sni Structural Composite Industries | 85. Same Day.com | 84. Quest Components | 96. Same Day.com | 118. Metrics Database |
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**Table 2.1
Types of Major Activity Centers
within 1 mile of the Alignment**

<i>City</i> \ <i>Type of Activity</i>	<i>Employment</i>	<i>Manufacturing</i>	<i>Commercial</i>	<i>Recreation</i>	<i>Public Service</i>	<i>Industrial</i>	<i>Education</i>	<i>Agricultural</i>	<i>Airport</i>	<i>Recreation</i>	<i>Special Events</i>	<i>Public Service</i>	<i>Transportation</i>
Pasadena	X	X	X										X
Arcadia	X		X	X	X					X	X		
Monrovia	X		X			X							
Duarte	X			X	X					X			
Irwindale	X			X	X								
Azusa	X	X	X				X	X					
Glendora	X	X	X	X	X		X			X			
San Dimas	X	X	X	X	X		X			X			
La Verne	X	X	X		X		X		X	X			
Pomona	X	X	X							X	X		
Claremont	X	X	X		X		X			X		X	

These resources are likely to be very supportive of transit ridership. For instance, the recreational resources are on-going sources of high-volume visits and special events. The three hospitals have high employment levels per square foot, partly as a result of their 24-hour operations. The four largest colleges provide substantial employment opportunities, plus student populations that often make multiple trips per day (including the evening) to and from the campuses. Multiple smaller colleges are also located within the Corridor.

2.2 Study Area Characteristics

In the ten years since 1990, the population of Los Angeles County has grown by 7.4 percent. Population growth in the study area has been similar. Table 2.2 shows the cities that abut the Gold Line Corridor and their population growth between 1990 and 2000 and projected growth between 2000 and 2025. In addition to the ten Corridor cities with stations, the adjacent city of Pasadena are technically in the Corridor and would benefit from and attract ridership to a transit improvement in the Gold Line Corridor; therefore, it has been included in the demographic assessment of the Corridor.

Five of the eleven cities have experienced a population growth of 7.9 percent or more in the ten years since 1990. This is a one-half percent growth rate above the County of Los Angeles in the same time frame. Two of those cities, Irwindale and Pomona, had more substantial population growth in that same ten-year time span (38 and 13.5 percent, respectively).

Nine of the eleven cities in the study Corridor are expected to have a population growth that ranges from 13.6 percent to 29.7 percent through the year 2025. The City of Irwindale, however, is expected to grow by 57.3 percent in the same time frame.

<i>City</i>	<i>1990 Population</i>	<i>2000 Population</i>	<i>Percentage Change 1990 to 2000</i>	<i>Forecasted Population 2025</i>	<i>Percent Change 2000 to 2025</i>
Arcadia	48,290	53,054	+9.6	54,712	+3.1
Azusa	41,333	44,712	+8.2	50,778	+3.7
Claremont	32,503	33,998	+4.6	38,609	+13.6
Duarte	20,688	21,486	+3.9	27,140	+26.3
Glendora	47,828	49,415	+3.3	56,909	+15.2
Irwindale	1,050	1,446	+37.7	2,275	+57.3
La Verne	30,897	31,638	+2.4	36,952	+16.8
Monrovia	35,761	36,929	+3.3	45,840	+24.1
Pasadena	131,591	133,936	+1.8	173,709	+29.7
Pomona	131,723	149,473	+13.5	189,297	+26.6
San Dimas	32,397	34,980	+8.0	39,996	+14.3
LA County	8,863,164	9,519,338	+7.4	11,847,538	+24.5

Sources: U.S. Bureau of the Census, 2000, 2001 SCAG RTP Update, Myra L. Frank and Associates, Inc.

This population growth is accompanied by the forecasted growth in employment. Table 2.3 displays future employment growth for the cities located in the Gold Line Corridor. Two of the eleven communities in the study Corridor are expected to have a job growth of over 20 percent in the 20 years between 2005 and 2025. Five others are expected to have a job growth of between 10 percent and 20 percent in this time span. More than half of the cities in the Corridor will have an employment growth above that of Los Angeles County as a whole.

<i>City</i>	<i>2005</i>	<i>2010</i>	<i>2015</i>	<i>2020</i>	<i>2025</i>	<i>% Change 2005-2020</i>
Arcadia	24,274	24,822	25,149	25,444	25,758	6.1
Azusa	15,051	15,609	15,941	16,242	16,564	10.1
Claremont	12,253	12,552	12,731	12,894	13,065	6.6
Duarte	10,824	11,764	12,322	12,829	13,371	23.5
Glendora	18,628	19,170	19,489	19,780	20,090	7.9
Irwindale	37,886	43,404	46,667	49,648	52,818	39.4
La Verne	9,506	10,034	10,348	10,633	10,934	15.0
Monrovia	23,046	24,044	24,633	5,174	25,748	11.7
Pasadena	96,502	99,824	101,791	103,584	105,494	9.3
Pomona	52,726	54,912	56,202	57,386	58,640	11.2
San Dimas	16,550	17,713	18,403	19,031	19,699	19.0
LA County	4,671,281	4,899,580	5,037,778	5,165,438	5,122,395	9.7

Source: 2001 SCAG RTP Update, Myra L. Frank and Associates, Inc.

This strong forecast of employment reinforces the notion that the Gold Line is a regional employment corridor and reflects the presence of several very stable employment centers (especially the colleges and hospitals).

The City of Irwindale is expected to have the highest growth in employment, with a 31 percent increase by the year 2025. The second highest, the City of La Verne, is expected to have a growth of 12 percent by that same year. The County of Los Angeles' projection is close to that of the City of La Verne at 11 percent. The forecasted increases in population and employment in the Corridor will increase the demand on existing transportation systems and services, as discussed in the following section.

2.3 Existing Transportation Systems and Services

Freeways and Major Arterials

The Corridor is served primarily by the Foothill Freeway (I-210). Approximately half of the railroad ROW that would be used for the Gold Line Phase II closely parallels the Foothill Freeway.

In addition to the Foothill Freeway, the San Bernardino Freeway (I-10) and the Pomona Freeway (SR-60) are major east/west freeways serving the San Gabriel and Pomona Valleys. The San Bernardino Freeway is located approximately one-half to seven miles to the south of the project depending on the route segment, while the Pomona Freeway is about five to nine miles to the south. The San Gabriel River Freeway (I-605) is a north/south freeway crossing the alignment and terminating at Huntington Drive in Duarte. State Route 30 freeway connects I-210 to Foothill Boulevard in La Verne and will ultimately be extended east to San Bernardino.

The San Gabriel Valley represents one of the region's most significantly congested areas due to the presence of heavy commute trips generated by area residents on the San Bernardino (I-10), Pomona (SR-60), and Foothill Freeway (I-210). As part of the project's initial analysis, efforts were made to determine the existing congestion levels within the Corridor. A congested freeway, for the purposes of examination, 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 the Foothill Freeway 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 the LOS scale ends at "F", congestion and delay can actually be much greater than the thresholds that define LOS F. East of Irwindale Avenue the percentage drops to 41 percent. Figure 2.2 illustrates the Average Daily Traffic between major interchanges on the Corridor's freeways.

Table 2.4, organized by study area, shows the existing major arterials located in the study Corridor. The study areas follow the study Corridor from west to east. Study area 1 is bordered on the west by the Sierra Madre Villa Station and the I-605 on the east. Study area 2 begins with I-605 on the west and North Lone Hill Avenue on the east. Lastly, Study area 3 is bordered by North Lone Hill Avenue on the west, and the Claremont Transfer Station on the east.

Peak Month Average Daily Traffic on Corridor Freeways
 Gold Line Phase II
Figure 2.2

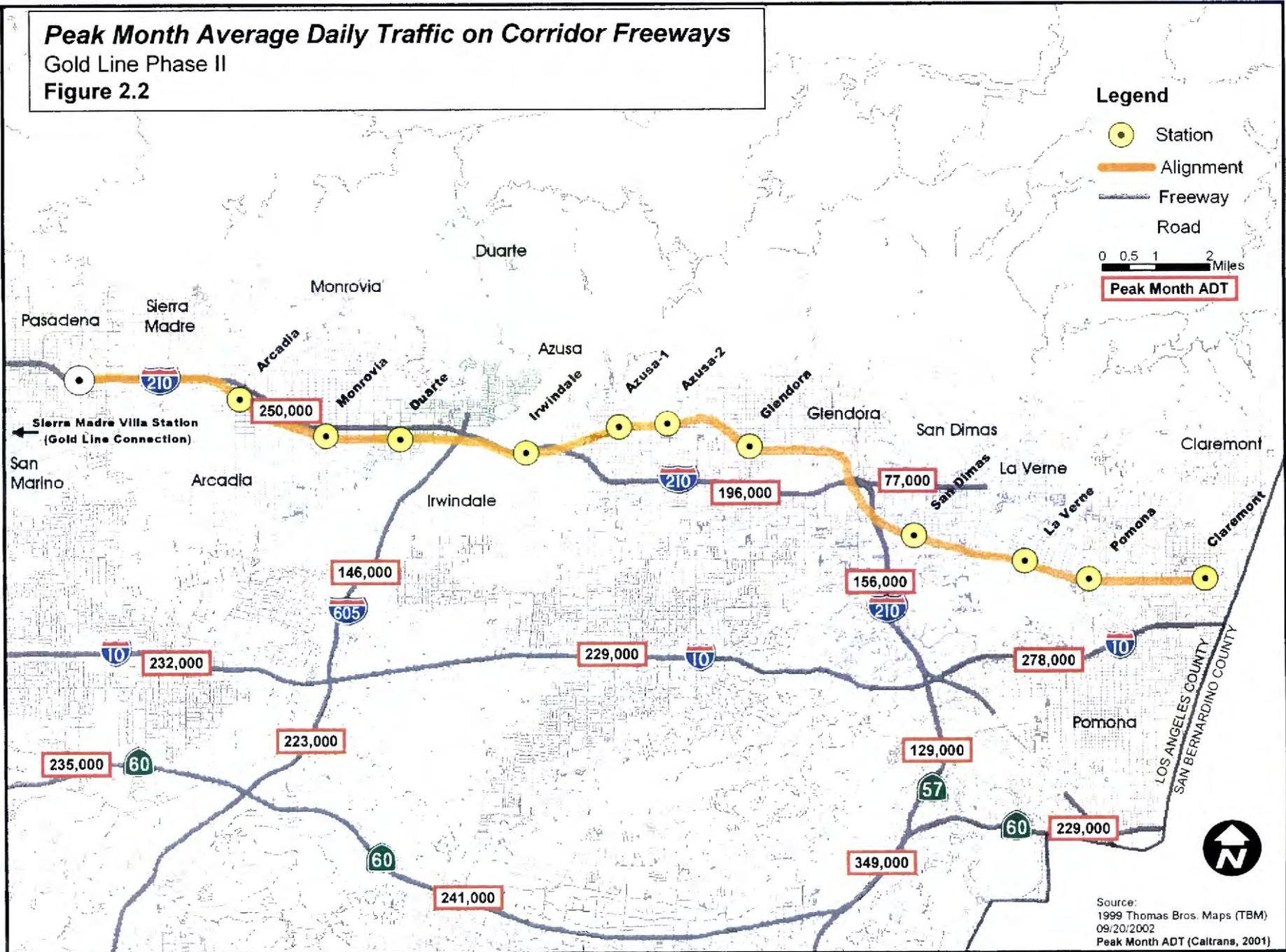


Table 2.4 Existing Arterial Roadways that Serve the Corridor		
<i>Name of Arterial</i>	<i>Direction of Travel</i>	<i>Location within Study Corridor</i>
Rosemead Blvd (State Route 19)	North/South	Study Area 1
E. Colorado Blvd. (Historic Route 66)	East/West	Study Area 1
Santa Anita Ave	North/South	Study Area 1
Myrtle Ave	North/South	Study Area 1
Baldwin Ave	North/South	Study Area 1
E. Huntington Dr. (Historic Route 66)	East/West	Study Area 1 and 2
Azusa Ave (State Route 39)	North/South	Study Area 2
Citrus Ave	North/South	Study Area 2
Irwindale Ave	North/South	Study Area 2
S. Grand Ave	North/South	Study Area 2
S. Glendora Ave	North/South	Study Area 2
Arrow Highway	East/West	Study Area 2 and 3
W. Alostia Ave (Historic Route 66)	East/West	Study Area 2 and 3
N. Lone Hill Ave	North/South	Study Area 2 and 3 (Border)
W. Foothill Blvd (State Route 66)	East/West	Study Area 2 and 3
Bonita Ave	East/West	Study Area 3
S. San Dimas Ave	North/South	Study Area 3
N. White Ave	North/South	Study Area 3
N. Garey Ave	North/South	Study Area 3
N. Towne Ave	North/South	Study Area 3
S. Indian Hill Ave	North/South	Study Area 3
S. Mills Ave	North/South	Study Area 3

Public Transportation

Public transportation needs in the 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 rail service (commuter and inter-city rail). Generally, the cities in the Corridor contract with Foothill Transit to fulfill the sub-regional transportation needs of their citizens. Additionally, while they do not directly contract with Amtrak or Metrolink to provide regional transportation to their citizens, they do support the service that they provide.

For the needs of the elderly and disabled, the Corridor cities provide a combination of their own localized transit operators, and contracted services with Access Services or Pomona Valley Transportation Authority to fulfill the gap between the regional transportation operators and the specialized needs of the disabled and elderly.

Some cities even provide localized transportation service geared towards serving their activity centers, or the needs of the elderly and disabled. These services are listed below in Table 2.5.

**Table 2.5
Transit Operators in the Corridor**

	<i>Service Objective</i>	<i>Operation</i>	<i>Service Area</i>
Regional			
Amtrak	Commuter and Travel Rail	Fixed Route	National and Intercity
Access Services	Specialized for the Disabled Citizens	As Reserved	Los Angeles County, Los Angeles County Metropolitan Transportation Authority, Foothill Transit and Member Cities
Los Angeles County Metropolitan Transportation Authority (MTA)	Public Mass Transportation (Operator and Transportation Planning Organization)	Fixed Route	Los Angeles County
	Rail	Fixed Route	No service in the Corridor
	Bus	Fixed Route	In the City of Duarte Only
Metrolink	Commuter Rail	Fixed Route	Regional
Foothill Transit	Public Bus Transit (Operator Only)	Fixed Route	Regional
Local			
Arcadia Transit	Public Shuttle	As Reserved	Arcadia
Azusa Transit	Public Bus System	Fixed Route	Azusa
Dial-A-Ride	Senior Citizens Shuttle	As Reserved	Azusa
Claremont Dial-A-Ride	Public Shuttle	As Reserved	Claremont
Get About	Senior and Disabled Citizens Shuttle	As Reserved	Claremont
Duarte Transit	Public Bus System	Fixed Route	Duarte
MTA	Public Mass Transit	Fixed Routes	Duarte
Glendora Mini-Bus	Senior and Disabled Citizens Shuttle	Per Reservation	Glendora
	Senior Citizens Shuttle	Per Reservation	Irwindale
Get About	Senior and Disabled Citizens Shuttle	Per Reservation	La Verne
Brethren Hillcrest Homes	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

Table 2.5 Transit Operators in the Corridor			
	<i>Service Objective</i>	<i>Operation</i>	<i>Service Area</i>
Get About	Shuttle for Senior Citizens and Disabled	As Reserved	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
Round About	Public Transportation	Fixed Routes	Sierra Madre
Dial-A-Ride	Senior and Disabled	As Reserved	Sierra Madre

Current regional transit operators outlined in Table 2.5 are briefly described in the following paragraphs. Table 2.6 illustrates the bus transit routes within the Gold Line Extension Corridor, and Appendix B is a comprehensive listing of the frequency of transit service within the Corridor. Figure 2.3 maps the existing transit routes within the Corridor.

Amtrak

The National Railroad Passenger Corporation, operating under the Amtrak name, provides travel and commuter services across the United States. They also provide contract-commuter service through the Southern California Regional Rail Authority (SCRRA). Amtrak utilizes some of the existing right-of-way that will be used by the Corridor.

MTA

The Metropolitan Transportation Authority serves as transportation planner, coordinator, designer, builder and operator for Los Angeles County. MTA operates bus and rail transit lines as well as HOV lanes, freeway corridor studies, and rideshare programs, among others. Approximately fifteen MTA bus lines run through or near the western portion of the Corridor.

Metrolink

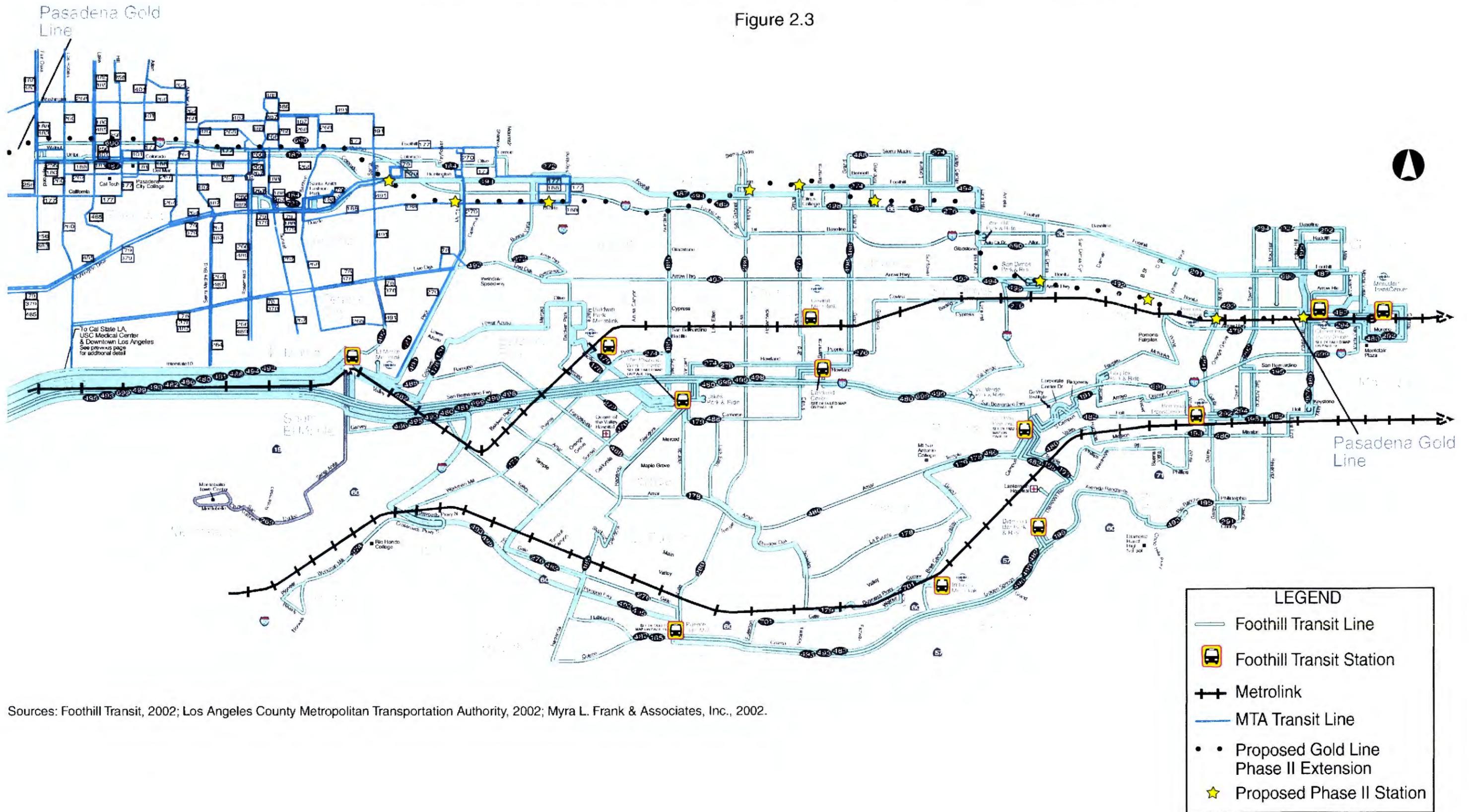
The Southern California Regional Rail Authority (SCRRA) plans, designs, constructs and administers the operation of commuter rail lines under the name Metrolink for the Southern California Region. The San Bernardino Line and the Riverside Line traverse the northern and mid-section of the San Gabriel Valley. The San Bernardino Line will use some of the same ROW that would be used for the Gold Line between Pomona and Claremont.

Foothill Transit

Foothill Transit provides fixed-route service on 27 local, express and Metrolink feeder lines, with approximately 17 million boardings each year. Nineteen lines are currently operated either entirely or partially within the Corridor. Ten of them run east/west and nine of them run north/south. Four of the east-west lines provide the lengthy trip from downtown Los Angeles to the Corridor cities. Each of the lines serves at least five destinations, with one line serving as many as 15 destinations. Figure 2.3 illustrates the Foothill Transit routes in the study area.

Foothill Transit and MTA Transit Routes on Proposed Gold Line Phase II

Figure 2.3



Sources: Foothill Transit, 2002; Los Angeles County Metropolitan Transportation Authority, 2002; Myra L. Frank & Associates, Inc., 2002.

**Table 2.6
Bus Transit Routes
within the Gold Line Extension Corridor**

<i>Operator</i>	<i>Line</i>	<i>Destination</i>
Azusa	1	Community Connector
Duarte	Blue Green	Community Connector Community Connector
Foothill Transit	184 185 187 272 274 276 280 291 292 294 479 480 492 494 498 499 690 699 721	Duarte – Monrovia – Arcadia Azusa – West Covina – Hacienda Heights Claremont – Montclair – Pasadena Duarte – Baldwin Park – West Covina Glendora – West Covina – Covina – Whittier San Dimas – Covina Blvd. – Sunset Ave. – Puente Hills Mall Azusa – Puente Hills Mall La Verne – Pomona – South Pomona Montclair – Claremont – Pomona Montclair – Claremont – Pomona Montclair – Pomona Fairplex – Cal Poly Montclair – West Covina – El Monte – Los Angeles Montclair – Arcadia – Los Angeles Glendora – Monrovia – Los Angeles Citrus College – Eastland – LA (Express) San Dimas Park & Ride – Via Verde Park & Ride – LA (Express) Montclair – Pasadena – LA (Express) Montclair TransCenter – Fairplex P & R – Lakes P & R – LA (Express) El Monte Metrolink - Arcadia
MTA	79 177 181 188 260 264 266 267 268 270 379 401 487 489 491	LA – Arcadia La Canada Flintridge – Pasadena – Arcadia – Monrovia – Duarte Hollywood – Glendale – Eagle Rock – Pasadena City College Altadena – Pasadena – Arcadia – Duarte Compton – Long Beach – Monterey Park – Pasadena – Altadena Rosemead – San Gabriel – San Marino – Pasadena – Altadena Lakewood – Pasadena El Monte – Temple City – Arcadia – Pasadena – Altadena El Monte – Arcadia – Pasadena – Altadena – La Canada Flintridge Monrovia – El Monte – Whittier – Santa Fe Springs – Norwalk – Cerritos LA – Arcadia (Limited) LA – Pasadena – Altadena (Express) LA – San Gabriel – Rosemead – Pasadena – Sierra Madre (Express) Hastings Ranch – Temple City – Rosemead Bl. – LA (Express) Sierra Madre – Arcadia – El Monte – LA (Express)

Access Services

Access Services is a state-mandated local governmental agency created by Los Angeles County's public transit agencies to administer and manage the delivery of regional American with Disabilities Act (ADA) paratransit service. Access Services' primary mission is to provide ADA-mandated paratransit services for people with disabilities who are unable to use public

fixed-route transportation systems, and to coordinate various paratransit operators within the Los Angeles County to provide efficient and cost-effective paratransit services.

Access Services currently fills the gap between existing fixed-route public transportation options and the client's transportation needs. This is implemented by providing a ride from the client's home to the nearest fixed transportation stop, and providing rides to and from locations not currently serviced by fixed transportation routes.

The County of Los Angeles, Los Angeles County Metropolitan Transportation Authority, Foothill Transit, Azusa Transit, the City of Sierra Madre and the City of Pasadena are members of Access Services.

Pomona Valley Transportation Authority

Pomona Valley Transportation Authority currently contracts with the cities of Claremont, La Verne, Pomona, and San Dimas. They provide the demand-services of Get-About (for seniors and disabled), and subsidize the Claremont Dial-A-Ride Service and San Dimas Dial-A-Cab for seniors.

Other Transportation Facilities

According to the 1995 San Gabriel Valley Bikeway Master Plan prepared for MTA, there are a limited number of pedestrian and bicycle facilities in the Corridor. Existing facilities within the study area include the San Gabriel River Trail, the Upper Rio Hondo Trail, the Duarte Bikeway Loop, the Walnut Creek Trail, Walnut Bike Lanes, Diamond Bar Bike Lanes, the Claremont Bike system, and a number of bike lanes throughout La Verne and Glendora.

Together these facilities provide 33 miles of Class I bike paths, 41 miles of Class II bike lanes, and 73 miles of Class III signed bicycle routes, for a total of 148 miles along 85 individual segments. In general, this existing network of bike paths tends to be isolated with few connections between cities and little overall regional consistency. Even when road widths allow, most major and secondary arterials in the San Gabriel Valley do not provide bike lanes. Nine of the cities in the corridor have no bike facilities whatsoever.

While trails in some areas (such as the San Gabriel River Trail and Rio Hondo Trail) are of generally high quality, a number of paths used as bike lanes are currently sub-standard, failing to meet minimum Caltrans requirements, i.e. 4 foot width with a 4 inch centerline stripe. Signage is a problem along a significant number of paths, with some bike lanes being unidentifiable without the use of area maps. In many places, paths are located in barren environments such as flood control channels and adjacent to industrial uses that make for an unpleasant riding experience. There are virtually no support facilities such as parking. Security and lighting are almost universally inadequate. As a result, bike trails are perceived to be unsafe and unappealing by large portions of the casual cycling population.

In recognition of these and other problems, plans are underway to add to and improve existing facilities. One example is the proposed construction of a San Dimas - Claremont Rail Trail within the Pasadena Sub-Division rail right-of-way, through the cities of San Dimas, La Verne, Pomona, and Claremont. This Rail Trail is a proposed multi-use pathway that has been funded through the MTA Call-for-Projects, and construction is scheduled for early 2003. Coordination is on-going between the Gold Line Phase II project and the bikeway. This project, also with 42 others proposed by the San Gabriel Valley Bikeway Master Plan, would provide almost 300 miles of new and revitalized trails in the Corridor.

In spite of proposed changes, it must be noted that existing facilities are, to a large degree, inadequate and the financial feasibility, timeframe for implementation, and overall impact of planned projects remains in question. As a result, it is reasonable to conclude that pedestrian and bicycle travel in the Corridor will not, in the near future, be a viable substitute for travel by automobile.

2.4 Corridor Transportation Patterns

Overall, the transportation network of greater Los Angeles is oriented in an east-west direction because the region is bounded by mountain ranges to the north. In the study area, the San Gabriel Mountains are the northern boundary, and communities and transportation facilities have developed primarily along an east-west spine. In the past, the main east-west transportation corridors were US 66 and the railroad. Over time, US 66 was replaced by I-210, the Foothill Freeway. Today, I-210 is the main transportation artery within the study corridor, as well as providing the main connection to other freeways in the metropolitan area.

Many of the major arterials in the study area, such as Foothill Boulevard, Colorado Boulevard, Huntington Drive and Arrow Highway, are also east-west oriented and tend to be very long. In fact, these arterials, or combinations of them, extend across the entire region. North-south arterials tend to be shorter, with many serving only communities adjoining I-210. As shown in Figure 2.3, the street arterial network is where most of the current transit service in the study corridor is provided.

Because I-210 is the northernmost of the five east-west freeways of greater Los Angeles, it also carries substantial amounts of truck traffic. It serves as a by-pass for truck traffic between I-5, the state's main north-south freeway, and I-10, southern California's main east-west freeway. This bypass route is an important connection to the regional distribution centers that are located to the east of the study corridor, in the Inland Empire along I-15 and I-215. In addition, there also many individual distribution facilities located in the study corridor that use I-210. At about the mid-point of study corridor, extraction facilities in Irwindale are the primary source of aggregate for construction projects throughout southern California.

Within the study area, the majority of trip making is east-west, to and from the activity centers discussed in Table 2.1, and to regional activity centers to the east and west of the study corridor. For instance, west of the corridor terminus at Sierra Madre Villa in Pasadena, I-210 provides access to several regional employment centers. These include the commercial employment centers at Lake Street and in downtown Pasadena, and to the Jet Propulsion Lab facilities in northwest Pasadena. I-210 connects to the SR 134 freeway, which provides access to the employment center in downtown Glendale and to the entertainment/employment center (Disney, ABC, Warner Brothers, etc.) in Burbank. At about the mid-point of the corridor, I-210 intersects I-605. The east end of the study corridor connects to the I-10, SR 55 and SR57. These four connecting freeways link the study corridor with significant portions of the Los Angeles Metropolitan region.

Although there are activity centers all along the study corridor that affect traffic, and connections to activity centers outside of the corridor, there is an overall AM/PM directional flow difference along the corridor. In the morning period, the majority of trips occur westbound, headed for the Pasadena, Glendale and Burbank employment centers. In the mornings, there is also a

substantial eastbound movement along I-210 between its west terminus and I-605, where traffic then turns southbound. In the PM period, the directional bias on I-210 is eastbound.

I-210 provides the primary route for intra-corridor trips, especially where origins and destinations are more than a couple of miles apart. Activity centers that are major trip generators include the complex of facilities that includes the Santa Anita Race Track, Santa Anita Fashion Park mall, and nearby downtown Arcadia. The City of Hope hospital in Duarte is a major destination. Irwindale is a generator of many truck trips, since it is a major warehouse distribution center and the source of much of the mined aggregate needed for construction in southern California. Two other facilities that generate many truck trips are the Miller Brewery in Irwindale and Monrovia Nurseries in Azusa, the largest plant grower in the United States. At the eastern half of the corridor, the Fairplex, Citrus College, Azusa Pacific University College, the University of La Verne, and Claremont Colleges are major destinations and trip generators. The majority of enrollees at the colleges are not resident on campus, so trips to and from the facilities occur throughout the day and into the evening hours. Although the arterial street network connects many of the aforementioned activity centers, the preponderance of trip making over about three miles in length occurs via freeway, even during congested periods.

Trip patterns in the study area are well-established and not likely to diminish in the foreseeable future. I-210 will continue to serve as an important truck corridor, the freeway will continue to link major employment centers within and outside of the study area, and locations such as the hospitals, colleges, distribution centers and major recreation facilities will continue to be major destinations and trip generators. Both forecasted growth within the Corridor and at locations outside but linked to the corridor, will place ever-increasing demands for travel capacity. Past experience has shown that providing any major capacity additions to the area freeway network is unlikely. Other than providing high occupancy vehicle (HOV) lanes and ITS improvements to increase through-put within existing right-of-way, community opposition to freeway widening is usually so strong as to prevent capacity increases that would require new rights-of-way.

As population and employment continue to increase in the region and in the study area, congestion on the freeways and arterial network will also increase. As further discussed in Section 2.5, peak hour travel times will lengthen dramatically. Congestion in the study area also has an effect on each of the corridors to which I-210 connects. At the east end of the study area, congestion impacts spill over into the I-10, SR 57 and SR 55 corridors, at the west end, congestion spills over into the SR 134 corridor. As the freeway facilities become more congested, traffic on the arterial network increases. When congestion occurs on the arterial network, there is a tendency for drivers to short-cut through neighborhood streets to avoid congested intersections, giving rise to concerns about speeding traffic through residential areas.

2.5 Current Transit Deficiencies

Current transit services generally meet two primary market functions: linking local business and activity centers along major arterials, or providing express services to downtown Los Angeles. Access between residential areas and employment locations provided by the bus systems are constrained to those locations that are served by bus routes. Service is provided only along the following major east-west and north-west arterials: Foothill Boulevard, Huntington Boulevard, Arrow Highway, Bonita Avenue, Myrtle Avenue, Azusa Boulevard, Grand Avenue, Towne Boulevard, and Indian Hill Boulevard.

Access for persons coming from or going to locations beyond a reasonable walking distance from these routes tends to be limited. Similarly, only those employment, shopping, and institutional destinations that are along or very close to the arterial routes are likely to have a transit-user connection.

Bus utilization is also constrained by trip times, where buses are generally moving at the same speeds as other traffic. In many cases, bus travel times are slower than individual auto trips, since buses typically make very frequent stops. These slow speeds do not provide an incentive for those with automobiles to use transit as an alternative mode for trip making.

The higher speed services provided by express bus or Metrolink are available only between select locations and generally during peak hours. Many employment and activity centers in the Corridor are not now served by bus service or higher speed services, or are served on a limited basis. Currently, the only activity centers with transit service are located at the east end of the Corridor (LA County Fairplex, University of La Verne, Claremont Colleges and their adjoining residential areas), and are served by Metrolink service. There is no Metrolink service between Pasadena and Pomona. In addition, Foothill Transit only has one express bus route that serves but one of the activity centers located in the entire Gold Line Phase II Study Corridor, which is the LA County Fairplex (the route travels from downtown Los Angeles and ends at the Fairplex).

The two Foothill Transit bus routes that most closely resemble the Pasadena Gold Line Phase II Study Corridor are traditional bus Line 187 from Pasadena to Montclair, and weekday express bus Line 690 from Pasadena to Montclair. Both of these bus lines serve only a portion of the study corridor, thus linking only some of the activity centers, and also leaving some sections of the study corridor unlinked by public transportation.

Travel time from Colorado Boulevard and Sierra Madre Boulevard to the Claremont TransCenter is approximately one and one-half hours during the weekday, and just over one hour on the weekend on Line 187. Travel time from Lake Avenue and Interstate 210 (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).

2.6 Forecasted Transportation Demand

According to the Southern California Association of Government's (SCAG) 2001 Regional Transportation Plan (RTP), if only the Baseline or No-Build Alternative projects committed through the year 2025 are constructed, the freeway network mixed-flow capacity would increase by less than ten percent and the arterial system would increase by about seven percent. (Baseline Projects are all committed projects in the 2001 RTP, Governor's Traffic Congestion Relief Program, and the TEA-21 priority projects for capital improvement as identified by county commissions, from 1997 to 2025.)

Under the Baseline or No-Build Alternative, drivers of the region could experience an increase in congestion and delay by over 100 percent by 2025. The average speed on the freeway system could deteriorate to about 16 miles per hour. As noted earlier, several lanes of the Foothill Freeway, which is the primary highway for the Gold Line Phase II Corridor, already operate at LOS F during peak hours. With the forecasted increases in congestion and delay, it can be expected that all lanes will be at LOS F and that the hours per day in which major congestion would occur will increase. Also as noted earlier, congestion and delay can actually exceed the thresholds that define LOS F. It should be noted that an average speed of 16 miles per hour

means that peak hour speeds are likely to be in the 5 to 10 mph range. Under these conditions, a trip along a 20-mile portion of the freeway could require 2 to 4 hours.

The aggregated daily vehicle hours spent in the region could increase by over 50 percent and the hours of delay could increase over 100 percent. Also, 26 percent of the total freeway system will be extremely congested and the average driver will spend 25 percent of their time in traffic.

Conditions similar to these forecasted regional conditions can be expected to occur in the study Corridor.

2.7 Project Goals and Objectives

The proposed goals and objectives for the Gold Line Corridor were developed in cooperation with the Project Steering Committee, made up of representatives from each city in the Corridor; they are consistent with the other transit improvements being planned for Los Angeles County. These goals and objectives, listed in Table 2.6, were adopted by the Project Steering Committee, and recognize the existing and forecasted transportation conditions described above.

<i>Category</i>	<i>Goal</i>	<i>Objective</i>
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
To take advantage of the high visibility of the Corridor to promote transit use		
Transit Usefulness	To complement other existing transit in the corridor and optimize previous investments	To provide efficient intra-corridor service not currently met by Metrolink, Foothill Transit or the Pasadena Gold Line Phase I
		To make good use of the right-of-way already purchased by MTA

**Table 2.6
Goals and Objectives**

<i>Category</i>	<i>Goal</i>	<i>Objective</i>
	To reduce auto dependency	To create a system with the capability of carrying 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.
	To improve mobility and provide connectivity to regional and local transit systems	To provide good connections to Metrolink, Foothill Transit, and to 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 selection of the LPA
		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

Chapter 3: THE STUDY ALTERNATIVES

- Seven alternatives were studied, including light rail transit, bus rapid transit, and commuter rail.
- All of the alternatives follow the Burlington Northern/Santa Fe (BNSF) Railroad right-of-way, currently owned by the Metropolitan Transportation Authority (MTA).
- Transit oriented development (TOD) strategies were developed for each transit stop location through a series of workshops with Corridor cities.

3.1 The Alternatives and Screening

A number of alternatives were initially evaluated (as reported in the *Development and Screening Analysis Report*, dated November 30, 2001). This analysis looked at a wide range of alignment and technology options aimed at serving the Corridor transportation needs of the San Gabriel Valley, including a Transportation Systems Management (TSM) or Baseline, Bus Rapid Transit (BRT), Light Rail Transit (LRT), Commuter Rail (CR), High Occupancy Vehicle (HOV) Lanes, and guideway-based alternatives. Table 3.1 outlines the initial long list of alternatives. After this long list of alternatives was developed, any alternatives that had flaws that would prevent their implementation or that would seriously limit their ability to service the needs of San Gabriel Valley were eliminated from further consideration. The screened list of ten "build" alternatives was presented to the San Gabriel Valley Council of Governments (SGVCOG) Blue Line Steering Committee on November 15th, 2001. The following reasons for recommending reducing the list of alternatives from 25 to 7 were:

1. Not cost-effective;
2. Pose significant environmental disadvantages;
3. Offer no advantages over other, less-costly technologies;
4. Would not meet projected travel demand ;
5. Would not reduce travel times ;
6. More costly to construct and/or operate than TSM or ten build alternatives; and
7. Do not meet or conflict with goals and objectives of San Gabriel Corridor Valley Corridor Alternatives Analysis.

As a result of the screening analysis and input from the Committee, the goals and objectives were modified and the list of ten alternatives was reduced to seven, as outlined in Table 3.2.

**Table 3.1
Long List of Alternatives**

<i>Alternatives</i>	<i>Technology</i>	<i>Description</i>	<i>Western Terminus / Eastern Terminus</i>
Baseline		Future bus network with Foothill Transit Express Bus on I-210 plus other transportation improvements in Regional Transportation Plan, Package G	Sierra Madre Villa Ave to Indian Hill Blvd
BRT-1	BRT	Widen I-210 for BRT lanes	Sierra Madre Villa Ave to Indian Hill Blvd
BRT-2	BRT	Elevated BRT lanes on I-210	Sierra Madre Villa Ave to Indian Hill Blvd
BRT-3	BRT	BRT on I-210 Shoulder	Sierra Madre Villa Ave to Indian Hill Blvd

**Table 3.1
Long List of Alternatives**

<i>Alternatives</i>	<i>Technology</i>	<i>Description</i>	<i>Western Terminus / Eastern Terminus</i>
BRT-4	BRT	BRT-only HOV lanes	Sierra Madre Villa Ave to Indian Hill Blvd
BRT-5	BRT	BRT on I-210 and Street ROW	Sierra Madre Villa Ave to Claremont MetroLink Station
BRT-6	BRT	Rapid Bus on Streets	Local Streets from Pasadena to Claremont
BRT-7	BRT	BRT on exclusive street ROW	Foothill Blvd. From Pasadena to Huntington Blvd. to Foothill Blvd. (Azusa) to Alosta Ave. to Lone Hill Ave. to Arrow Highway / Claremont
BRT-8	BRT	BRT on I-210 and Rail ROW	Sierra Madre Villa Ave. on I-210, Exit at Irwindale into Rail ROW / Claremont
BRT-9	BRT	BRT on Rail ROW (2 lanes) - bus on pavement - guided bus	Rail ROW / Claremont
LRT-1	LRT	LRT single track using existing rail for both LRT and freight with new sidings	Rail ROW / Claremont
LRT-2	LRT	LRT double track a.) with no freight (buy remaining interests) b.) with freight (run freight operations off-peak) c.) test a Phase 1 Minimum Operable Segment that extends LRT to, for example, Irwindale, with DMU to Claremont on double track - may include some sections of single track	Rail ROW / Claremont
LRT-3	LRT	LRT double track and dedicated freight track a.) test a Phase 1 Minimum Operable Segment that extends LRT to, for example, Irwindale, with DMU to Claremont on double track	Rail ROW / Claremont
LRT-4	LRT/BRT	LRT on Rail ROW and Express buses use sections of the Rail ROW	Rail ROW / Claremont
CR-1	CCR	Conventional MetroLink-type Commuter Rail using Rail ROW	Rail ROW / Claremont
CR-2	DMU (Diesel Multiple Units)	FRA-compliant single track using existing rail for both DMU and freight with new sidings	Rail ROW / Claremont
CR-3	DMU	FRA non-compliant double track a.) with no freight (buy remaining interests) b.) with freight (run freight operations off-peak)	Rail ROW / Claremont
CR-4	DMU	FRA non-compliant double track and dedicated freight track	Rail ROW / Claremont
CR-5	DMU	FRA-compliant double track with occasional single track in narrow sections	Rail ROW / Claremont
HOV-1	HOV (High Occupancy Vehicle)	HOV Direct Connector to Sierra Madre Villa Station (Blue line Terminus)	Sierra Madre Villa Ave to Indian Hill
HOV-2	HOV with Bus	Bus Operations in HOV lanes with on-line stations	I-210 to end of HOV Lane
HOV-3	HOV with Bus	Bus Operations in HOV lanes with off-line stations and new connector ramps	I-210 to end of HOV Lane

**Table 3.1
Long List of Alternatives**

<i>Alternatives</i>	<i>Technology</i>	<i>Description</i>	<i>Western Terminus / Eastern Terminus</i>
Guideway-1	Monorail	Monorail using Rail ROW	Sierra Madre Villa Ave to Claremont
Guideway-2	Maglev	Magnetic Levitation System using Rail ROW	Sierra Madre Villa Ave to Claremont
Guideway-3	AGT	Automated Guideway Transit using Rail ROW	Sierra Madre Villa Ave to Claremont
Guideway-4	PRT	Personal Rapid Transit using Rail ROW	Sierra Madre Villa Ave to Claremont

* Shaded alternatives were carried forward for further analysis.

During the initial screening process, alternatives were analyzed using a number of different factors including engineering or environmental “fatal flaws,” potential to serve existing land uses, transit-oriented development potential, implementation time, and financial capacity, among others (refer to the *Development and Screening Analysis Report*, dated November 30, 2001 for more information). This analysis process resulted in seven build alternatives, all of which utilized a single alignment on property currently owned by Los Angeles County Metropolitan Transportation Authority (LACMTA) and used by BNSF for freight rail. Because LACMTA owns the right-of-way, alternatives using this alignment would be more cost effective to implement.

Three alignments, and combinations thereof, were developed during the two-day alternatives analysis workshop in the fall of 2001. These alignments were developed in tandem with the initial long list of alternatives. The alignments include:

- expanding the I-210 Freeway
- local major arterials
- BNSF Rail Right-of-Way

I-210 Freeway

Several bus and HOV alternatives were based on this alignment and included widening the freeway right-of-way, elevating a busway above the freeway, or running buses on the shoulders or in the HOV lanes. The primary reason these alternatives were not recommended for further analysis were:

- high costs associated with widening the freeway
- unable to implement transit by 2008 due to extensive widening/construction
- significant impacts to the natural and manmade environment
- inconsistent with the goal of locating stations that facilitate the cities’ vision for land use and development around transit stations and adjoining activity centers since I-210 runs north of the city centers
- construction on I-210 has been ongoing for a number of years; communities along the corridor are resistant to additional right-of-way and construction impacts

Local Major Arterials

BRT and Rapid Bus alternatives were examined that utilized local major arterials, dedicated local streets, or a combination of freeway and local streets. Disadvantages to these alignments included:

- travel times were not reduced
- high costs associated with widening local streets
- significant impacts to natural and manmade resources

- residential neighborhoods surround the downtown areas of Valley cities along local streets

BNSF Rail Right-of-Way

Previously acquired by the LACMTA, this rail right-of-way is the historic link between valley cities. Different types of technology, including BRT, LRT, and DMU could utilize this alignment with minimal land acquisition. This alignment was recommended for further study for the following reasons:

- limited land acquisition necessary
- maximizes previous investment in the corridor
- consistent with the goal of locating stations that facilitate the cities' vision for land use and development around transit stations and adjoining activity centers
- relatively shorter construction times required, with less impact on existing natural and manmade environment

Three types of technologies are utilized in these alternatives: bus rapid transit (BRT), light rail transit (LRT), and diesel multiple units (DMU). Table 3.2 outlines the alternatives.

<i>Alternative</i>	<i>Technology</i>	<i>Description</i>	<i>Route / Eastern Terminus</i>
Alternative 1: Baseline	Baseline	Future No-Build bus network with Foothill Transit Express Bus on I-210	Corridor-wide
Alternative 2: BRT on Rail ROW	BRT	BRT on Rail right-of-way (ROW) (2 lanes) - bus on pavement - guided bus	Rail ROW from Sierra Madre Villa Ave / Claremont
Alternative 3: LRT no Freight	LRT	LRT double track a.) with no freight (buy remaining interests) b.) with freight (run freight operations off-peak) c.) test a first stage that extends LRT to, for example, Irwindale, with DMU to Claremont on double track - may include some sections of single track	Rail ROW from Sierra Madre Villa Ave / Claremont
Alternative 4: LRT on 2-Tracks + Freight	LRT	LRT double track and dedicated freight track a.) test a first stage that extends LRT to, for example, Irwindale, with DMU to Claremont on double track	Rail ROW from Sierra Madre Villa Ave / Claremont
Alternative 5: Non Compliant DMU Shared with Freight	DMU	Federal Railroad Administration (FRA) non-compliant double track a.) with no freight (buy remaining interests) b.) with freight (run freight operations off-peak)	Rail ROW from Sierra Madre Villa Ave / Claremont
Alternative 6: Non-compliant DMU + Separated Freight	DMU	FRA non-compliant vehicle, double tracked and dedicated freight track	Rail ROW from Sierra Madre Villa Ave / Claremont
Alternative 7: Compliant DMU + Single Track Sections	DMU	FRA-compliant vehicle, double tracked with occasional single track in narrow sections of ROW	Rail ROW from Sierra Madre Villa Ave / Claremont

3.1.1 Coordination with Freight Operator

Coordination with the BNSF was initiated during the study to share and gather information regarding the potential effect of the alternatives on existing freight operations. The railroad staff was amenable to sharing information and willing to discuss potential coordination activities. However, since no definitive conclusions were arrived at, the Alternatives Analysis Report (AA) assumed a placeholder for potential costs associated with changes to the existing railroad operations and agreement. Currently, freight service is provided to six businesses located between the cities of Monrovia and Claremont, which are located in the eastern segment of the rail right-of-way. The largest customer is the Miller Brewing Company, usually receiving 15-18 cars daily and sending out an equal number. They occasionally require unscheduled servicing as well. Coordination with the BNSF resulted in the understanding that further meetings with the railroad will be required during the subsequent phase of project development.

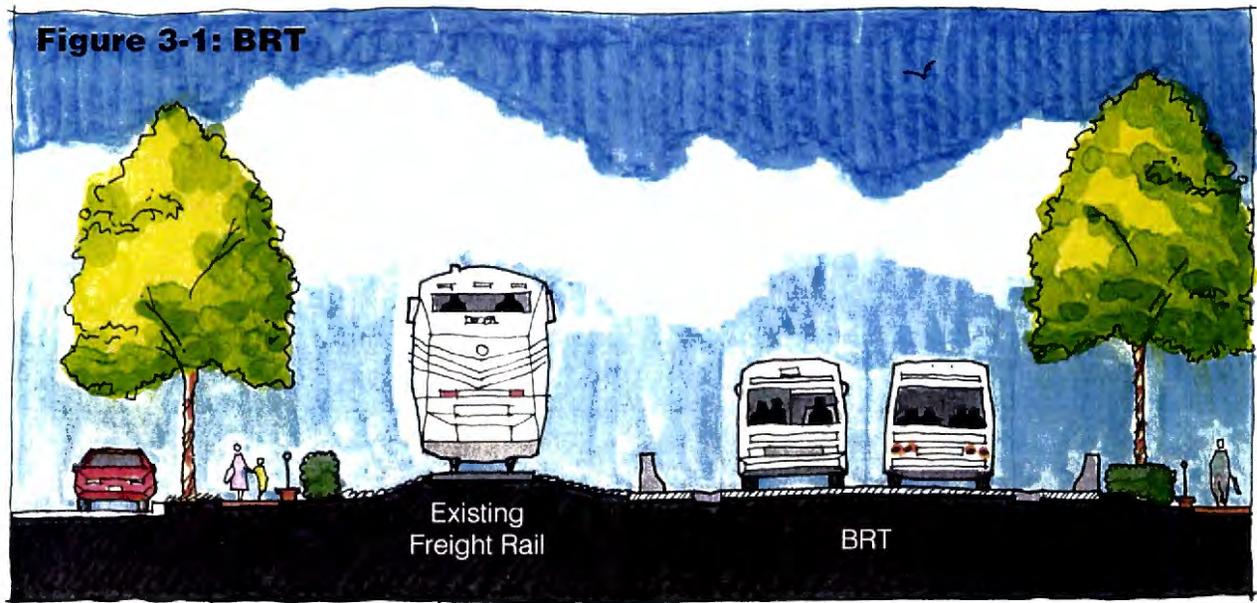
3.1.2 Technologies

The three technologies evaluated in the AA report are defined below:

Bus Rapid Transit (BRT)

Bus rapid transit utilizes buses to provide high-quality, rapid transportation, in a defined corridor and primarily on dedicated bus lanes. As the Federal Transit Administration (FTA) describes it, BRT “combines the quality of rail transit and the flexibility of buses” (FTA, BRT Reference Guide, www.fta.dot.gov/brt). BRT takes advantage of such innovations as intelligent transportation systems (ITS) technologies, priority for transit, convenient fare collection systems, and integration with local land use policies, all with the goal of reducing travel time. BRT often, but not necessarily, includes exclusive lanes for buses only or separate rights-of-way.

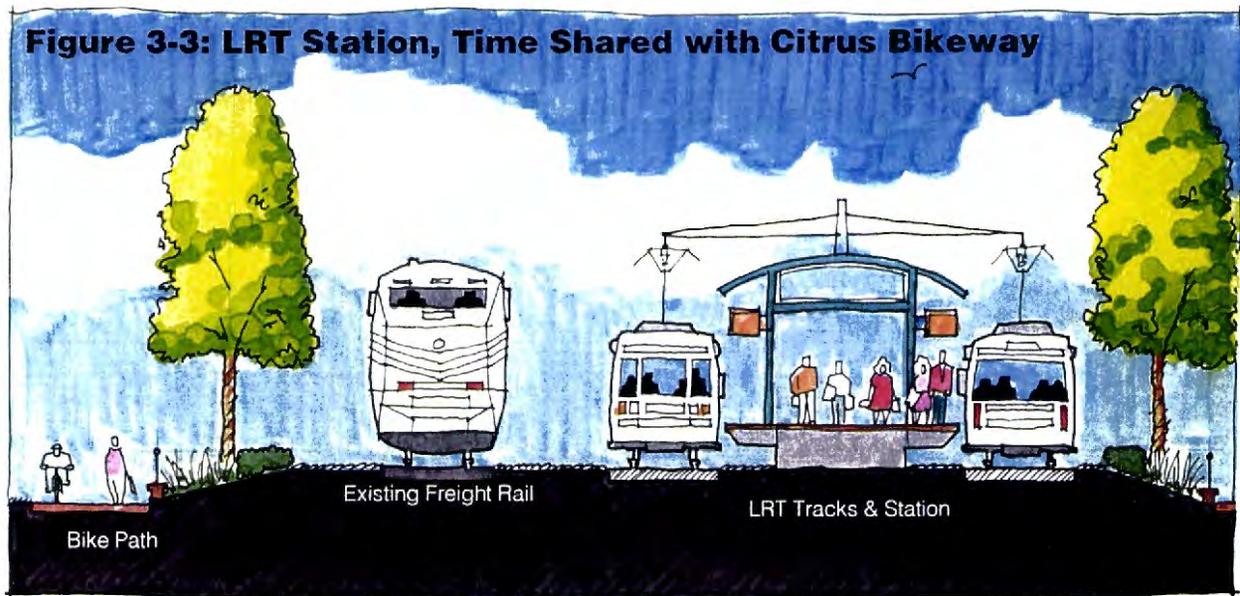
BRT provides fast, longer distance trips as well as collection and distribution functions. Buses can pick up and distribute passengers, get on the busway, and proceed to other destinations before exiting again. Therefore, BRT alignments can be used by local bus routes as well as longer commute-type routes. At grade crossings, the busway alternative would include gates as an added safety measure. Figure 3-1 shows an enhanced typical cross-section for BRT adjacent to a freight line.



Light Rail Transit (LRT)

Light rail transit or LRT uses lightweight passenger rail cars operating on tracks. In the Gold Line alternatives, the right-of-way would be separated from other traffic since the only alignment considered is the BNSF right-of-way. LRT is an electrically-powered system, obtaining its power using an overhead wire. In Los Angeles County, the Metro Blue Line and Green Line, completed in the last decade, and the Metro Gold Line, currently under construction, are LRT systems.

LRT vehicles can accelerate and decelerate quickly and, therefore, can efficiently serve closely spaced stations. Because of its lighter weight LRT can often be accommodated on bridges designed for automobile traffic. Both figures 3-2 and 3-3 show an enhanced typical cross-section for LRT, with a station included in Figure 3-3.

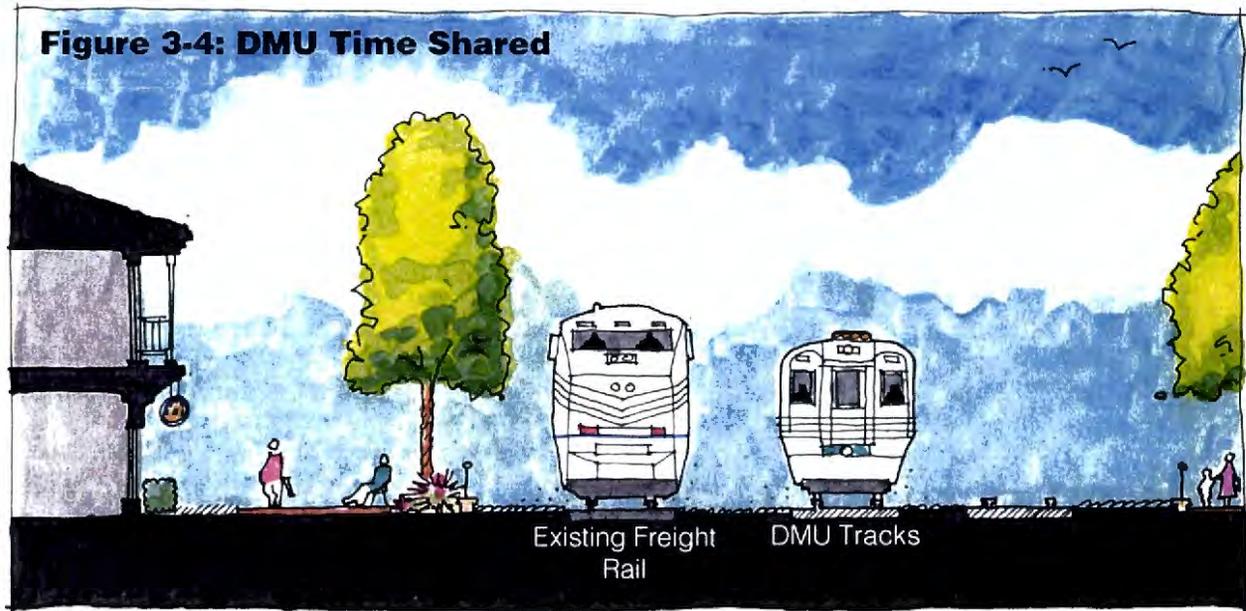


Diesel Multiple Units (DMU)

Diesel multiple units (DMUs) are diesel-powered, self-propelled passenger cars operating on tracks. Since a power unit is located in the undercarriage of each passenger car, a locomotive is not needed. A DMU looks much like a rail passenger car, but without a locomotive to pull it.

DMU systems accelerate and decelerate much like LRT systems. Cars can be coupled together or run individually, depending upon required capacity. They tend to be more efficient than conventional commuter rail alternatives for smaller passenger loads because they do not require a locomotive to pull only one or two cars.

DMUs are classified into two categories in this analysis: Federal Railroad Administration- (FRA) compliant or FRA non-compliant. The operation of DMUs in the same time schedule and on the same tracks as freight operations requires that the DMU be FRA-compliant, meaning that the DMUs meet the FRA standards for crashworthiness. An FRA-compliant DMU has been recently introduced in this country. Figure 3-4 shows an enhanced typical cross-section for DMU.



3.2 Descriptions of the Short List of Alternatives

Alternative 1 – Transportation Systems Management (Baseline)

The Transportation Systems Management (TSM) Alternative is defined by FTA as the no-build alternative plus lower cost transit capital and operational improvements that are intended to enhance the performance of the transportation system within the study corridor. These improvements are a relatively low cost approach to addressing the transportation problems in a corridor. The TSM alternative for the Gold Line Corridor is identified in the LACMTA Long Range Transportation Plan 2025 as the Constrained Alternative (Package G). It includes additions in bus service frequencies as well as implementing and expanding shuttles within several of the cities located within the Corridor. The TSM also includes the completion of the Pasadena Gold Line from Union Station to a terminus at Sierra Madre Villa Avenue, which would be the first station for the Gold Line Phase II Corridor. Other mobility projects that are relevant to and part of the TSM alternative, as they would provide improved bus operations include:

1. Freeway widening and addition of HOV lanes to Route 210 from Foothill Boulevard to the San Bernardino County Line
2. Widening of San Dimas Avenue via Vaquero to Bonita Avenue from 2 to 4 lanes
3. Run time improvements on San Bernardino and Riverside-Fullerton-LA Metrolink service lines that operate in the south end of the Corridor
4. Countywide Bus Service Improvements.

Existing transit service would remain under this alternative, including the express buses currently running on I-10 and I-210.

Build Alternatives

The following “build” alternatives would all use the Burlington Northern Santa Fe (BNSF) Railroad right-of-way from Irwindale to Claremont. Between Irwindale and the Sierra Madre Villa Station of the Gold Line Phase I, a separate alignment would be constructed. The alternatives would all require limited land acquisition because they would utilize the rail right-of-way for most of their length. Additional land would only be needed for station, parking and maintenance facilities. Eleven stations have been considered for each of the alternatives, all of which are located in the same locations.

All of the alternatives would benefit from fact that the BNSF right-of-way was purchased by the Metropolitan Transportation Authority (MTA) over ten years ago. Several of the alternatives test the possibility of a lowering the capital cost by time-separating freight operations on the railroad right-of-way and avoiding construction of separate tracks. Single track operation with passing tracks is also examined.

Operating Characteristics

The light rail alternatives would operate at 5-minute headways during peak periods, and 10-minute headways off-peak. LRT trains would have full signal pre-emption at grade crossings.

The DMU alternatives would have peak hour headways of 10 minutes, with off-peak headways at 20 minutes. Full signal pre-emption at grade crossing is also provided with no required reduction in speed. These operating characteristics are assumed for a non-FRA compliant DMU vehicle that would be time separated from freight operations.

The BRT alternatives would operate at 15-minute headways using two new busway routes. The combined headway of the buses on the busway would be 7.5 minutes. Off-peak headways would be 30 minute on each route. The buses on the guideway are assumed to also have full signal pre-emption. However, the buses are assumed to slow down from their 55 mph maximum speed, to 35 mph at grade crossings. This reflects the required Public Utilities Commission Safety/Operating measures that are currently being implemented for the San Fernando Valley BRT. This alternative does not operate a number of bus routes into Pasadena nor does it assume that feeder buses would use the busway for several reasons. First, there is no room at Sierra Madre Villa Station for multiple bus routes, especially in the PM peak when each route needs its own waiting bay. Second, the busway has a number of grade-crossings along its length which limits the number of buses using it to about 15 per hour in each direction. Much more than this will mean significant impacts to north-south traffic, with little signal preemption, or many grade separations. Third, the demand for direct bus service from multiple neighborhoods to downtown Pasadena is not nearly as great as the same demand to downtown Los Angeles.

Alternative 2 – BRT on Rail ROW

This alternative includes two exclusive BRT lanes from the Gold Line Phase I Sierra Madre Villa LRT station to Claremont on the BNSF right-of-way. It would include stations in the median of the freeway from the western end at Sierra Madre Villa Avenue to near Santa Anita Avenue in Arcadia. At this point, the BRT route would continue eastward in the railroad right-of-way. Stations would be located in each Corridor city as shown in Figure 3.5.

Alternative 2: Bus Rapid Transit (BRT) on Rail Right of Way (ROW)

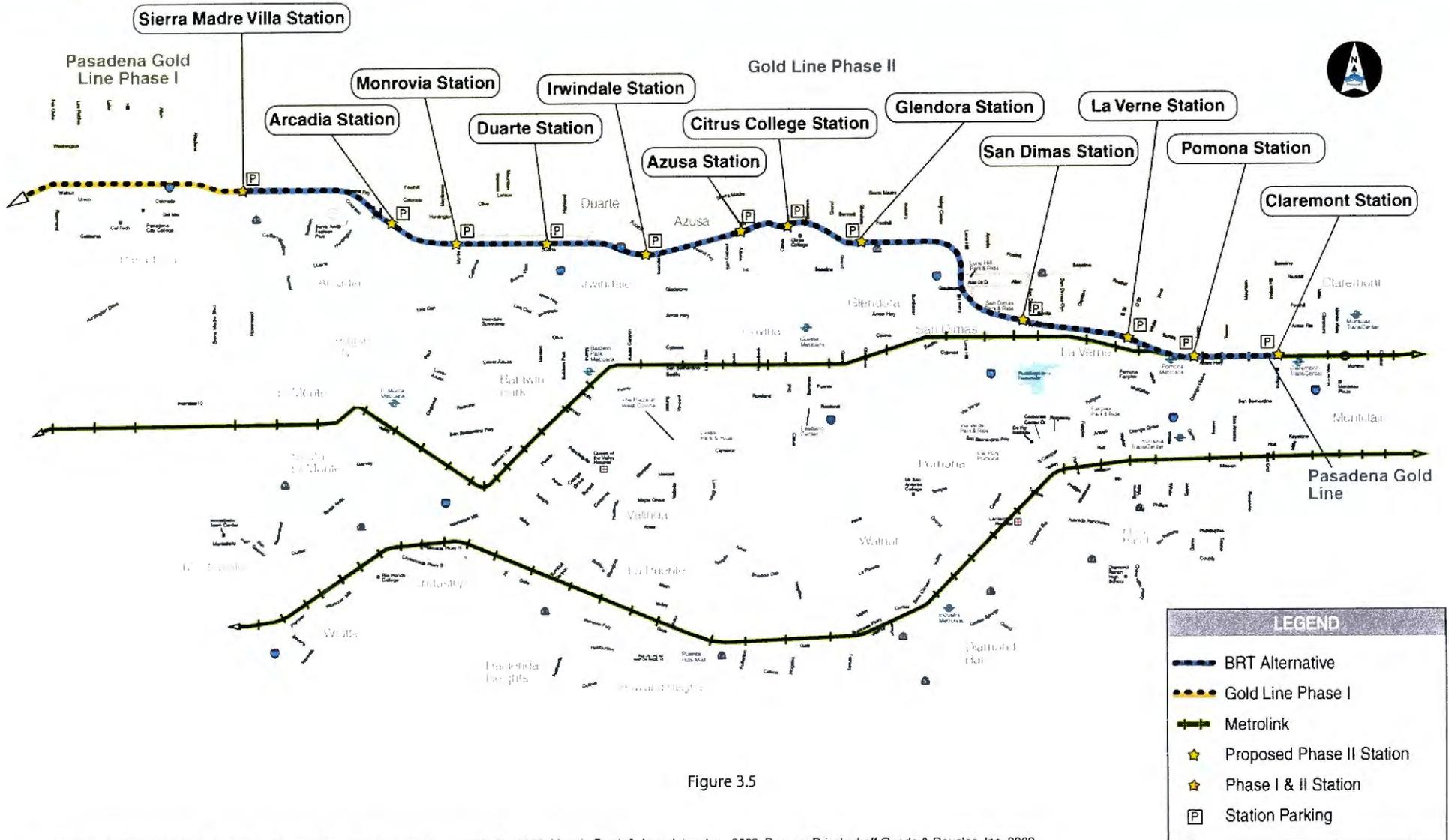


Figure 3.5

Sources: Foothill Transit, 2002; Los Angeles County Metropolitan Transportation Authority, 2002; Myra L. Frank & Associates, Inc., 2002; Parsons Brinckerhoff Quade & Douglas, Inc, 2002.

This alternative would be consistent with the study goal to locate stations that facilitate Corridor cities' visions for land use and development around transit stations and adjoining activity centers. Station locations for BRT would be the same as for the LRT and DMU alternatives and, in some cases, provide opportunities for re-use of historic railroad stations. With this alternative it is assumed that conflicts with freight operations would be eliminated by either buying out the freight interests completely, or by allowing freight to operate only in the late night and early morning hours when BRT is not operating. Buses would use existing MTA bus maintenance facilities.

Alternative 3 – LRT with no Freight

This alternative would use the existing railroad track and construct one additional track in the railroad right-of-way for LRT service. Some sections of single track would be utilized to reduce costs, such as on bridges. Conflicts with freight service would be eliminated by either buying out the freight interests completely, or by allowing freight service to operate only in the late night and early morning hours when LRT is not operating. A variation on this alternative would include testing a first stage implementation segment that would extend the LRT from Sierra Madre Villa to Irwindale and DMU from Irwindale to Claremont on double track. Stations and parking would be placed at appropriate locations in each city along the LRT route as shown in Figure 3.6.

Additional land would be needed for stations, parking and maintenance facilities. Construction costs would include stations and parking and a new set of tracks within the railroad right-of-way. The time required for this construction would be relatively short, because much of the construction would be in a little-used corridor with few conflicts with adjacent land uses and traffic. Thus, this alternative could be implemented relatively quickly.

As with all alternatives, this alternative would maximize previous investments by utilizing the previously purchased railroad right-of-way and historic stations. Bi-directional service could be operated on a frequent service schedule with multiple car trains.

A first phase implementation option could be to construct the LRT using only a single track with passing tracks at key locations. This would reduce the capital cost of constructing the line in its entirety until funds become available.

Alternative 3 would be consistent with the San Gabriel Valley Corridor goal to locate stations that facilitate corridor cities' visions for land use and development around transit stations and adjoining activity centers. It would also provide a faster ride since a transfer to the Gold Line Phase I LRT would not be necessary. Station locations for LRT would provide opportunities for re-use of historic railroad stations.

Alternative 4 – LRT on Two Tracks plus Freight

This alternative would include laying two new tracks in the railroad right-of-way for LRT service and retain freight service on a third track. Because the existing freight track is currently located in the middle of the right-of-way, it would be necessary to relocate the freight track so that the two new LRT tracks would fit with the existing right-of-way and retain the required clearances from the freight track. When completed, conflicts with freight service would be avoided by operating LRT on completely separated tracks.

A variation on this alternative would include testing a Phase 1 implementation strategy that would extend the LRT to Irwindale, with DMU to Claremont on double track. Stations and

parking would be placed at appropriate locations in each city along the LRT route as shown in Figure 3.6.

This alternative would require limited land acquisition because it would utilize rail right-of-way for the entire length. Any additional land would only be needed for stations, parking and maintenance facilities. Construction costs would include the stations and new sets of tracks within the railroad right-of-way, along with relocating the freight track. Costs for this alternative would be greater than those for Alternative 3 because of the need to relocate the existing freight tracks. The time required for this construction would be slightly longer than with Alternative 3 because of the time needed to relocate the freight track. However, it could be constructed within the 2008 time frame.

Alternative 4 would maximize previous investments by utilizing the previously purchased railroad right-of-way and historic rail stations. As with Alternative 3, although the exclusive use of two tracks would allow full bi-directional service throughout the day and allow for future increases in service; however, unlike Alternative 3, freight service could operate at any hour of the day since it would have exclusive tracks.

This alternative would be consistent with the Corridor study goal to facilitate corridor cities' vision for land use and development around transit stations and adjoining activity centers. It would also provide a faster ride since a transfer to the Gold Line Phase I would not be necessary. Station locations for this alternative would provide opportunities for re-use of historic railroad stations.

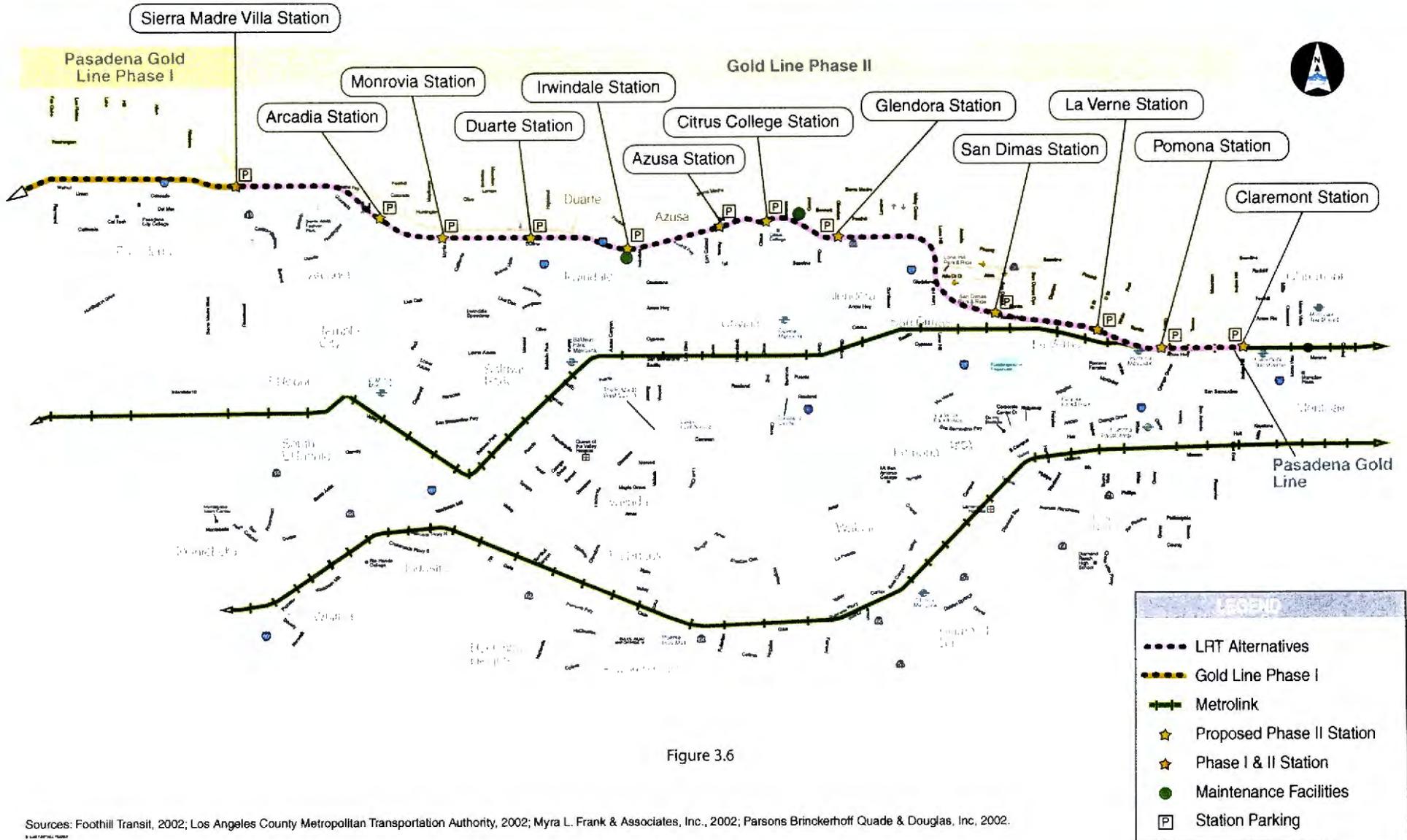
Alternative 5 – Non-compliant DMU Shared with Freight

This alternative would use non-compliant DMU vehicles operating on the existing railroad track as well as adding one new track in the railroad right-of-way for DMU service. Conflicts with freight service would be eliminated by either buying out the freight interests completely, or by moving the freight service to after-hours-only. Because the DMU operations and the freight operations would be at least time separated, the DMUs would not need to be Federal Railroad Administration (FRA) compliant. Stations would be located in each city along the route as shown in Figure 3.7 with parking provided where indicated.

Alternative 5 would require limited land acquisition because it would utilize existing rail right-of-way for the entire length. Additional land would be needed for stations, parking and maintenance facilities. Construction costs would include the stations and a new set of tracks within the railroad right-of-way. The time required for this construction would be relatively short, because much of the construction would be in a little-used corridor with few conflicts with adjacent land uses and traffic. Thus, this alternative could be implemented relatively quickly.

This alternative would maximize previous investments by utilizing the previously purchased railroad right-of-way. The full use of both tracks, at least during the DMU service hours, would not limit the number of trains that could operate. Bi-directional service could be operated on a heavy schedule with multiple car trains, if desired; only limited by station platform length and consideration of at-grade crossings. Existing DMU technology would be used.

Alternatives 3 & 4: Light Rail Transit (LRT) on Rail Right of Way (ROW)



Sources: Foothill Transit, 2002; Los Angeles County Metropolitan Transportation Authority, 2002; Myra L. Frank & Associates, Inc., 2002; Parsons Brinckerhoff Quade & Douglas, Inc, 2002.

Alternative 6 – Non-compliant DMU Plus Separated Freight

This alternative would use two new tracks in the railroad right-of-way for DMU service and retain a third track for freight. Because of the location of the existing freight track in the middle of the right-of-way, it would be necessary to relocate the freight track so that the two new DMU tracks would also fit with the right-of-way and maintain the required minimum clearances between DMU and freight. When completed, conflicts with freight service would be avoided by operating on completely separated tracks. Because the DMU operations would be physically separated from the freight operations, the DMUs would not need to be FRA-compliant. Stations and parking would be located in each city along the route as shown in Figure 3.7.

Alternative 6 would require limited land acquisition because it would utilize the existing rail right-of-way for the entire length. Additional land would only be needed for stations, parking and maintenance facilities. Construction costs would include the stations, related facilities and new sets of tracks within the railroad right-of-way, along with rebuilding the freight track where necessary. The time required for this construction would be slightly longer than with the previous DMU alternatives, but not unreasonable because much of the construction would be in a little-used corridor with few conflicts with adjacent land uses and traffic.

This alternative would maximize previous investments by utilizing the previously purchased railroad right-of-way. The full use of two tracks would allow full bi-directional services up to 24 hours a day, only limited by station platform length and consideration of at-grade crossings.

Alternative 7 – Compliant DMU Plus Single Track Sections

Similar to Alternative 5, this alternative would use the existing railroad track as well as one additional track in the railroad right-of-way in most locations for DMU service. However, in some locations where the right-of-way is narrow or to avoid building a new bridge, only the existing single track would be used. Because the DMU operations would share the tracks with freight operations on these single-track sections, the DMUs would need to be FRA-compliant. Stations and parking would be located in each city along the route as shown in Figure 3.7.

Alternative 7 would require limited land acquisition because it would utilize rail right-of-way for the entire length. Additional land would only be needed for stations, parking and maintenance facilities. Construction costs would include the stations and a new set of tracks within the railroad right-of-way. The time required for this construction would be relatively short, because much of the construction would be in a little-used corridor with few conflicts with adjacent land uses and traffic. Thus, this alternative could be implemented relatively quickly.

This alternative would take advantage of previous investments by utilizing the previously purchased railroad right-of-way. However, because the freight would still use one of the tracks, operation of the DMUs would be slightly limited. Bi-directional service could be operated on a coordinated schedule with multiple car trains.

Alternatives 5, 6 & 7: Diesel Multiple Units (DMU) on Rail Right of Way (ROW)

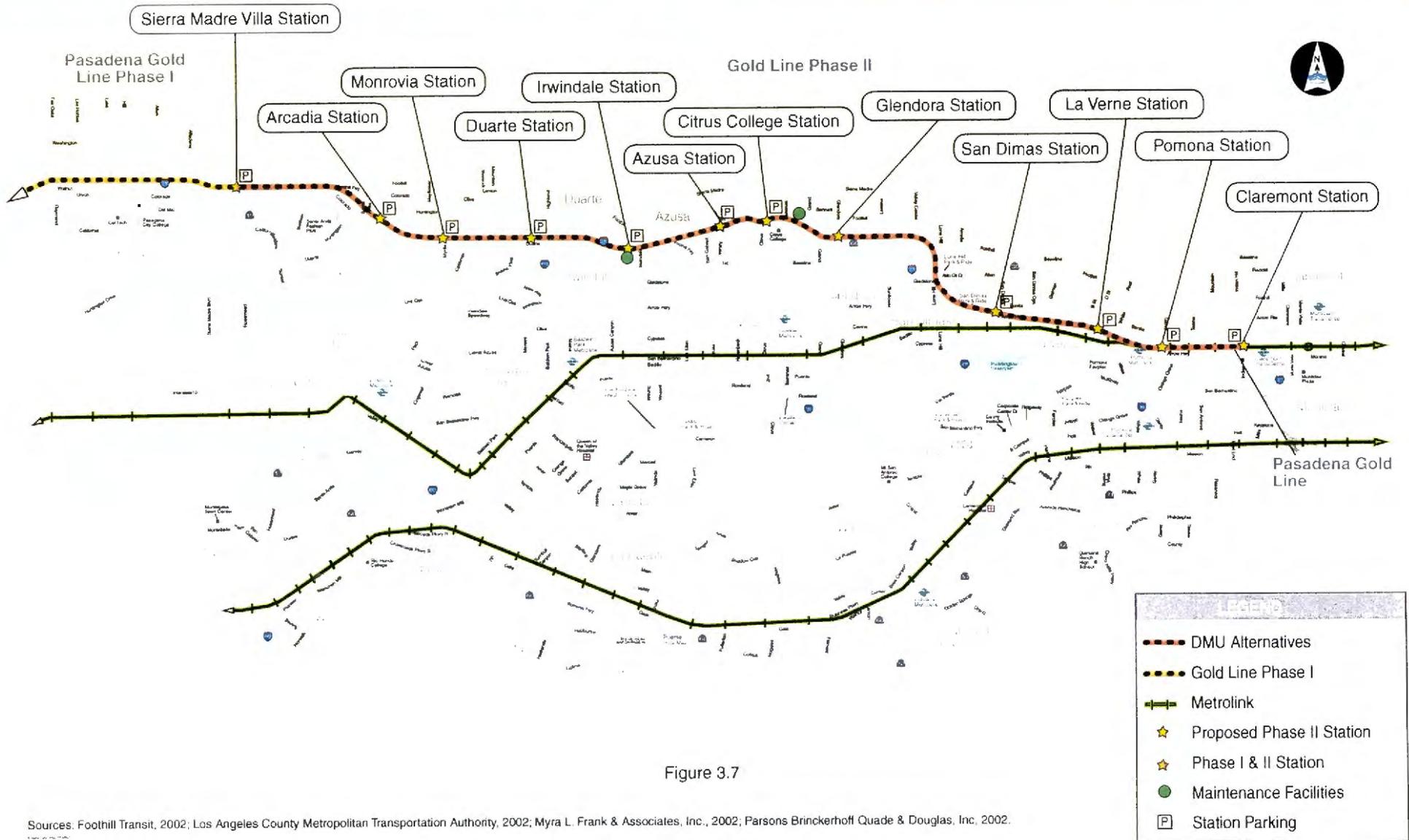


Figure 3.7

Sources: Foothill Transit, 2002; Los Angeles County Metropolitan Transportation Authority, 2002; Myra L. Frank & Associates, Inc., 2002; Parsons Brinckerhoff Quade & Douglas, Inc. 2002.

3.3 Maintenance and Operations Facility

As part of this study, maintenance facility sites were identified only for the LRT and commuter rail alternatives based on the assumption that buses for the BRT alternative could be maintained at one or more existing MTA bus facility. The selection of sites analyzed was based on the following criteria:

1. The Eastside and Gold Line Phase I LRT vehicles would be maintained in existing temporary facilities (Red Line and Midway yards). If one of the LRT alternatives is selected as the preferred alternative, then a new permanent maintenance facility would be located along the BNSF corridor and the Phase I, Phase II and Eastside vehicles would use this facility.
2. The new maintenance facility must be able to accommodate 86 LRT vehicles (36, 24, and 26 for Phase I, Phase II, and Eastside, respectively) plus spares. This requires at least 20 acres of land.
3. The site must have good access from the main line.
4. The site should ideally be located somewhere mid-corridor to minimize long deadheading.
5. The site must be compatible with adjoining land uses.
6. If localized impacts are produced, they must be able to be mitigated effectively.

The facility would include vehicle storage, an operations center, maintenance building, wheel truing machine, paint preparation and paint shop, car wash, inspection tracks, interior cleaning platform, maintenance of way building, and a traction power sub-station.

Two sites meeting the criteria were identified. They are located in the cities of Glendora and Irwindale and are shown on the LRT and DMU maps.

The proposed maintenance facility would create substantial employment opportunities to the community in which it is located. The facility will require approximately 300 to 400 personnel to operate and maintain the LRT vehicles. About one third of this number would be train operators entering and leaving at various times of the day. The remainder would be maintenance workers who could enter and leave at specific shift times.

Preliminary coordination with the cities of Irwindale and Glendora occurred during the spring of 2002. A more detailed analysis for locating a maintenance facility will be conducted during the preparation of the Draft Environment Impact Statement/Report.

3.4 Capital and Operations and Maintenance (O & M) Costs

The capital and operating and maintenance costs of the alternatives shown in Table 3.2 are provided in year 2002 dollars. Therefore, inflation rates are not included. The capital costs include all capital components of each alternative (i.e. guideway/busway, roadway work, stations, communications, signals, maintenance facility, utilities, vehicles, right-of-way, etc.), including contingency factors for unknowns and add-on allowances for preparing the environmental documents, additional engineering, design, construction management and agency costs. The operating and maintenance costs are based on operating parameters for the year 2025 that come from the operating plan developed for this study and the ridership forecasts. A detailed discussion of both can be found in the technical reports prepared for this study and identified in Chapter 1.

MEASURES	Alt. 1: TSM	Alt. 2: BRT	Alt. 3: LRT, time separated	Alt. 4: LRT, time shared	Alt. 5: Non- compliant DMU, time separated	Alt. 6: Non- compliant DMU, time shared	Alt. 7: Compliant DMU, some single track
Capital costs	5,500.0	554.7	896.6	929.9	735.5	802.2	410.9
Operating and maintenance costs	1,035.0	3.4	23.6	23.6	16.4	16.4	15.25

3.5 Traffic and Grade Crossings

An initial grade crossing analysis was conducted for seven typical crossings selected from the Gold Line Phase II Corridor. These crossings are representative of the other grade crossings along the alignment and experience the highest traffic volumes in their typical category. As such, this analysis looked at the worst-case conditions of each type of crossing to determine if grade separations would be required. The BNSF alignment crosses a total of 45 streets at-grade and the seven typical crossings analyzed are described in Table 3.3.

The “type of crossing” is based on the geometry of the crossing and the proximity of the crossing to adjacent signals. The crossing types are defined as follows:

- Intersection Adjacent: LRT crossing within 85’ of a signalized intersection.
- Near Intersection: LRT crossing between 86’-200’ of a signalized intersection.
- Mid-block: LRT crossing greater than 200’ of an intersection.
- Diagonal: LRT crossing within an intersection, bisecting the roadway intersection diagonally.

<i>Crossing Location</i>	<i>City</i>	<i>Type of Crossing</i>	<i>Number of Lanes</i>
Santa Anita Avenue	Arcadia	Mid-Block	4
Mayflower Avenue	Monrovia	Mid-block	4
Azusa Avenue, Route 39	Azusa	Mid-block (one way)	2
Grand Ave./Foothill Blvd.	Glendora	Diagonal	4/4
Wheeler Avenue	La Verne	Intersection Adjacent	4
Garey Avenue	Pomona	Mid-block	4
Indian Hill Boulevard	Claremont	Near Intersection	4

The grade separation analysis compared the forecasted 2025 traffic volumes at the grade crossings, with the forecasted LRT frequencies and followed the Institute of Transportation Engineers (ITE) guidelines for determining when to grade separate an LRT grade crossing. Since the technologies evaluated in this report are using the same operating headway assumptions, and travel times for each alternative are relatively similar, it is assumed that the

results of the analysis would be applicable to all of the alternatives. The underlying concept of the guidelines is that the delay to motorists will determine the need to grade separate. The threshold lines represent level of service (LOS) E volumes, assuming that LOS E or worse would be unacceptable to most traffic jurisdictions.

The traffic projections at each typical crossing are presented in Table 3.4. This table presents the forecasted 2025 average daily traffic (ADT) for each direction (northbound/southbound) at the grade crossing, and the corresponding 2025 peak hour volume per lane at the crossing.

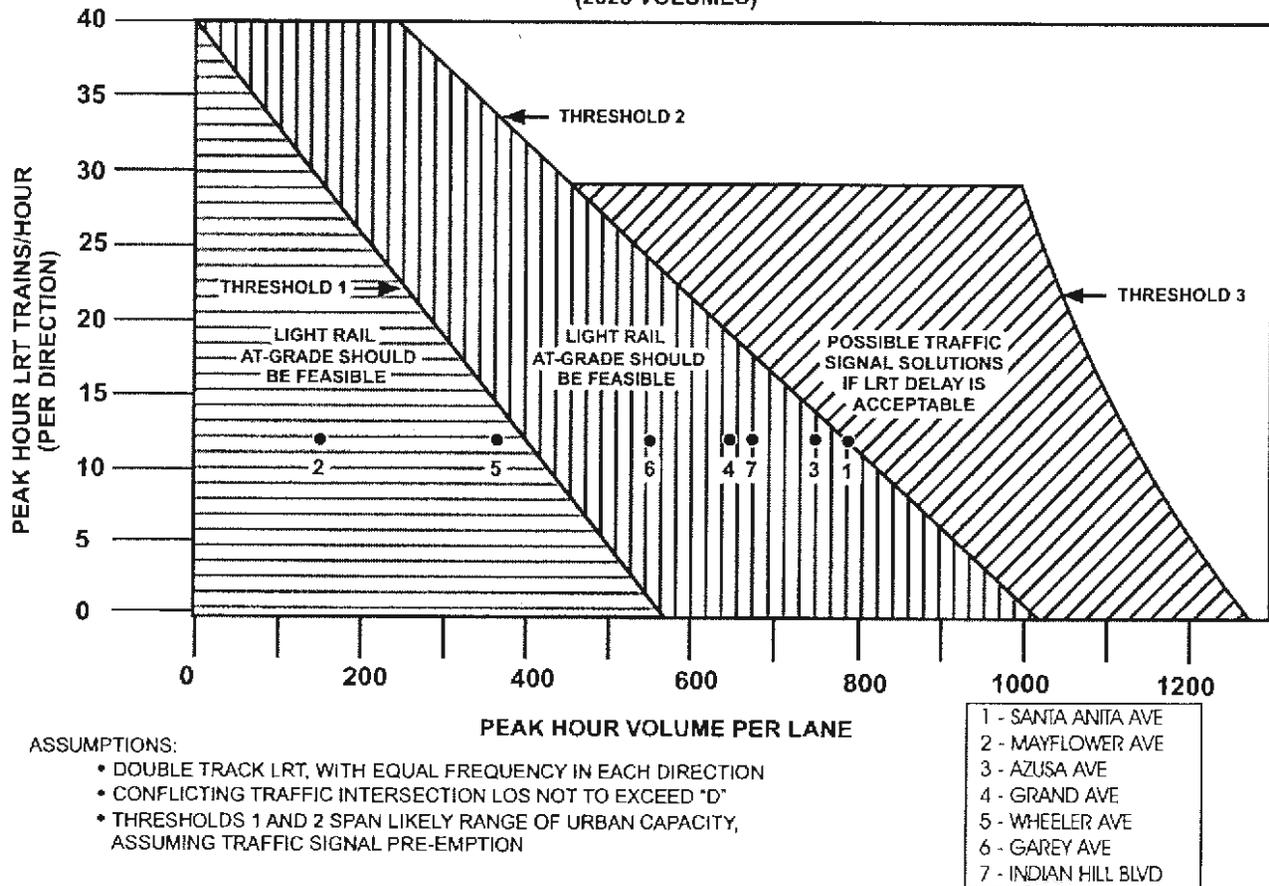
<i>Crossing</i>	<i>2025 ADT Northbound</i>	<i>2025 ADT Southbound</i>	<i>PM Peak Hour Volume per lane</i>
Santa Anita Avenue	14,600	15,800	800
Mayflower Avenue	4,100	3,000	200
Azusa Avenue, Route 39	15,100	---	750
Grand Ave./Foothill Blvd	13,000	8,750	650
Wheeler Avenue	7,200	6,400	360
Garey Avenue	15,000	16,350	550
Indian Hill Boulevard	13,500	12,000	675

As seen in Figure 3.5, the seven typical crossings were plotted on the ITE diagram based on peak hour volumes per lane. The conclusion of this analysis is that grade separations are not required at any of these crossings, although it may be desirable to grade separate Santa Anita Avenue to avoid delays to the transit alternative. In the 1993 Environmental Impact Statement it was recommended that the crossing of Santa Anita Avenue be grade separated. Even though this analysis indicates that it may be possible to cross Santa Anita at grade, this should be further evaluated to determine if an at-grade crossing is desirable and corresponding delays are acceptable.

Each of the technologies considered in the Corridor, BRT, LRT and DMU, presents a different set of safety issues at grade crossings, coupled with issues associated with combining freight movement with transit movement along the same corridor. To better assess the issue of safety and determine if any safety improvements are required, a detailed delay and accident analysis should be conducted in subsequent phases of the project to identify and evaluate the type of improvements required in the Gold Line Phase II Corridor.

Figure 3.5

**EVALUATION OF SELECTED PGL CLAREMONT EXTENSION
CROSSINGS ON AT-GRADE OPERATION THRESHOLDS
(2025 VOLUMES)**



3.6 Stations and Transit Oriented Development

In the 1993 Environmental Impact Statement prepared for the Gold Line Phase II Corridor, each of the participating Corridor cities identified the location of their historic downtown railroad station as the preferred site for their city station. During the Phase II Alternatives Analysis, this was reconfirmed with city staff and eleven stations were identified. In the City of San Dimas, seven sites were identified by the City and an analysis was conducted resulting in the selection of two for the station and related parking at the site of their historic rail station. In Azusa, the City decided that they would need two stations; the site of their historic rail station in the historic downtown, and at Citrus College where transit oriented development is currently being planned by the City for the Monrovia Nursery site. Therefore, eleven stations have been assumed for this study: Arcadia, Monrovia, Duarte, Irwindale, Azusa (downtown), Azusa (Monrovia Nursery development), Glendora, San Dimas, La Verne, Pomona, and Claremont.

As part of the analysis of the Gold Line, a sketch level investigation of the potential for transit-oriented development (TOD) around stations was completed in the ten communities at their preferred station sites. Sketch plans and recommendations for each community were documented in a report that provides the Gold Line communities with an orientation to some of the issues and considerations essential for undertaking a successful TOD program in the

corridor (*Transit Oriented Development: Prospects and Opportunities for the Gold Line, April 2002*).

Tremendous Potential

The Gold Line has tremendous potential for transit-oriented development. The corridor is characterized by a series of intact, compact walkable downtowns that grew-up around the historic rail line. Gold Line stations will serve as a new front door to a majority of the downtowns in the Corridor. This pattern of development sets the Gold Line apart from most other potential transit "new starts" in the United States.

Sketch Plans Driven by Community Vision

The centerpiece of the planning approach was a series of charrettes held in each community along the Corridor. Participants were asked to express their vision for the area around their potential station site. Based on the direction suggested in the charrettes TOD sketch plans were prepared illustrating how the Gold Line could be used to achieve the community's vision for how it wants to grow. The ten sketch plans are shown in Figure 3.6 through Figure 3.15.

The sketch plans address a range of conditions and opportunities in the corridor. At each of the Gold Line stations there are opportunities to accommodate new transit-friendly development. However, a central theme in each community was the need to respect and reinforce the single-family fabric of the neighborhoods surrounding the potential stations.

The opportunities for TOD range from modest infill, as in the case in Arcadia, to new development in Monrovia, where the vision is to use the Gold Line as a tool to help redevelop and transform over 50 acres around their Citrus College station into mixed-use transit villages with higher density residential, public spaces, high technology employment, retail and a new gateway to the city.

Summary of Recommendations

The introduction of a major transit investment into the Corridor will not guarantee the transformation of the station areas into the "transit villages" envisioned in this study. Detailed planning and public sector leadership will be required to help ensure that the communities along the Gold Line Phase II Corridor can capitalize on the investment in transit and realize their vision for how they want to grow.

Recommendations for the Gold Line Corridor include the concepts and strategies that are summarized in Table 3.5.

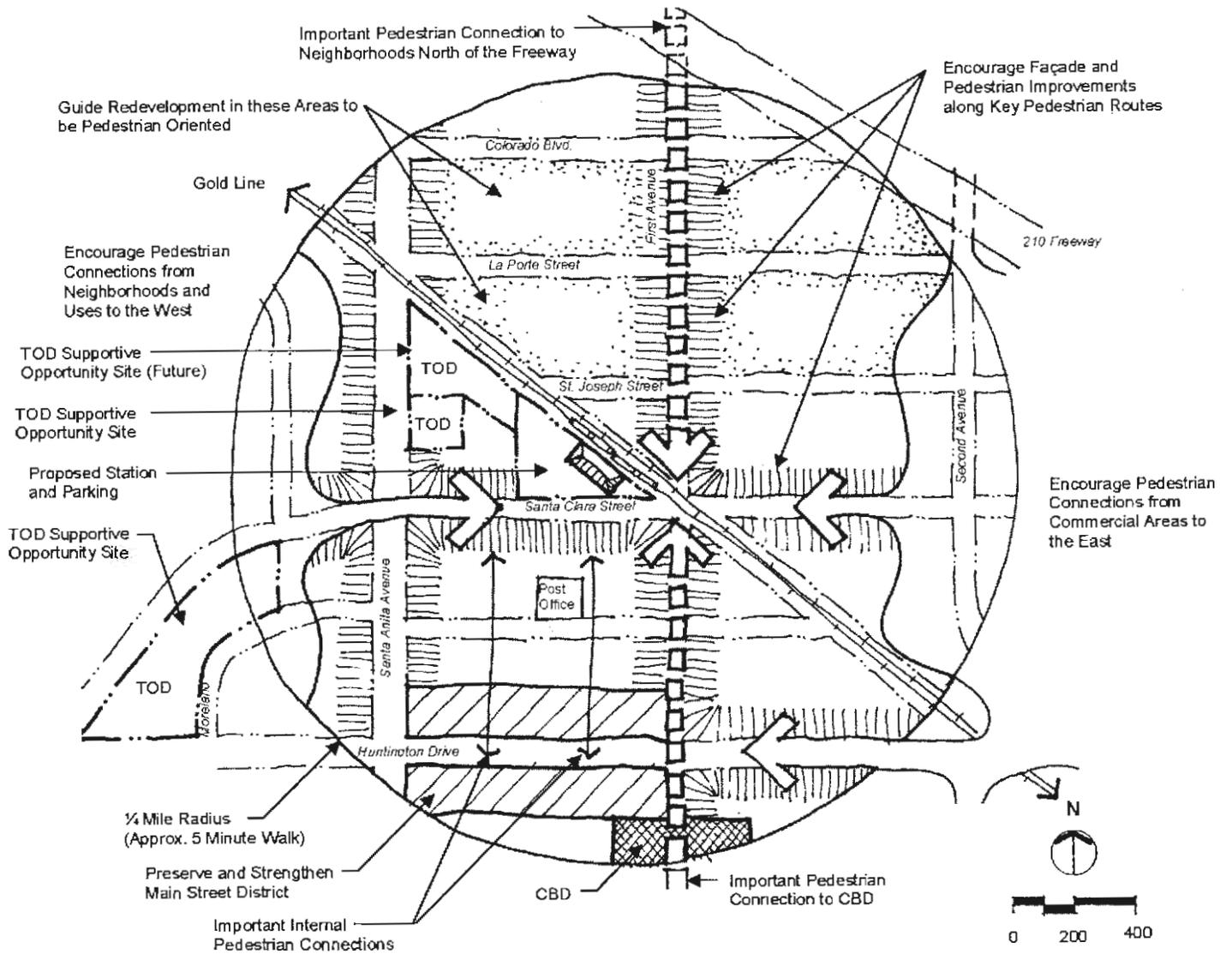


Figure 3.6
Illustrative TOD Sketch Plan
Arcadia, CA
 Transit Oriented Development Analysis
 Pasadena to Claremont Gold Line

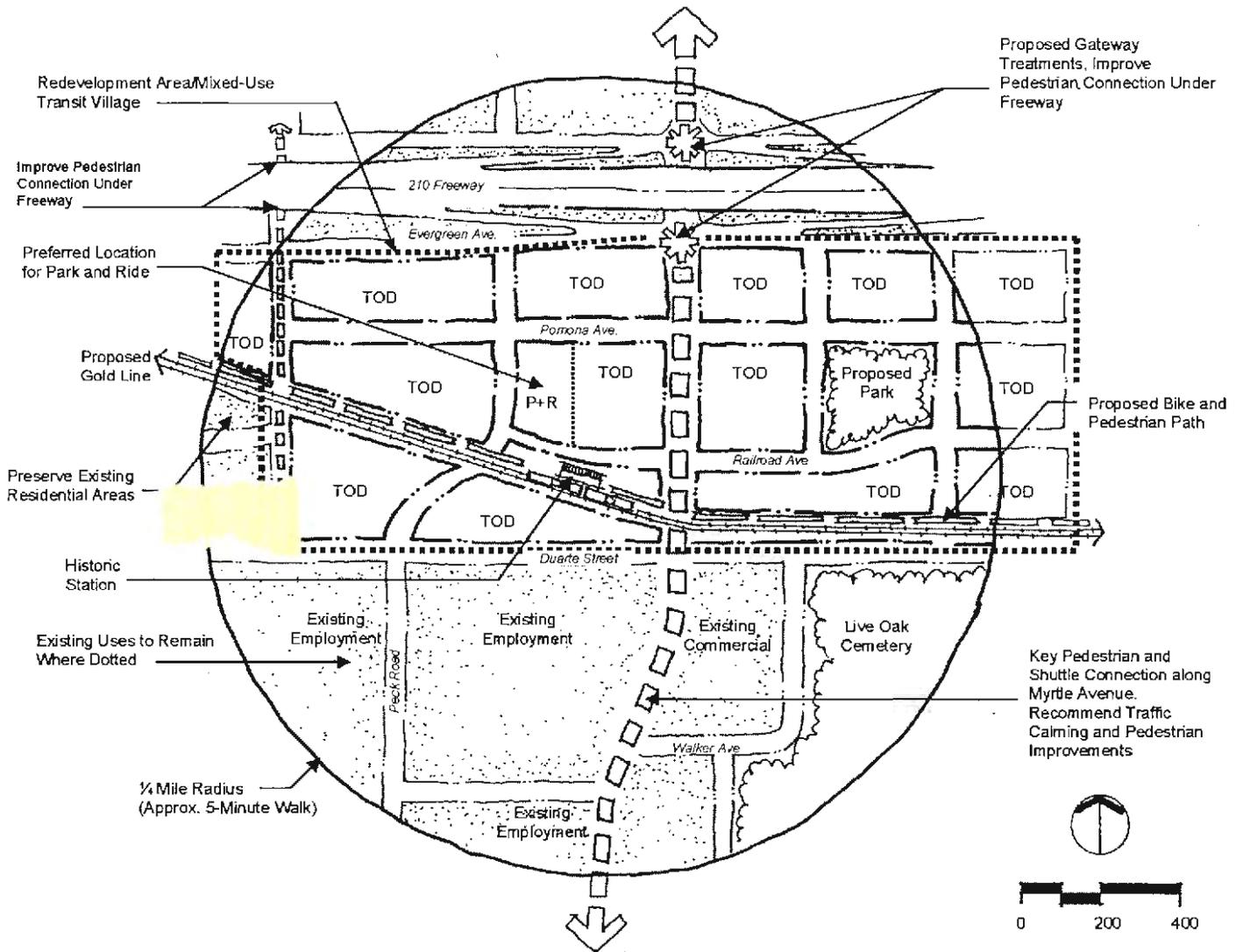


Figure 3.7
Illustrative TOD Sketch Plan
Monrovia, CA
 Transit Oriented Development Analysis
 Pasadena to Claremont Gold Line

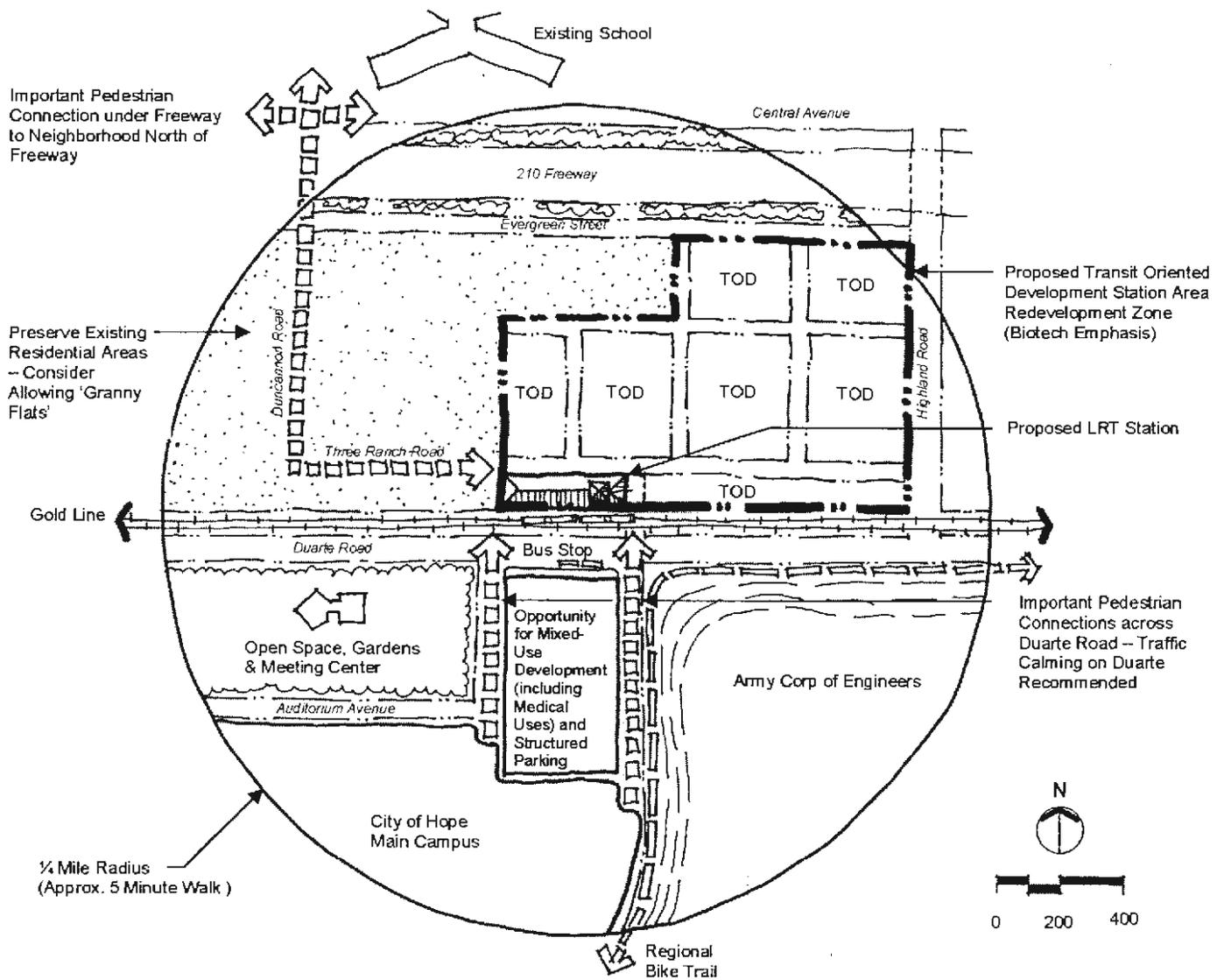


Figure 3.8
Illustrative TOD Sketch Plan
Duarte, CA
 Transit Oriented Development Analysis
 Pasadena to Claremont Gold Line

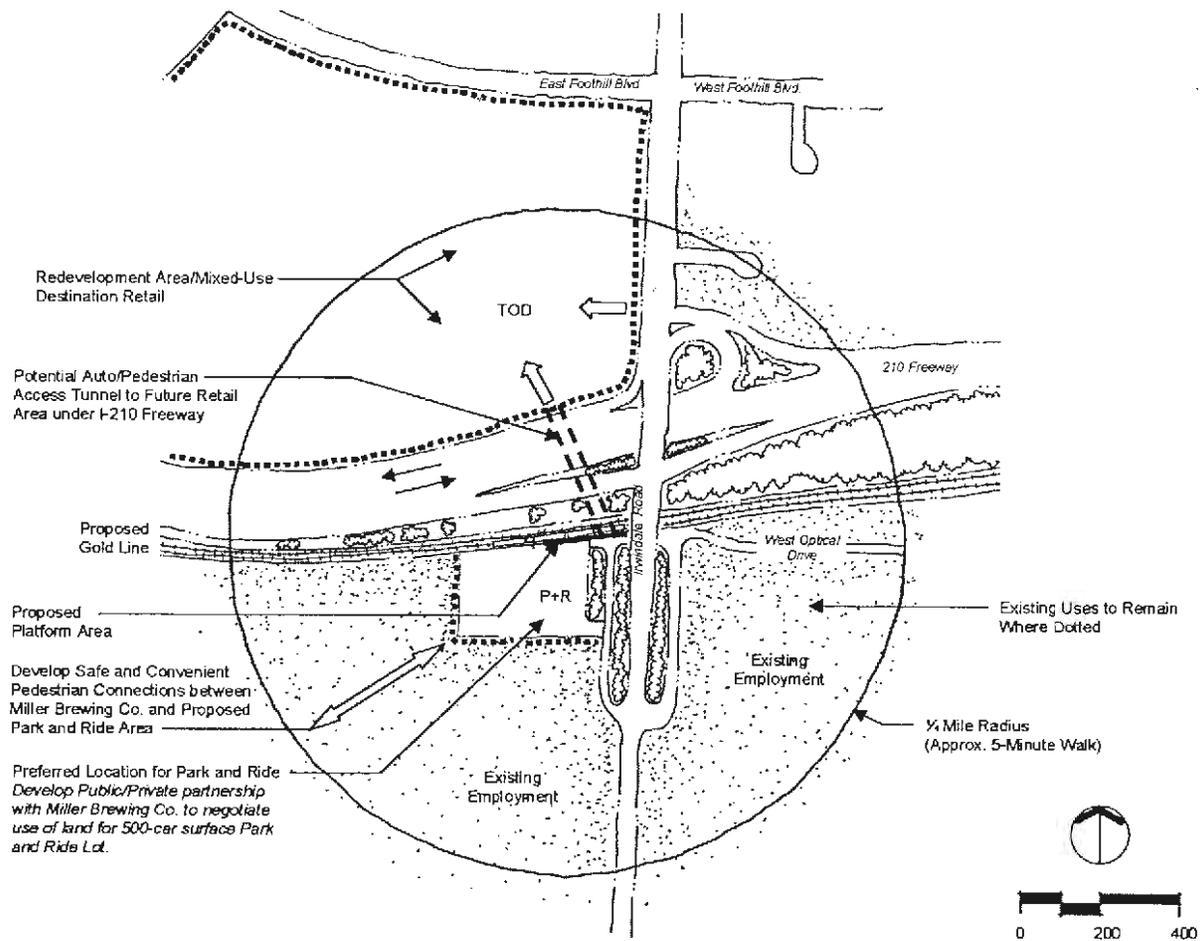


Figure 3.9
Illustrative TOD Sketch Plan
Irwindale, CA
 Transit Oriented Development Analysis
 Pasadena to Claremont Gold Line

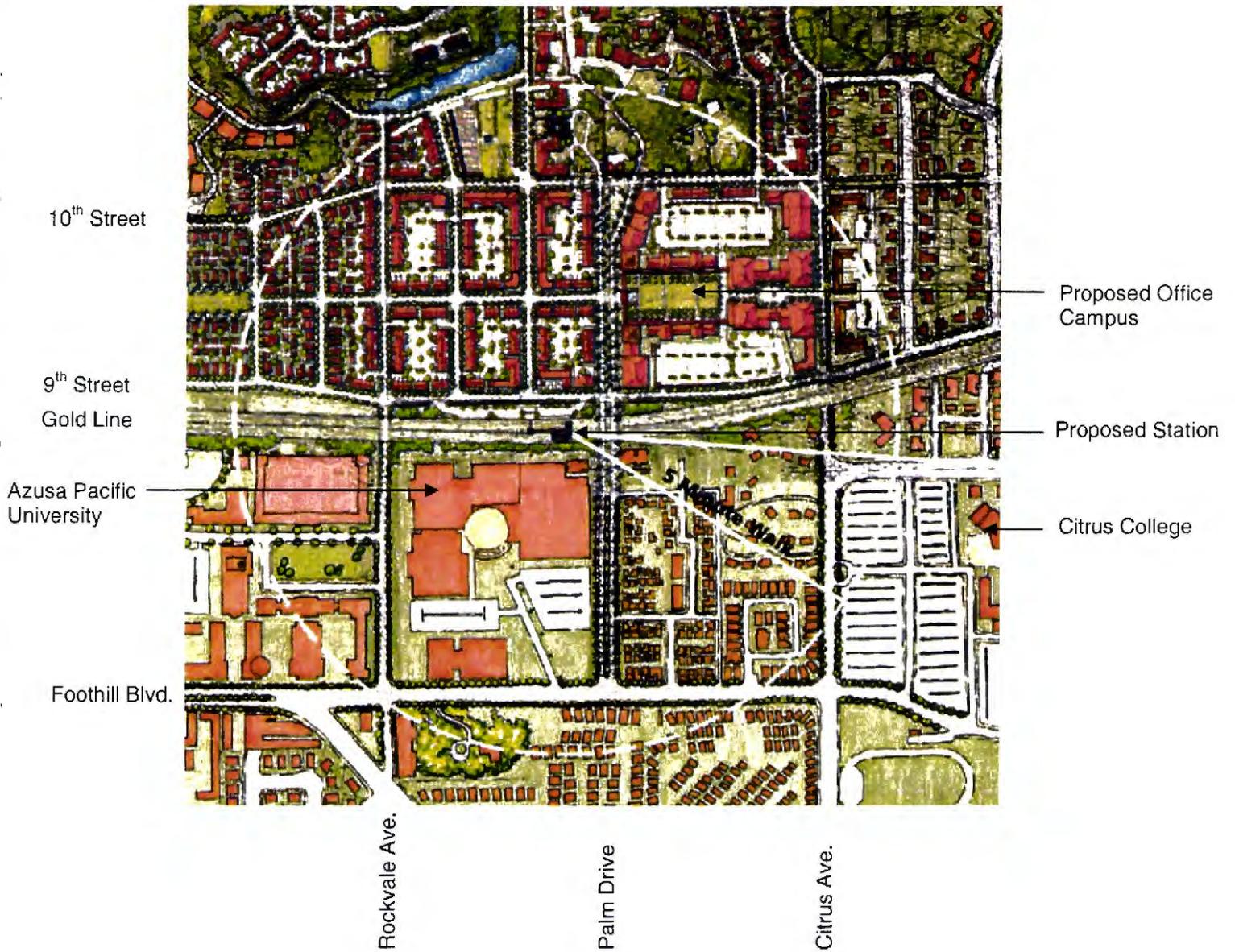


Figure 3.10
Illustrative TOD Sketch Plan
Azusa, CA
 Transit Oriented Development Analysis
 Pasadena to Claremont Gold Line
 (source: Torti Gallas and Partners • CHK, Inc.)

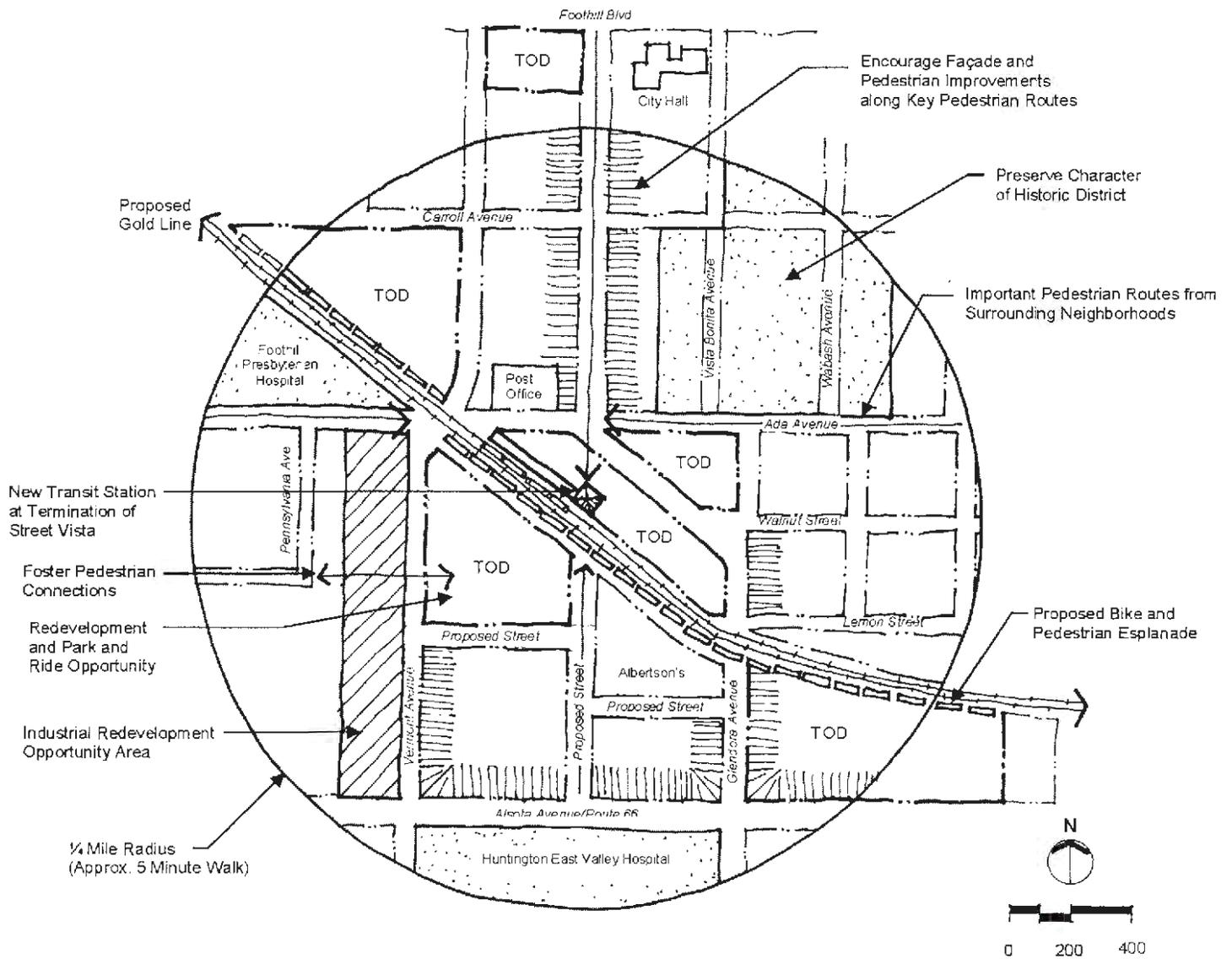
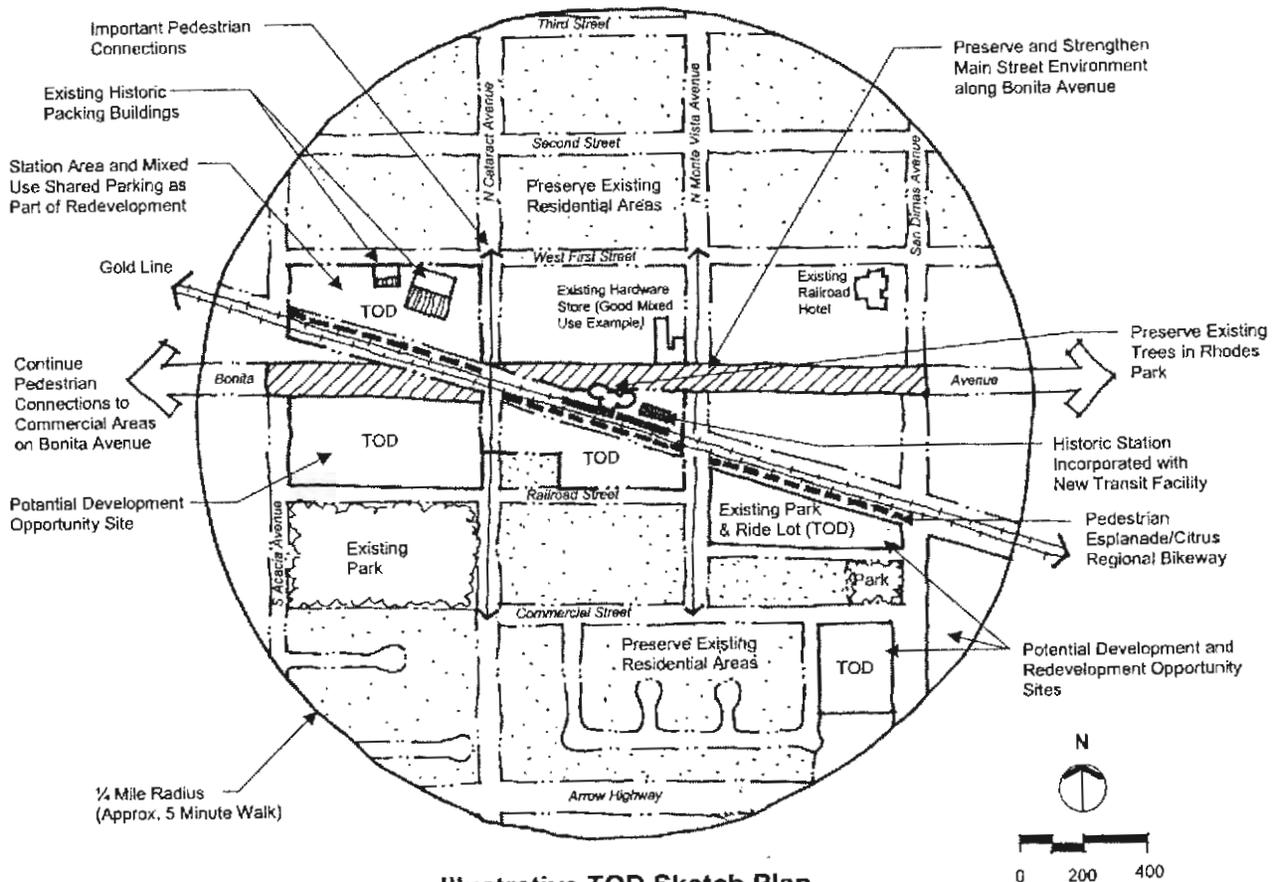


Figure 3.11
Illustrative TOD Sketch Plan
Glendora, CA
 Transit Oriented Development Analysis
 Pasadena to Claremont Gold Line



**Illustrative TOD Sketch Plan
San Dimas, California**
Transit Oriented Development Analysis
Pasadena to Claremont Gold Line

Figure 3.12



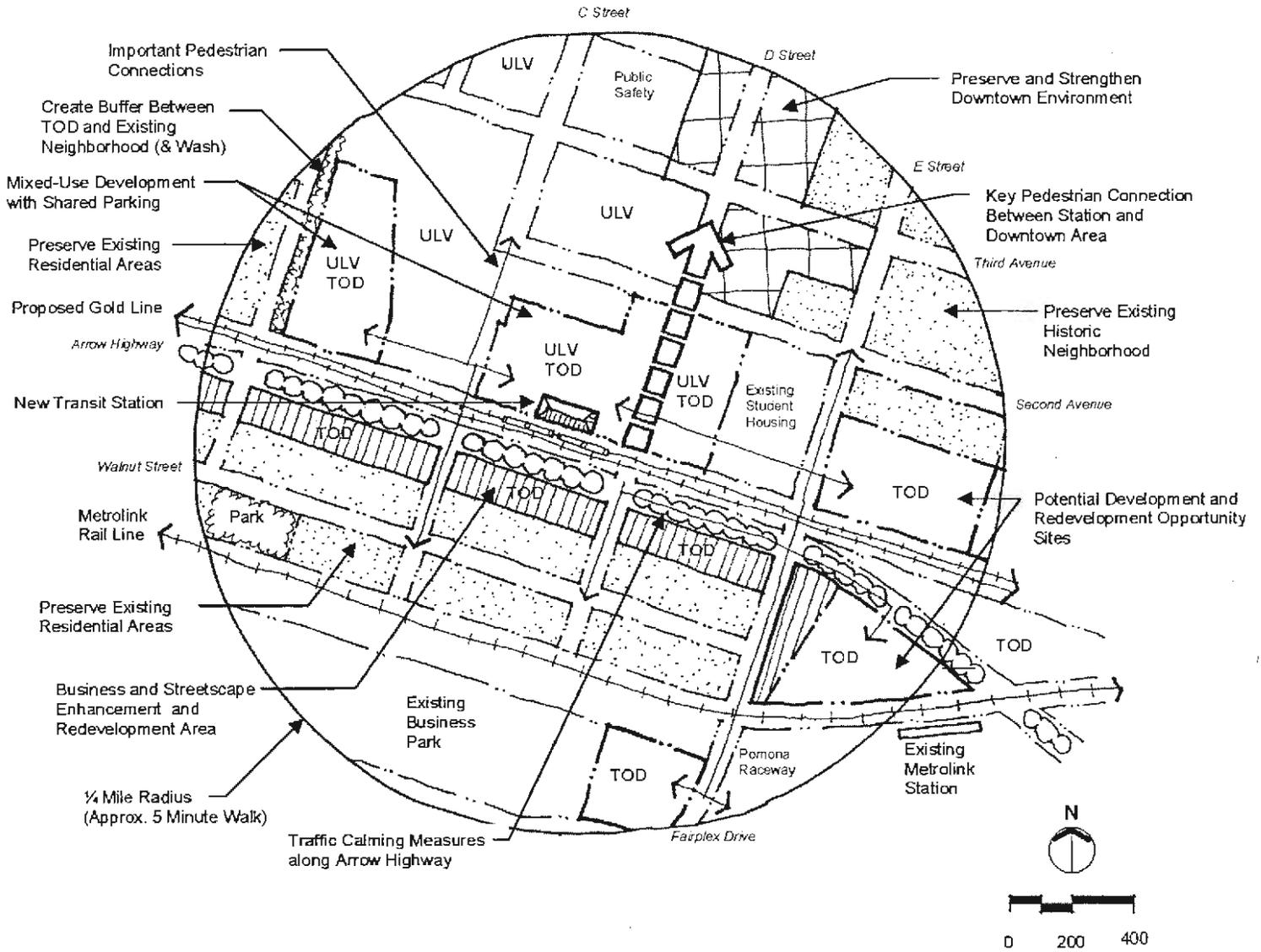


Figure 3.13
Illustrative TOD Sketch Plan
La Verne, CA
 Transit Oriented Development Analysis
 Pasadena to Claremont Gold Line

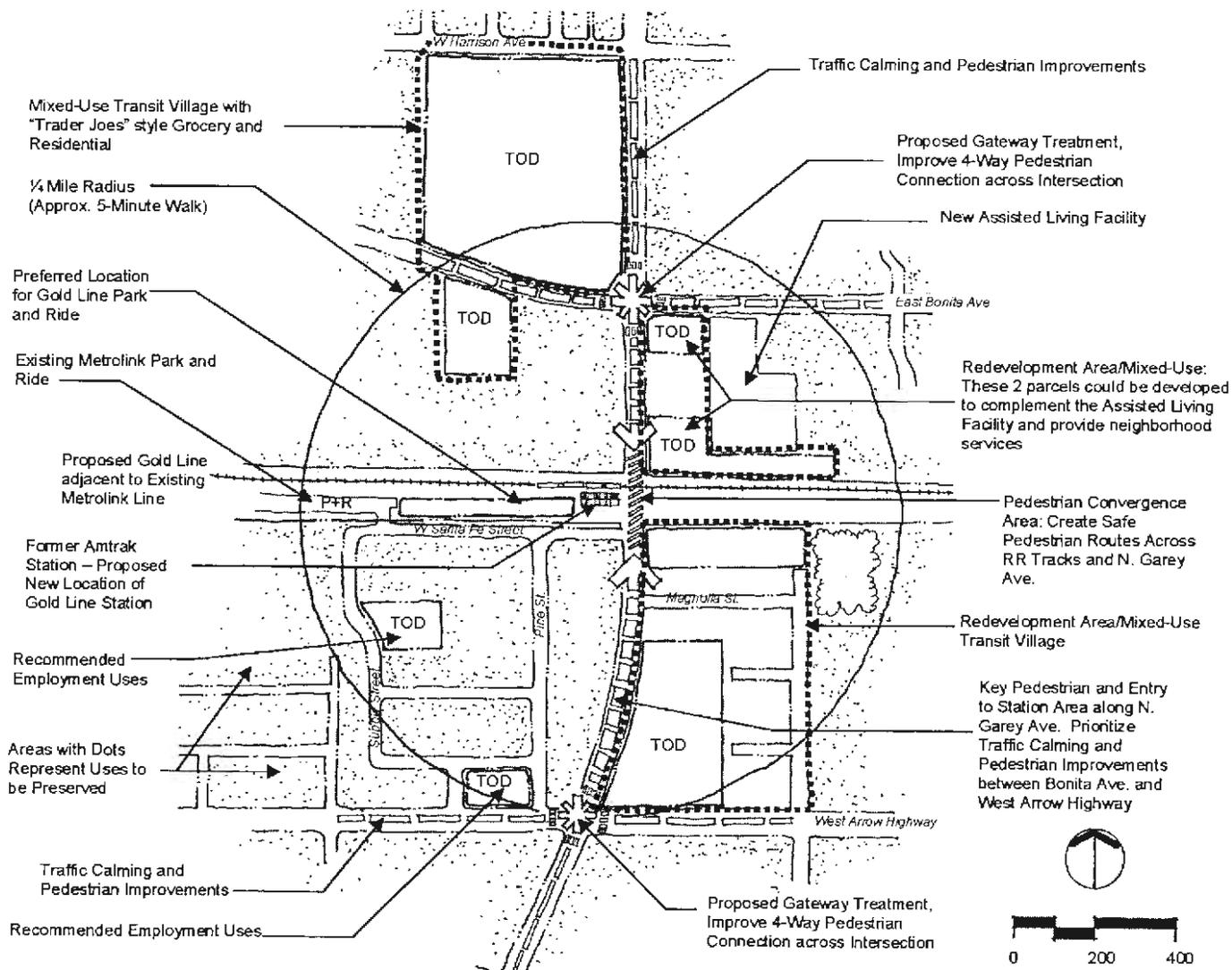


Figure 3.14
Illustrative TOD Sketch Plan
Pomona, CA
 Transit Oriented Development Analysis
 Pasadena to Claremont Gold Line

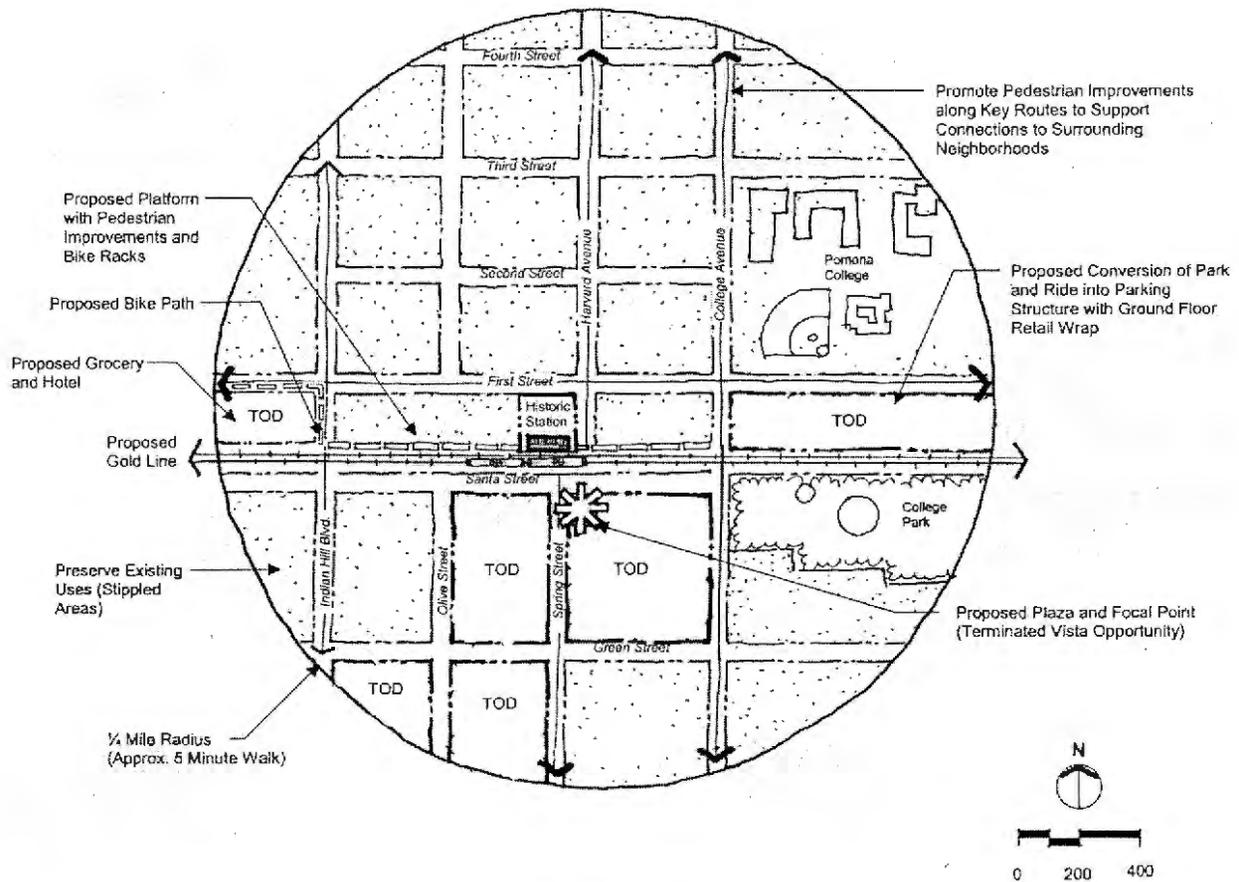


Figure 3.15
Illustrative TOD Sketch Plan
Claremont, CA
 Transit Oriented Development Analysis
 Pasadena to Claremont Gold Line

Table 3.5
Ten Steps to TOD on the Gold Line

<p>1. Transit Villages Proceed with planning and implementation of compact, mixed-use “transit villages.”</p>
<p>2. Station Area Planning As part of the next phase of the Gold Line project undertake planning transit villages.</p>
<p>3. Revise Development Codes Development codes in the Corridor will need to be revised to allow TOD as a clearly permitted use.</p>
<p>4. Development Ready Transit Plan and design the Gold Line to welcome and encourage TOD.</p>
<p>5. Preserve & Enhance Neighborhoods A successful TOD strategy for the Corridor needs to respect and preserve the integrity of existing single-family neighborhoods.</p>
<p>6. Start with Strengths For most Gold Line communities a successful TOD strategy and a successful downtown strategy are one and the same.</p>
<p>7. Pedestrian-Friendly Projects Focus on pedestrian-friendly projects to avoid the complication of sequencing development with the Gold Line.</p>
<p>8. Develop Strategically Understand and plan for the synergistic relationship of uses between stations along the Gold Line Phase II Corridor.</p>
<p>9. Facilitate Good Development / Discourage Bad Development Give closer attention to pedestrian-oriented design for all development in the station areas.</p>
<p>10. Places to Come Back To When done best, transit investments can be a powerful tool to help create places to come back to, not simply to leave from.</p>

Chapter 4: FUNDING OPPORTUNITIES

- Preliminary funding plans have been developed for the capital and operations and maintenance components of the Pasadena Gold Line Phase II Locally Preferred Alternative. A number of potential capital and operations and maintenance funding sources have been identified at the local, state and federal levels, including the blending of existing sources and less traditional sources such as short-term grant anticipation bonding backed by future commitments of Federal Transit Administration Section 5309 New Starts funding.
- The preliminary capital funding plan calls for 50 percent funding from the FTA Section 5309 New Start Program, 1.5 percent from FTA/FHWA flexible funding sources, 26 percent from State funding sources, and 22.5 percent from a combination of local sources, including contributions for stations from the cities in the Gold Line Phase II corridor.
- The preliminary O&M funding plan calls for approximately 27 percent of O&M funding to be derived from farebox revenues, with 73 percent from operating support provided by Los Angeles County Metropolitan Transportation Authority.

This chapter summarizes the preliminary funding plan for the Locally Preferred Alternative (LPA) for the Pasadena Gold Line Phase II. The LPA for Phase II calls for the extension of the Phase I Gold Line light rail transit (LRT) project from Sierra Madre Villa to Claremont.¹ Key issues considered in developing the preliminary funding plan are also described. These issues will be reconsidered during the subsequent stages of project development and will be used in the development of an updated funding and financing strategy.

Table 4.1 provides an overview of the proposed uses and sources of funds for the LPA over the Fiscal Year 2002 – 2025 project analysis period in Year of Expenditure (YOE) dollars. As shown in the table, capital and operations and maintenance (O&M) costs reflect the effect of a 3.5 percent annual rate of inflation on the costs (in 2002 constant dollars) that were presented in prior chapters, assuming a 2-phased implementation scenario. Under this scenario, Segment 1 of the LPA, extending from Sierra Madre Villa to Irwindale, would be constructed over the FY 2004-2009 period, with service on this segment operational in 2010. Segment 2, extending from Irwindale to Claremont, would be constructed over the FY 2009-2013 period, with service along the two segments operational in 2014.

Section 4.1 provides an overview of the costs and revenues for the LPA. Section 4.2 summarizes the preliminary capital funding plan, with the preliminary O&M funding plan summarized in Section 4.3. Section 4.4 then presents the financial plan for the LPA project, including a detailed cash flow analysis over the FY 2002-2025 period. Unless otherwise noted, all costs and revenues presented in this chapter are expressed in Year of Expenditure dollars to give a clearer picture of the financial obligations associated with implementing and operating the LPA project.

¹ Report prepared by Sharon Greene and Associates

4.1 Overview of Costs and Revenues

As shown in Table 4.1, over the FY 2002-2025 period, the total costs of the LRT Locally Preferred Alternative are projected to total \$1,960.4 million (YOE dollars). These costs include \$1,318.6 million (67 percent) for capital, \$55.4 million (3 percent) for interest on short-term debt, and \$588.4 million (27 percent) for O&M.

While the capital costs of the project total \$1,318.6 million, in order to meet the proposed project implementation schedule in light of an assumed limitation of \$50 million per year in the level of Federal Transit Administration (FTA) Section 5309 New Starts funding likely to be received, additional costs are projected to be required for issuance and repayment of principal and interest costs for short-term grant anticipation financing. These principal and interest costs are projected to total \$291.4 million., including \$238 million in principal for bond proceeds and \$53.4 million in interest costs. The bond principal would be repaid with FTA Section 5309 New Starts funds received after completion of construction. Fifty percent of the interest costs are also assumed to be reimbursed with future FTA New Start funds.

The revenues for capital, debt service, and O&M are projected to meet the \$1,960.4 million in project costs. The principal proposed revenue sources are:

- *Capital Revenue Sources:*

- Southern California Association of Governments (SCAG);

- Interest;

- Bridge Replacement (Pasadena Blue Line Construction Authority, or "Authority");

- Phase I Carryover;

- Real Estate (Authority);

- Los Angeles County Metropolitan Transportation Authority (MTA);

- Pasadena Gold Line Phase II Joint Powers Authority (JPA);

- Phase II Cities Contributions for Stations;

- State of California;

- FTA Section 5309 New Starts Program;

- FTA/FHWA Intermodal Funds; and

- Bond Proceeds.

- *Debt Service Revenue Sources:*

- MTA;

- State of California; and

- FTA Section 5309 New Starts Program.

- *O&M Revenue Sources:*

- Gold Line Phase II LRT Fare Revenues and

- MTA Operating Support.

TABLE 4.1
PASADENA GOLD LINE PHASE II: SOURCES AND USES
FISCAL YEAR 2002 - 2025 (IN YEAR OF EXPENDITURE DOLLARS)

	TOTAL (2002 \$)	TOTAL (YOE \$)
CAPITAL COSTS		
SEGMENTS 1 AND 2		
AA/FEIS/PE	\$23,000,000	\$24,400,000
Administration	\$63,000,000	\$82,400,000
Program Management	\$62,000,000	\$81,400,000
Final Design	\$38,000,000	\$45,100,000
Real Estate		
Existing	\$81,000,000	\$101,900,000
Future	\$52,000,000	\$61,500,000
Total	\$133,000,000	\$163,400,000
Procurement (# vehicles,w spares) (24 Vehicles)		
Cost	\$150,000,000	\$201,900,000
Construction	\$407,000,000	\$539,300,000
Testing & Startup	\$15,000,000	\$20,900,000
Misc Other	\$31,000,000	\$42,000,000
Subtotal	\$922,000,000	\$1,200,800,000
Project Reserve	\$90,000,000	\$117,800,000
Interest on Bond Proceeds		\$53,400,000
TOTAL, CAPITAL COSTS, SEGMENTS 1 AND 2	\$1,012,000,000	\$1,372,000,000
CAPITAL REVENUES		
SEGMENTS 1 AND 2		
LOCAL		
SCAG		\$1,400,000
Interest		\$2,000,000
Bridge Replacement		\$13,900,000
Phase I Carryover		\$10,000,000
Real Estate		\$101,900,000
MTA		\$124,800,000
JPA		\$3,800,000
Subtotal, Local		\$257,800,000
PHASE II CITIES: CONTRIBUTION FOR STATIONS		
		\$52,700,000
STATE		
		\$355,200,000
FEDERAL		
FTA New Starts		\$686,300,000
Federal Intermodal Funds		\$20,000,000
Subtotal, Federal		\$706,300,000
BOND PROCEEDS		
(REPAYMENT OF BOND PROCEEDS)		
		-\$238,000,000
TOTAL, CAPITAL REVENUES, SEGMENTS 1 AND 2		\$1,372,000,000
DEBT SERVICE COSTS (included above)		
SEGMENTS 1 AND 2		
Interest Component of Debt Service on Short Term Bonds		\$53,400,000
Principal Component (Repayment of Bond Proceeds)		\$238,000,000
TOTAL, DEBT SERVICE COSTS, SEGMENTS 1 AND 2		\$291,400,000
DEBT SERVICE REVENUES (included above)		
SEGMENTS 1 AND 2		
MTA (Interest Component)		\$13,350,000
State (Interest Component)		\$13,350,000
FTA New Starts (Principal Component)		\$238,000,000
FTA New Starts (Reimbursement of 50% of Interest Component)		\$26,700,000
TOTAL, DEBT SERVICE REVENUES, SEGMENTS 1 AND 2		\$291,400,000
OPERATING AND MAINTENANCE COSTS		
Gold Line Phase II LRT Operations and Maintenance Costs		\$588,376,084
TOTAL, OPERATIONS AND MAINTENANCE COSTS		\$588,376,084
OPERATING AND MAINTENANCE REVENUES		
Gold Line Phase II LRT Fare Revenues		\$158,480,066
MTA Operating Support		\$429,896,018
TOTAL, OPERATIONS AND MAINTENANCE REVENUES		\$588,376,084
BEGINNING ANNUAL BALANCE		\$0
ENDING ANNUAL BALANCE		\$0

Key Assumptions:

- a) Implementation in 2 segments: 2005-2009, 2009-2013
- b) Initiation of Service: 2010 for Segment 1 area; 2014 for Segment 2 area
- c) FTA New Starts: 50% of Capital and Financing Costs, to \$50 Million/Year
- d) Phase II Cities fund Station Costs (4% of Total Capital Costs)
- e) State: 26% of Capital Costs
- f) Advanced Acquisition of Real Estate included as a project cost and revenue source

4.2 Capital Revenue Sources

Table 4.2 summarizes the capital funding plan for the proposed LPA. As shown in the table, all federal sources are proposed to comprise 51.5 percent of capital costs. State sources are proposed to provide 26 percent of total capital funding, with the remaining 22.5 percent from a combination of various local sources and Phase II city contributions for stations.

4.2.1 Federal Capital Sources

Federal sources proposed for capital consist of FTA Section 5309 New Start funds and FTA/FHWA Intermodal funding from flexible sources such as the FHWA Congestion Mitigation and Air Quality (CMAQ) program and the Surface Transportation Program (STP) program. Of these, FTA Section 5309 funds are estimated to provide 50 percent of project capital funding, with 1.5 percent from FTA/FHWA flexible intermodal funding sources.

FTA Section 5309 New Start Funds:

A total of \$686.3 million in FTA New Starts funding is proposed to fund 50 percent of the capital cost of the LPA plus interest costs. In light of national competition for FTA New Starts funding, this source is assumed to not exceed \$50.0 million per year. This annual limitation requires that short-term grant anticipation bonds be issued to provide the FTA New Starts 50 percent share exceeding \$50.0 million in certain years. Thus, FTA New Start funding is projected to include \$238.0 million for repayment of the principal and for payment of \$26.7 million (50 percent) of the interest cost. Over the 2003-2013 period, FTA New Start funds are used directly for capital, while over the 2014-2018 period, such funds are used for repayment of financing costs.

The FTA Section 5309 New Starts program provides discretionary capital grants for fixed transit guideway new starts and extensions. With the pending completion in FY 2003 of transportation funding programs authorized under the Transportation Equity Act for the 21st Century (TEA-21), efforts are currently underway to develop legislation guiding the re-authorization of federal transportation funding programs and levels for the FY 2004 – 2010 period. This reauthorization process provides a potential opportunity for advancing the Pasadena Gold Line Phase II project for future New Starts funding.

Competition for FTA New Starts funding is intense at both the national level and within the Los Angeles metropolitan area. As of February 2001, FTA was tracking over 110 current planning studies considering over \$60 billion in major transit capital investments. There are currently 28 projects in the Preliminary Engineering phase of project development. The total combined cost of these projects is \$16.4 billion, of which the requested New Starts share will be \$8.2 billion, or 50 percent. In addition, there are 13 projects in the Final Design phase of project development. The combined cost of these projects is \$3.6 billion, of which the requested New Starts share will be \$1.7 billion, or 47 percent. Thus, to be successful in securing New Starts funds, the PBL Phase II LPA will have to be highly competitive with respect to both its technical merits and its level of political support demonstrated during reauthorization.

TABLE 4.2
PASADENA GOLD LINE PHASE II: CAPITAL FUNDING PLAN
FISCAL YEAR 2002 - 2025 (IN YEAR OF EXPENDITURE DOLLARS)

	TOTAL (YOE \$)	PERCENT, BY SOURCE
CAPITAL REVENUES		
SEGMENTS 1 AND 2		
LOCAL		
SCAG	\$1,400,000	0.1%
Interest	\$2,000,000	0.1%
Bridge Replacement	\$13,900,000	1.0%
Phase I Carryover	\$10,000,000	0.7%
Real Estate	\$101,900,000	7.4%
MTA	\$124,800,000	9.1%
JPA	\$3,800,000	0.3%
Subtotal, Local	\$257,800,000	18.8%
PHASE II CITIES: CONTRIBUTION FOR STATIONS	\$52,700,000	3.8%
STATE	\$355,200,000	25.9%
FEDERAL		
FTA New Starts *	\$686,300,000	50.0%
Federal Intermodal Funds	\$20,000,000	1.5%
Subtotal, Federal	\$706,300,000	51.5%
BOND PROCEEDS	\$238,000,000	
(REPAYMENT OF BOND PROCEEDS)	-\$238,000,000	
TOTAL, CAPITAL REVENUES, SEGMENTS 1 AND 2 *	\$1,372,000,000	100.00%

* FTA Section 5309 New Starts revenues include funds for repayment of \$ 238 million in principal and \$26.7 million in interest on short-term grant anticipation bonds.

Key Assumptions:

- a) Implementation in 2 segments: 2005-2009, 2009-2013
- b) Initiation of Service: 2010 for Segment 1 area; 2014 for Segment 2 area
- c) FTA New Starts: 50% of Capital and Financing Costs, to \$50 Million/Year
- d) Phase II Cities fund Station Costs (4% of Total Capital Costs)
- e) State: 26% of Capital Costs
- f) Advanced Acquisition of Real Estate included as a project cost and revenue source

FTA/FHWA Intermodal Funds:

A total of \$20 million in FTA/FHWA Intermodal funding is proposed. These revenues would be used for station-related costs and would be derived from various flexible funding programs, including CMAQ and STP. Such funding is allocated on a competitive basis to individual projects through the MTA Call For Projects.

4.2.2 State Capital Sources

A total of \$355.2 million in State funding is proposed. This revenue includes \$341.9 million for capital and an additional \$13.3 million for payment of 25 percent of the interest costs on short-term grant anticipation bonds. These funds could be provided from various State sources, including future funding through the Transportation Congestion Relief Program and from future funding measures.

In light of the fiscal constraints presently facing the State of California, State funding is not proposed as a major source until after 2007. This will provide the opportunity for future funding measures to advance in the Legislature and will allow time for the Gold Line Phase II project to be programmed in future State Transportation Improvement Programs for federal and state funding.

4.2.3 Local Capital Sources and City Capital Contributions for Stations

Local sources are projected to provide \$257.8 million in capital funding, with an additional \$52.7 million provided by the Gold Line Phase II cities in the form of capital contributions for stations. These sources include contributions from Southern California Association of Governments for planning (.1 percent), accrued interest (.1 percent), Bridge Replacement funds (1 percent), Phase I carryover funds (.7 percent), real estate previously acquired for the railroad right-of-way (7.4 percent), MTA (9.1 percent), and contributions from the Gold Line Phase II Joint Powers Authority (.3 percent).

MTA is responsible for programming the majority of the transportation funds expended in Los Angeles County. Funds programmed at the discretion of LACMTA include 75 - 80 percent of LA County's Proposition A and C half-cent sales tax funds (other than the Local Return components of these measures), as well as LA County's share of the 75 percent of the federal and state funds comprising the State Highway Account that get programmed in the Regional Transportation Improvement Program (RTIP) component of the State Transportation Improvement Program (STIP).

Through its Call for Projects, MTA prioritizes multiple types of projects using a variety of federal, state, and local MTA funding resources. The types of projects programmed through the Call include Regional Surface Transportation Improvements, Arterial Goods Movement, Signal Synchronization and Bus Speed Improvements, Transportation Demand Management, Bikeway Improvements, Pedestrian Improvements, Transportation Enhancements, and Rideshare Services, as well as Freeway Improvements and Gap Closures. Among the types of funding sources programmed through the Call are Proposition C 25 percent Transit-Related Highway Improvement funds, the Regional Surface Transportation Program (RSTP) component of Federal Highway Administration's Surface Transportation Program, and FHWA Congestion Mitigation and Air Quality Program (CMAQ) funds.

Among the capital components comprising the Gold Line Phase II, it is likely that the local jurisdictions along the corridor will seek funding through the Call for multimodal transportation centers that can be implemented in the short and intermediate term and then be adapted for use as LRT stations. The funds potentially received through the Call would be matched with local funds contributed by the corridor jurisdictions.

At the discretion of the MTA Board, funding from key sources is programmed for major transit corridor projects. Among the funding sources programmed for these types of projects are Proposition A 35 Percent funds for rail development, Proposition C 40 Percent Discretionary funds, and RSTP funds.

With respect to City Contributions for Stations, the local jurisdictions along the Gold Line Phase II corridor have indicated their commitment to assist in funding the capital cost of the project. This assistance could be in the form of local acquisition and development of right of way for future stations. The stations could be developed incrementally, starting as transit centers and then adapted to multimodal centers serving the rail line.

Local jurisdictions could potentially use a variety of funding sources for their local station projects. Among these are Proposition A 25 Percent Local Return, Proposition C 20 Percent Local Return, local gas tax subventions, tax increment financing revenues from redevelopment, and joint development.

4.3 Operations and Maintenance Funding Sources

As shown in Table 4.3, two sources are proposed to fund the \$588.4 million in O&M costs projected over the FY 2010-2025 period, during which the LPA project is assumed to be in operation: These sources are Gold Line Phase II LRT fare revenues and MTA Operating Support. In constant 2002 dollars, the annual O&M cost of the Gold Line Phase II LRT LPA are estimated to be \$23.6 million per year at full operation. As service is proposed to be implemented in two increments (Segment 1 area by 2010, with extension to Segment 2 area by 2014), O&M costs were assumed to ramp up from 45 percent of the total in 2010 to full operation by 2016.

Gold Line Phase II LRT Fare Revenues

Over the 2010-2025 period, LRT fare revenues are projected to fund a total of \$158.5 million (26.9 percent) of total O&M costs. Farebox recovery levels are projected to ramp up from 20 percent farebox recovery at the initiation of service in 2010, to 25 percent by 2015, and to 30 percent by 2020. This level of performance is consistent with existing MTA LRT services and with MTA policy.

MTA Operating Support:

Over the 2010-2025 period, MTA operating support is proposed to fund a total of \$429.9 million (73 percent) of total O&M costs. In 2002 constant dollars, this is equivalent to approximately \$17.2 million per year. This level of operating support would be added to the funding MTA currently provides for operation of public transportation services, totaling in the billions of dollars.

TABLE 4.3
PASADENA GOLD LINE PHASE II: OPERATIONS AND MAINTENANCE FUNDING PLAN
FISCAL YEAR 2002 - 2025 (IN YEAR OF EXPENDITURE DOLLARS)

	TOTAL (YOE \$)	PERCENT, BY SOURCE
OPERATING AND MAINTENANCE COSTS		
Gold Line Phase II LRT Operations and Maintenance Costs	\$588,376,084	100.00%
TOTAL, OPERATIONS AND MAINTENANCE COSTS	\$588,376,084	100.00%
OPERATING AND MAINTENANCE REVENUES		
Gold Line Phase II LRT Fare Revenues	\$158,480,066	26.94%
MTA Operating Support	\$429,896,018	73.06%
TOTAL, OPERATIONS AND MAINTENANCE REVENUES	\$588,376,084	100.00%

Key Assumptions:

- a) Implementation in 2 Segments: 2005-2009, 2009-2013
- b) Initiation of Service: 2010 for Segment 1 area; 2014 for Segment 2 area
- c) Farebox recovery assumed to increase from 20 percent in 2010 to 30 percent by 2025

4.4 Financial Plan for the Gold Line Phase II LRT LPA

Tables 4.4, 4.5, and 4.6 contain detailed cash flow analyses of the costs and revenues required for the capital and O&M components of the Gold Line Phase II LRT LPA over the FY 2002-2025 period. In Table 4.4, the costs and revenues required for the two segments are combined to present total costs and revenues for the two segments. In Tables 4.5 and 4.6, the costs and revenues are shown separately for each segment.

As shown in both tables, the capital costs for Segment 1 (Sierra Madre Villa to Irwindale) are projected to occur over the FY 2005-2009 period, with operation of service within the Segment 1 area proposed to begin in 2010. The capital costs for Segment 2 (Irwindale to Claremont) are projected to occur over the FY 2009-2013 period, with operation of service extended to the Segment 2 area beginning in 2014.

4.5 Next Steps

In concert with the completion of the AA/DEIS and PE/FEIS, the Pasadena Gold Line Construction Authority, in conjunction with the San Gabriel Valley Council of Governments and the local jurisdictions in the corridor, will refine the financial strategy and plan for the Gold Line Phase II project. These efforts will include:

- Refinement of capital and operating costs and refinement of the project implementation schedule specifying the level of capital and operating expenditures projected by year;
- Refinement of potential revenue sources, potential funding partners, respective financial contributions, and short-term and long-term financing requirements for the Gold Line Phase II project;
- Inclusion of the Gold Line Phase II project into the financially-constrained component of the MTA Long Range Plan and the SCAG Regional Transportation Plan; and enhancement of opportunities for securing federal, state, and local revenues for the project through existing and newly proposed funding and financing programs;
- Work with FTA to incorporate the Pasadena Gold Line Phase II project into the FTA New Start Program and into federal legislation reauthorizing transportation funding programs and levels through the reauthorization of TEA-21; and
- Work with local jurisdictions in the corridor to develop, advance, and fund early-action transit center and multimodal facility projects that can be adapted to serve as future stations for the Gold Line Phase II project, including opportunities for joint development and for transit-oriented development along the corridor.

**TABLE 4.4
PASADENA GOLD LINE PHASE II: COMBINED FINANCIAL PLAN, SEGMENTS 1 AND 2
FISCAL YEAR 2002 - 2025 (IN YEAR OF EXPENDITURE DOLLARS)**

Key Assumptions:

-
- b) Initiation of Service: 2010 for Segment 1 area; 2014 for Segment 2 area
- c) FTA New Starts: 50% of Capital and Financing Costs, to \$50 Million/Year
- d) Phase II Cities fund Station Costs (4% of Total Capital Costs)
- e) State: 26% of Capital Costs

f) Advanced Acquisition of Real Estate included as a project cost and revenue	TOTAL (YOY \$)	Actual through 2002	2003	2004	SEGMENT 1					SEGMENT 2				
					2005	2006	2007	2008	2009	2010	2011	2012	2013	
CAPITAL COSTS														
SEGMENTS 1 AND 2														
AA/FEIS/PE	\$24,400,000	\$580,000	\$1,540,000	\$22,300,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0		
Administration	\$82,400,000	\$40,000	\$100,000	\$0	\$993,393	\$6,830,862	\$7,148,980	\$9,503,643	\$15,597,500	\$8,172,667	\$8,142,519	\$10,461,307	\$15,311,130	
Program Management	\$81,400,000	\$200,000	\$400,000	\$0	\$0	\$4,406,133	\$11,080,751	\$14,189,854	\$10,523,482	\$4,728,989	\$11,478,352	\$14,201,748	\$10,185,917	
Final Design	\$45,100,000	\$0	\$0	\$0	\$22,200,000	\$0	\$0	\$0	\$22,900,000	\$0	\$0	\$0	\$0	
Real Estate														
Existing	\$101,900,000	\$101,900,000	\$0	\$0	\$0	\$32,100,000	\$0	\$0	\$0	\$69,800,000	\$0	\$0	\$0	
Future	\$61,500,000	\$0	\$0	\$0	\$34,262	\$41,309,500	\$5,344,588	\$5,511,849	\$795	\$7,440,000	\$930,000	\$929,205	\$0	
Total	\$163,400,000	\$101,900,000	\$0	\$0	\$34,262	\$73,409,500	\$5,344,588	\$5,511,849	\$795	\$77,240,000	\$930,000	\$929,205	\$0	
Procurement (# vehicles,w spares) (16 Vehicles)														
Cost	\$201,900,000	\$0	\$0	\$0	\$0	\$0	\$27,015,299	\$7,963,098	\$30,501,805	\$0	\$59,047,286	\$10,265,796	\$60,156,946	
Construction	\$539,300,000	\$0	\$0	\$0	\$0	\$1,080,994	\$39,045,544	\$113,279,152	\$119,814,339	\$1,119,149	\$39,794,057	\$111,546,810	\$113,840,184	
Testing & Startup	\$20,900,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$8,300,000	\$0	\$0	\$0	\$14,600,000	
Misc Other	\$42,000,000	\$0	\$980,000	\$0	\$1,454	\$288,711	\$1,876,436	\$2,921,778	\$14,855,592	\$337,300	\$2,248,543	\$3,208,772	\$15,805,613	
Subtotal	\$1,200,800,000	\$102,700,000	\$2,400,000	\$22,300,000	\$23,229,109	\$88,094,171	\$92,509,598	\$153,388,972	\$220,293,093	\$91,593,099	\$121,838,758	\$156,843,408	\$229,009,792	
Project Reserve	\$117,800,000	\$13,900,000	\$250,000	\$0	\$2,319,911	\$8,808,417	\$9,250,960	\$15,338,897	\$22,042,308	\$9,159,310	\$12,183,876	\$15,864,341	\$23,000,980	
Interest Component of Debt Service on Short Term Bonds	\$53,400,000									\$1,400,000	\$4,320,000	\$4,320,000	\$6,320,000	
TOTAL, CAPITAL COSTS, SEGMENTS 1 AND 2	\$1,372,000,000	\$116,600,000	\$2,650,000	\$22,300,000	\$25,549,020	\$94,703,588	\$101,760,558	\$168,727,869	\$243,735,402	\$105,072,409	\$138,122,634	\$177,207,748	\$259,230,771	
CAPITAL REVENUES														
SEGMENTS 1 AND 2														
LOCAL														
SCAG	\$1,400,000	\$800,000	\$800,000											
Interest	\$2,000,000	\$200,000	\$300,000	\$1,500,000										
Bridge Replacement	\$13,900,000	\$13,900,000	\$0	\$950,000	\$641,368	\$118	\$198			\$12,508,319				
Phase I Carryover	\$10,000,000			\$5,000,000	\$2,000,000		\$3,000,000							
Real Estate	\$101,900,000	\$101,900,000	\$0	\$0	\$0	\$32,100,000				\$9,743,061	\$15,846,340	\$17,814,131	\$25,553,898	
MTA	\$124,800,000		\$850,000	\$0	\$0	\$5,959,904	\$10,818,978	\$19,860,188	\$30,383,425	\$9,430,829	\$12,219,652	\$14,797,722	\$18,061,502	
JPA	\$3,800,000		\$250,000	\$250,000	\$250,000	\$250,000	\$300,000	\$300,000	\$370,421	\$268,852	\$356,582	\$460,353	\$743,781	
Subtotal, Local	\$257,800,000	\$118,600,000	\$2,000,000	\$7,400,000	\$2,891,368	\$38,310,019	\$14,217,174	\$20,260,189	\$44,604,736	\$17,542,542	\$26,322,584	\$30,972,205	\$42,459,181	
PHASE II CITIES: CONTRIBUTION FOR STATIONS	\$52,700,000				\$1,000,000	\$1,000,000	\$6,000,000	\$4,000,000	\$5,987,097	\$5,108,193	\$6,775,251	\$8,746,709	\$14,131,850	
STATE	\$355,200,000			\$4,000,000	\$8,893,548	\$8,407,872	\$28,543,364	\$56,467,880	\$66,192,870	\$28,521,874	\$37,124,799	\$47,588,034	\$68,739,740	
FTA New Starts	\$688,300,000		\$650,000	\$10,800,000	\$12,764,103	\$46,985,897	\$50,000,000	\$50,000,000	\$50,000,000	\$50,000,000	\$50,000,000	\$50,000,000	\$50,000,000	
Federal Intermodal Funds	\$20,000,000				\$2,000,000	\$0	\$3,000,000	\$3,000,000	\$4,000,000	\$2,900,000	\$2,000,000	\$2,000,000	\$2,000,000	
Subtotal, Federal	\$708,300,000		\$650,000	\$10,800,000	\$14,764,103	\$46,985,897	\$53,000,000	\$53,000,000	\$54,000,000	\$52,900,000	\$52,000,000	\$52,000,000	\$52,000,000	
BOND PROCEEDS	\$238,000,000							\$35,000,000	\$73,000,000	\$0	\$14,000,000	\$36,000,000	\$80,000,000	
(REPAYMENT OF BOND PROCEEDS)	-\$238,000,000													
TOTAL, CAPITAL REVENUES, SEGMENTS 1 AND 2	\$1,372,000,000	\$116,600,000	\$2,650,000	\$22,300,000	\$25,549,020	\$94,703,688	\$101,760,558	\$168,727,869	\$243,735,402	\$103,172,409	\$136,222,634	\$175,307,748	\$257,330,771	
DEBT SERVICE COSTS (Included above)														
SEGMENTS 1 AND 2														
Interest Component of Debt Service on Short Term Bonds	\$53,400,000									\$1,400,000	\$4,320,000	\$4,320,000	\$6,320,000	
Principal Component (Repayment of Bond Proceeds)	\$238,000,000									\$0	\$0	\$0	\$0	
TOTAL, DEBT SERVICE COSTS, SEGMENTS 1 AND 2	\$291,400,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400,000	\$4,320,000	\$4,320,000	\$6,320,000	
DEBT SERVICE REVENUES (included above)														
SEGMENTS 1 AND 2														
MTA (Interest Component)	\$13,350,000									\$700,000	\$2,160,000	\$2,160,000	\$3,160,000	
State (Interest Component)	\$13,350,000									\$700,000	\$2,160,000	\$2,160,000	\$3,160,000	
FTA New Starts (Principal Component)	\$238,000,000													
FTA New Starts (Reimbursement of 50% of Interest Component)	\$26,700,000													
TOTAL, DEBT SERVICE REVENUES, SEGMENTS 1 AND 2	\$291,400,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400,000	\$4,320,000	\$4,320,000	\$6,320,000	
OPERATING AND MAINTENANCE COSTS														
Gold Line Phase II LRT Operations and Maintenance Costs	\$588,376,084													
TOTAL, OPERATIONS AND MAINTENANCE COSTS	\$588,376,084	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
OPERATING AND MAINTENANCE REVENUES														
Gold Line Phase II LRT Fare Revenues	\$158,480,066													
MTA Operating Support	\$429,896,018									\$2,792,247	\$9,532,192	\$4,388,983	\$5,142,491	
TOTAL, OPERATIONS AND MAINTENANCE REVENUES	\$588,376,084	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,961,234	\$17,660,961	\$19,940,830	\$22,358,656	
BEGINNING ANNUAL BALANCE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	
ENDING ANNUAL BALANCE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	

TABLE 4.4
PASADENA GOLD LINE PHASE II: COMBINED FINANCIAL PLAN, SEGMENTS 1 AND 2
FISCAL YEAR 2002 - 2025 (IN YEAR OF EXPENDITURE DOLLARS)

Key Assumptions:

-
- b) Initiation of Service: 2010 for Segment 1 area; 2014 for Segment 2 area
- c) FTA New Starts: 50% of Capital and Financing Costs, to \$50 Million/Year
- d) Phase II Cities fund Station Costs (4% of Total Capital Costs)
- e) State: 28% of Capital Costs
- f) Advanced Acquisition of Real Estate included as a project cost and revenue

	TOTAL (YOY \$)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
CAPITAL COSTS													
SEGMENTS 1 AND 2													
AA/FEIS/PE	\$24,400,000												
Administration	\$82,400,000												
Program Management	\$81,400,000												
Final Design	\$45,100,000												
Real Estate													
Existing	\$101,900,000												
Future	\$81,500,000												
Total	\$183,400,000												
Procurement (# vehicles, w spares) (18 Vehicles)													
Cost	\$201,000,000												
Construction	\$539,300,000												
Testing & Startup	\$20,900,000												
Misc Other	\$42,000,000												
Subtotal	\$1,200,800,000												
Project Reserve	\$117,800,000												
Interest Component of Debt Service on Short Term Bonds	\$53,400,000	\$9,520,000	\$8,120,000	\$6,660,000	\$4,640,000	\$3,200,000							
TOTAL CAPITAL COSTS, SEGMENTS 1 AND 2	\$1,372,000,000	\$9,520,000	\$8,120,000	\$6,660,000	\$4,640,000	\$3,200,000	\$0						
CAPITAL REVENUES													
SEGMENTS 1 AND 2													
LOCAL													
SCAG	\$1,400,000												
Interest	\$2,000,000												
Bridge Replacement	\$13,900,000												
Phase I Carryover	\$10,000,000												
Real Estate	\$101,900,000	\$0											
MTA	\$124,800,000												
JPA	\$3,800,000												
Subtotal, Local	\$257,800,000	\$2,880,000											
PHASE II CITIES: CONTRIBUTION FOR STATIONS													
STATE	\$52,700,000												
FEDERAL	\$355,200,000												
FTA New Starts	\$885,300,000	\$35,000,000	\$36,500,000	\$43,500,000	\$48,000,000	\$80,000,000							
Federal Intermodal Funds	\$20,000,000												
Subtotal, Federal	\$705,300,000	\$0	\$6,500,000	\$13,500,000	\$43,000,000	\$80,000,000							
BOND PROCEEDS													
(REPAYMENT OF BOND PROCEEDS)	-\$238,000,000	-\$35,000,000	-\$36,500,000	-\$43,500,000	-\$48,000,000	-\$80,000,000							
TOTAL CAPITAL REVENUES, SEGMENTS 1 AND 2	\$1,372,000,000	\$2,880,000	\$0										
DEBT SERVICE COSTS (Included above)													
SEGMENTS 1 AND 2													
Interest Component of Debt Service on Short Term Bonds	\$53,400,000	\$9,520,000	\$8,120,000	\$6,660,000	\$4,640,000	\$3,200,000							
Principal Component (Repayment of Bond Proceeds)	\$238,000,000	\$35,000,000	\$36,500,000	\$50,500,000	\$36,000,000	\$80,000,000							
TOTAL DEBT SERVICE COSTS, SEGMENTS 1 AND 2	\$291,400,000	\$44,520,000	\$44,620,000	\$57,160,000	\$40,640,000	\$83,200,000	\$0						
DEBT SERVICE REVENUES (Included above)													
SEGMENTS 1 AND 2													
MTA (Interest Component)	\$13,350,000	\$4,760,000	\$4,060,000	\$3,330,000	\$2,320,000	\$1,600,000	-\$13,350,000						
State (Interest Component)	\$13,350,000	\$4,780,000	\$4,060,000	\$3,330,000	\$2,320,000	\$1,600,000	-\$13,350,000						
FTA New Starts (Principal Component)	\$238,000,000	\$35,000,000	\$36,500,000	\$50,500,000	\$36,000,000	\$80,000,000	\$0						
FTA New Starts (Reimbursement of 50% of Interest Component)	\$28,700,000	\$0	\$0	\$0	\$0	\$0	\$28,700,000						
TOTAL DEBT SERVICE REVENUES, SEGMENTS 1 AND 2	\$291,400,000	\$44,520,000	\$44,620,000	\$57,160,000	\$40,640,000	\$83,200,000	\$0						
OPERATING AND MAINTENANCE COSTS													
Gold Line Phase II LRT Operations and Maintenance Costs													
	\$588,376,084	\$32,041,674	\$35,005,528	\$38,137,602	\$39,472,418	\$40,853,953	\$42,283,841	\$43,763,775	\$45,295,508	\$46,880,850	\$48,521,680	\$50,219,939	\$51,977,637
TOTAL OPERATIONS AND MAINTENANCE COSTS	\$588,376,084	\$32,041,674	\$35,005,528	\$38,137,602	\$39,472,418	\$40,853,953	\$42,283,841	\$43,763,775	\$45,295,508	\$46,880,850	\$48,521,680	\$50,219,939	\$51,977,637
OPERATING AND MAINTENANCE REVENUES													
Gold Line Phase II LRT Fare Revenues													
	\$158,480,066	\$7,690,002	\$8,751,382	\$9,534,400	\$9,868,105	\$10,213,488	\$10,570,960	\$10,942,133	\$11,328,652	\$11,730,255	\$12,147,850	\$12,581,450	\$13,031,169
MTA Operating Support	\$429,896,018	\$24,351,672	\$26,254,146	\$28,603,201	\$29,604,314	\$30,640,464	\$31,712,881	\$32,821,643	\$33,966,856	\$35,147,595	\$36,363,830	\$37,606,489	\$38,886,468
TOTAL OPERATIONS AND MAINTENANCE REVENUES	\$588,376,084	\$32,041,674	\$35,005,528	\$38,137,602	\$39,472,418	\$40,853,953	\$42,283,841	\$43,763,775	\$45,295,508	\$46,880,850	\$48,521,680	\$50,219,939	\$51,977,637
BEGINNING ANNUAL BALANCE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENDING ANNUAL BALANCE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**TABLE 4.5
PASADENA GOLD LINE PHASE II: FINANCIAL PLAN FOR SEGMENT 1
FISCAL YEAR 2002 - 2025 (IN YEAR OF EXPENDITURE DOLLARS)**

Key Assumptions:

- a) Implementation in 2 segments: 2005-2009, 2009-2013
- b) Initiation of Service: 2010 for Segment 1 area; 2014 for Segment 2 area
- c) FTA New Starts: 50% of Capital and Financing Costs, to \$50 Million/Year
- d) Phase II Cities fund Station Costs (4% of Total Capital Costs)
- e) State: 26% of Capital Costs
- f) Advanced Acquisition of Real Estate included as a project cost and revenue

	TOTAL (YOY \$)	Actual through 2002	2003	2004	SEGMENT 1					SEGMENT 2			
					2005	2006	2007	2008	2009	2010	2011	2012	2013
CAPITAL COSTS													
SEGMENT 1													
AA/FEIS/PE	\$24,400,000	\$560,000	\$1,540,000	\$2,300,000									
Administration	\$39,100,000	\$40,000	\$100,000		\$983,369	\$8,890,882	\$7,146,980	\$8,503,649	\$14,385,122				
Program Management	\$40,800,000	\$200,000	\$400,000		\$0	\$4,406,133	\$11,080,751	\$14,189,654	\$10,523,462				
Final Design	\$22,200,000	\$0			\$22,200,000	\$0	\$0	\$0	\$0				
Real Estate		\$0											
Existing	\$32,100,000	\$101,900,000			\$0	\$32,100,000	\$0	\$0	\$0				
Future	\$52,200,000				\$34,282	\$41,309,500	\$5,344,588	\$5,511,849	\$0				
Total	\$84,300,000	\$101,900,000			\$34,282	\$73,409,500	\$5,344,588	\$5,511,849	\$0				
Procurement (# vehicles, w spares) (18 Vehicles)													
Cost	\$88,400,000				\$0	\$0	\$27,915,209	\$7,983,096	\$30,501,605				
Construction	\$273,000,000				\$0	\$1,080,864	\$38,045,544	\$113,279,152	\$119,814,339				
Testing & Startup	\$6,300,000				\$0	\$0	\$0	\$0	\$8,300,000				
Misc Other	\$20,400,000		\$360,000		\$1,454	\$288,711	\$1,976,438	\$2,921,778	\$14,853,621				
Subtotal	\$578,900,000	\$102,700,000	\$2,400,000	\$22,300,000	\$23,228,109	\$86,094,171	\$82,506,568	\$153,388,672	\$198,178,149				
Project Reserve	\$55,400,000	\$13,900,000	\$250,000	\$0	\$2,318,811	\$8,609,417	\$9,250,980	\$15,338,897	\$18,830,815				
Interest Component of Debt Service on Short Term Bonds	\$24,000,000								\$1,400,000	\$3,800,000	\$3,800,000	\$3,800,000	\$3,800,000
SUBTOTAL, SEGMENT 1, CAPITAL COSTS	\$656,300,000	\$116,600,000	\$2,650,000	\$22,300,000	\$25,549,020	\$94,703,588	\$101,760,558	\$168,727,869	\$217,208,964	\$3,800,000	\$3,800,000	\$3,800,000	\$3,800,000
CAPITAL REVENUES													
SEGMENT 1													
LOCAL													
SCAG	\$1,400,000	\$600,000	\$800,000										
Interest	\$2,000,000	\$200,000	\$300,000	\$1,500,000									
Bridge Replacement	\$13,900,000	\$13,900,000		\$850,000	\$841,369	\$118	\$196		\$12,808,318				
Phase I Carryover	\$10,000,000			\$5,000,000	\$2,000,000		\$3,000,000						
Real Estate	\$32,100,000	\$101,900,000											
MTA (includes payment of interest on Short Term Bonds)	\$71,200,000	\$0	\$650,000	\$0	\$0	\$5,959,904	\$10,818,978	\$19,980,189	\$28,412,829	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000
JPA	\$1,900,000		\$250,000	\$250,000	\$250,000	\$300,000	\$300,000	\$300,000	\$300,000				
Subtotal, Local	\$132,500,000	\$116,600,000	\$2,000,000	\$7,400,000	\$2,891,369	\$38,310,019	\$14,217,174	\$20,280,189	\$41,321,248				
PHASE II CITIES: CONTRIBUTION FOR STATIONS													
STATE (includes payment of interest on Short Term Bonds)	\$18,900,000	\$0	\$0	\$4,000,000	\$8,893,548	\$8,407,872	\$28,543,364	\$56,467,880	\$58,287,716	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000
FEDERAL													
FTA New Starts	\$328,300,000	\$0	\$850,000	\$10,900,000	\$12,784,103	\$48,985,897	\$50,000,000	\$50,000,000	\$50,000,000	\$0	\$0	\$0	\$0
Federal Intermodal Funds	\$10,000,000				\$2,000,000	\$3,000,000	\$3,000,000	\$3,000,000	\$3,000,000				
Subtotal, Federal	\$338,300,000	\$0	\$850,000	\$10,900,000	\$14,784,103	\$48,985,897	\$53,000,000	\$53,000,000	\$52,000,000				
BOND PROCEEDS	\$95,000,000												
(REPAYMENT OF BOND PROCEEDS)	-\$95,000,000												
TOTAL, CAPITAL REVENUES, SEGMENT 1	\$656,300,000	\$116,600,000	\$2,650,000	\$22,300,000	\$25,549,020	\$94,703,588	\$101,760,558	\$168,727,869	\$217,208,964	\$1,900,000	\$1,900,000	\$1,900,000	\$1,900,000
DEBT SERVICE COSTS (included above)													
SEGMENT 1													
Interest Component of Debt Service on Short Term Bonds	\$24,000,000									\$1,400,000	\$3,800,000	\$3,800,000	\$3,800,000
Principal Component (Repayment of Bond Proceeds)	\$95,000,000												
TOTAL, DEBT SERVICE COSTS, SEGMENT 1	\$119,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400,000	\$3,800,000	\$3,800,000	\$3,800,000
DEBT SERVICE REVENUES (included above)													
SEGMENT 1													
MTA (Interest Component)	\$8,000,000									\$700,000	\$1,900,000	\$1,900,000	\$1,900,000
State (Interest Component)	\$8,000,000									\$700,000	\$1,900,000	\$1,900,000	\$1,900,000
FTA New Starts (Principal Component)	\$95,000,000									\$0	\$0	\$0	\$0
FTA New Starts (Reimbursement of 50% of Interest Component)	\$12,000,000									\$0	\$0	\$0	\$0
TOTAL, DEBT SERVICE REVENUES, SEGMENT 1	\$119,000,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$1,400,000	\$3,800,000	\$3,800,000	\$3,800,000
OPERATING AND MAINTENANCE COSTS													
Gold Line Phase II LRT Operations and Maintenance Costs	\$588,376,084												
TOTAL, OPERATIONS AND MAINTENANCE COSTS	\$588,376,084	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,981,234	\$17,660,961	\$19,940,830	\$22,358,656
OPERATING AND MAINTENANCE REVENUES													
Gold Line Phase II LRT Fare Revenues	\$158,480,066												
MTA Operating Support	\$429,896,018									\$2,792,247	\$3,532,192	\$4,386,983	\$5,142,491
TOTAL, OPERATIONS AND MAINTENANCE REVENUES	\$588,376,084	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$11,168,987	\$14,128,768	\$15,553,847	\$17,216,165
BEGINNING ANNUAL BALANCE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENDING ANNUAL BALANCE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

**TABLE 4.5
PASADENA GOLD LINE PHASE II: FINANCIAL PLAN FOR SEGMENT 1
FISCAL YEAR 2002 - 2025 (IN YEAR OF EXPENDITURE DOLLARS)**

Key Assumptions:

- a) Implementation in 2 segments: 2005-2009, 2009-2013
- b) Initiation of Service: 2010 for Segment 1 area; 2014 for Segment 2 area
- c) FTA New Starts: 50% of Capital and Financing Costs, to \$50 Million/Year
- d) Phase II Cities fund Station Costs (4% of Total Capital Costs)
- e) State: 26% of Capital Costs

	TOTAL (YOE \$)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
CAPITAL COSTS													
SEGMENT 1													
AA/FEIS/PE	\$24,400,000												
Administration	\$39,100,000												
Program Management	\$40,800,000												
Final Design	\$22,200,000												
Real Estate													
Existing	\$32,100,000												
Future	\$52,200,000												
Total	\$84,300,000												
Procurement (# vehicles, w spares) (18 Vehicles)													
Cost	\$66,400,000												
Construction	\$273,000,000												
Testing & Startup	\$6,300,000												
Misc Other	\$20,400,000												
Subtotal	\$576,900,000												
Project Reserve	\$55,400,000												
Interest Component of Debt Service on Short Term Bonds	\$24,000,000	\$3,800,000	\$2,400,000	\$1,200,000									
SUBTOTAL, SEGMENT 1 CAPITAL COSTS	\$656,300,000	\$3,800,000	\$2,400,000	\$1,200,000	\$0								
CAPITAL REVENUES													
SEGMENT 1													
LOCAL													
SCAG	\$1,400,000												
Interest	\$2,000,000												
Bridge Replacement	\$13,800,000												
Phase I Carryover	\$10,000,000												
Real Estate	\$32,100,000												
MTA (includes payment of interest on Short Term Bonds)	\$71,200,000	\$1,900,000	\$1,200,000	\$600,000	\$0	\$0	-\$6,000,000						
JPA	\$1,900,000												
Subtotal, Local	\$132,500,000												
PHASE II CITIES: CONTRIBUTION FOR STATIONS	\$16,600,000												
STATE (includes payment of interest on Short Term Bonds)	\$168,900,000	\$1,900,000	\$1,200,000	\$600,000	\$0	\$0	-\$6,000,000						
FEDERAL													
FTA New Starts	\$328,300,000	\$35,000,000	\$30,000,000	\$30,000,000	\$0	\$0	\$12,000,000						
Federal Intermodal Funds	\$10,000,000												
Subtotal, Federal	\$338,300,000												
BOND PROCEEDS	\$95,000,000												
(REPAYMENT OF BOND PROCEEDS)	-\$95,000,000	-\$35,000,000	-\$30,000,000	-\$30,000,000									
TOTAL, CAPITAL REVENUES, SEGMENT 1	\$656,300,000	\$1,900,000	\$1,200,000	\$600,000	\$0	\$0	\$6,000,000	\$0	\$0	\$0	\$0	\$0	\$0
DEBT SERVICE COSTS (included above)													
SEGMENT 1													
Interest Component of Debt Service on Short Term Bonds	\$24,000,000	\$3,800,000	\$2,400,000	\$1,200,000									
Principal Component (Repayment of Bond Proceeds)	\$95,000,000	\$35,000,000	\$30,000,000	\$30,000,000									
TOTAL, DEBT SERVICE COSTS, SEGMENT 1	\$119,000,000	\$38,800,000	\$32,400,000	\$31,200,000	\$0								
DEBT SERVICE REVENUES (included above)													
SEGMENT 1													
MTA (Interest Component)	\$6,000,000	\$1,900,000	\$1,200,000	\$600,000	\$0	\$0	-\$6,000,000						
State (Interest Component)	\$6,000,000	\$1,900,000	\$1,200,000	\$600,000	\$0	\$0	-\$6,000,000						
FTA New Starts (Principal Component)	\$95,000,000	\$35,000,000	\$30,000,000	\$30,000,000	\$0	\$0							
FTA New Starts (Reimbursement of 50% of Interest Component)	\$12,000,000						\$12,000,000						
TOTAL, DEBT SERVICE REVENUES, SEGMENT 1	\$119,000,000	\$38,800,000	\$32,400,000	\$31,200,000	\$0								
OPERATING AND MAINTENANCE COSTS													
Operation Within Segment 1 and Segment 2 Areas													
Gold Line Phase II LRT Operations and Maintenance Costs	\$588,378,084	\$32,041,674	\$35,005,528	\$38,137,602	\$39,472,418	\$40,853,953	\$42,283,841	\$43,763,775	\$45,295,508	\$46,880,850	\$48,521,680	\$50,219,939	\$51,977,637
TOTAL, OPERATIONS AND MAINTENANCE COSTS	\$588,378,084	\$32,041,674	\$35,005,528	\$38,137,602	\$39,472,418	\$40,853,953	\$42,283,841	\$43,763,775	\$45,295,508	\$46,880,850	\$48,521,680	\$50,219,939	\$51,977,637
OPERATING AND MAINTENANCE REVENUES													
Gold Line Phase II LRT Fare Revenues	\$158,480,066	\$7,690,002	\$8,751,382	\$9,534,400	\$9,888,105	\$10,213,488	\$10,570,960	\$10,929,133	\$11,388,652	\$11,864,255	\$12,356,504	\$12,865,982	\$13,398,291
MTA Operating Support	\$429,896,018	\$24,351,672	\$26,254,146	\$28,603,201	\$29,604,314	\$30,640,464	\$31,712,881	\$32,834,643	\$33,998,855	\$35,216,595	\$36,485,176	\$37,801,957	\$39,169,346
TOTAL, OPERATIONS AND MAINTENANCE REVENUES	\$588,378,084	\$32,041,674	\$35,005,528	\$38,137,602	\$39,472,418	\$40,853,953	\$42,283,841	\$43,763,775	\$45,295,508	\$46,880,850	\$48,521,680	\$50,219,939	\$51,977,637
BEGINNING ANNUAL BALANCE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENDING ANNUAL BALANCE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

TABLE 4.6
PASADENA GOLD LINE PHASE II: FINANCIAL PLAN FOR SEGMENT 2
FISCAL YEAR 2002 - 2025 (IN YEAR OF EXPENDITURE DOLLARS)

Key Assumptions:

- a) Implementation in 2 segments: 2005-2009, 2009-2013
- b) Initiation of Service: 2010 for Segment 1 area; 2014 for Segment 2 area
- c) FTA New Starts: 50% of Capital and Financing Costs, to \$50 Million/Year
- d) Phase II Cities fund Station Costs (4% of Total Capital Costs)
- e) State: 26% of Capital Costs

	TOTAL (YOY \$)	Actual through 2002	2003	2004	SEGMENT 1					SEGMENT 2						
					2005	2006	2007	2008	2009	2010	2011	2012	2013			
CAPITAL COSTS																
SEGMENT 2																
Administration	\$43,300,000									\$1,212,378	\$8,172,867	\$9,142,519	\$10,461,307	\$15,311,130		
Program Management	\$40,600,000									\$0	\$4,723,968	\$11,478,352	\$14,201,748	\$10,195,917		
Final Design	\$22,900,000									\$22,900,000	\$0	\$0	\$0	\$0		
Real Estate																
Existing	\$69,800,000															
Future	\$9,300,000									\$0	\$69,800,000	\$0	\$0	\$0		
Total	\$79,100,000									\$795	\$77,240,000	\$930,000	\$929,205	\$0		
Procurement (# vehicles,w spares)										\$795	\$77,240,000	\$930,000	\$929,205	\$0		
Cost	\$135,500,000															
Construction	\$266,300,000									\$0	\$0	\$59,047,288	\$16,295,766	\$60,156,948		
Testing & Startup	\$14,600,000									\$0	\$1,110,149	\$39,794,057	\$111,548,610	\$113,840,184		
Misc Other	\$21,600,000									\$0	\$0	\$0	\$0	\$14,600,000		
Subtotal	\$1,771									\$1,771	\$337,300	\$2,246,543	\$3,208,772	\$15,805,613		
Project Reserve	\$623,900,000									\$24,114,943	\$91,593,099	\$121,638,758	\$158,643,408	\$229,509,792		
Interest Component of Debt Service on Short Term Bonds	\$62,400,000									\$2,411,494	\$9,159,310	\$12,183,876	\$15,664,341	\$23,000,980		
Interest Component of Debt Service on Short Term Bonds	\$29,400,000										\$520,000	\$520,000	\$1,100,000	\$2,520,000		
TOTAL, SEGMENT 2 CAPITAL COSTS	\$715,700,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$26,526,438	\$101,272,409	\$134,322,634	\$173,407,748	\$255,430,771		
CAPITAL REVENUES																
SEGMENT 2																
LOCAL																
SCAG	\$0															
Interest	\$0															
Bridge Replacement	\$0															
Phase I Carryover	\$0															
Real Estate	\$69,800,000															
MTA (includes payment of interest on Short Term Bonds)	\$53,600,000									\$1,242,571	\$9,743,081	\$15,646,340	\$17,614,131	\$25,553,898		
JPA	\$1,900,000									\$1,970,495	\$7,530,629	\$10,319,852	\$12,697,722	\$16,181,502		
Subtotal, Local	\$125,300,000									\$70,421	\$268,852	\$356,592	\$460,353	\$743,781		
PHASE II CITIES: CONTRIBUTION FOR STATIONS	\$36,100,000									\$3,283,487	\$17,542,542	\$28,322,564	\$30,972,205	\$42,459,181		
STATE (includes payment of interest on Short Term Bonds)	\$186,300,000									\$1,337,997	\$5,109,193	\$6,775,251	\$8,748,709	\$14,131,850		
FEDERAL										\$6,604,954	\$26,621,674	\$35,224,799	\$45,688,834	\$68,839,740		
FTA New Starts	\$358,000,000															
Federal Intermodal Funds	\$10,000,000									\$0	\$50,000,000	\$50,000,000	\$50,000,000	\$50,000,000		
Subtotal, Federal	\$368,000,000									\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000	\$2,000,000		
BOND PROCEEDS	\$143,000,000									\$2,000,000	\$52,000,000	\$52,000,000	\$52,000,000	\$52,000,000		
(REPAYMENT OF BOND PROCEEDS)	-\$143,000,000									\$13,000,000		\$14,000,000	\$38,000,000	\$80,000,000		
TOTAL, CAPITAL REVENUES, SEGMENT 2	\$715,700,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$26,526,438	\$101,272,409	\$134,322,634	\$173,407,748	\$255,430,771		
DEBT SERVICE COSTS (included above)																
SEGMENT 2																
Interest Component of Debt Service on Short Term Bonds	\$29,400,000															
Principal Component (Repayment of Bond Proceeds)	\$143,000,000											\$520,000	\$520,000	\$1,100,000		
TOTAL, DEBT SERVICE COSTS, SEGMENT 2	\$172,400,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$520,000	\$520,000	\$1,100,000	\$2,520,000		
DEBT SERVICE REVENUES (included above)																
SEGMENT 2																
MTA (Interest Component)	\$7,350,000															
State (Interest Component)	\$7,350,000									\$0	\$280,000	\$280,000	\$550,000	\$1,260,000		
FTA New Starts (Principal Component)	\$143,000,000									\$0	\$260,000	\$280,000	\$550,000	\$1,260,000		
FTA New Starts (Reimbursement of 50% of Interest Component)	\$14,700,000									\$0	\$0	\$0	\$0	\$0		
TOTAL, DEBT SERVICE REVENUES, SEGMENT 2	\$172,400,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$520,000	\$520,000	\$1,100,000	\$2,520,000		
OPERATING AND MAINTENANCE COSTS																
Gold Line Phase II LRT Operations and Maintenance Costs	\$588,376,084															
TOTAL, OPERATIONS AND MAINTENANCE COSTS	\$588,376,084	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,961,234	\$17,660,961	\$19,940,830	\$22,358,656		
OPERATING AND MAINTENANCE REVENUES																
Gold Line Phase II LRT Fare Revenues	\$168,480,066															
MTA Operating Support	\$429,896,018															
TOTAL, OPERATIONS AND MAINTENANCE REVENUES	\$588,376,084	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$13,961,234	\$17,660,961	\$19,940,830	\$22,358,656		
BEGINNING ANNUAL BALANCE													\$0	\$0	\$0	\$0
ENDING ANNUAL BALANCE													\$0	\$0	\$0	\$0

**TABLE 4.6
PASADENA GOLD LINE PHASE II: FINANCIAL PLAN FOR SEGMENT 2
FISCAL YEAR 2002 - 2025 (IN YEAR OF EXPENDITURE DOLLARS)**

- Key Assumptions:**
a) Implementation in 2 segments: 2005-2009, 2009-2013
b) Initiation of Service: 2010 for Segment 1 area; 2014 for Segment 2 area
c) FTA New Starts: 50% of Capital and Financing Costs, to \$50 Million/Year
d) Phase II Cities fund Station Costs (4% of Total Capital Costs)
e) State: 26% of Capital Costs
f) Advanced Acquisition of Real Estate included as a project cost and revenue

	TOTAL (VOE \$)	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
CAPITAL COSTS													
SEGMENT 2													
Administration	\$43,300,000												
Program Management	\$40,600,000												
Final Design	\$22,900,000												
Real Estate													
Existing	\$89,800,000												
Future	\$9,300,000												
Total	\$79,100,000												
Procurement (# vehicles,w spares)													
Cost	\$135,500,000												
Construction	\$286,300,000												
Testing & Startup	\$14,600,000												
Misc Other	\$21,600,000												
Subtotal	\$823,900,000												
Project Reserve	\$62,400,000												
Interest Component of Debt Service on Short Term Bonds	\$29,400,000	\$5,720,000	\$5,720,000	\$5,460,000	\$4,640,000	\$3,200,000							
TOTAL, SEGMENT 2 CAPITAL COSTS	\$715,700,000	\$5,720,000	\$5,720,000	\$5,460,000	\$4,640,000	\$3,200,000	\$0						
CAPITAL REVENUES													
SEGMENT 2													
LOCAL													
SCAG	\$0												
Interest	\$0												
Bridge Replacement	\$0												
Phase I Carryover	\$0												
Real Estate	\$69,800,000	\$0											
MTA (includes payment of interest on Short Term Bonds)	\$53,600,000	\$2,860,000	\$2,860,000	\$2,730,000	\$2,320,000	\$1,600,000	-\$7,650,000						
JPA	\$1,900,000												
Subtotal, Local	\$125,300,000	\$2,860,000	\$2,860,000	\$2,730,000	\$2,320,000	\$1,600,000	-\$7,650,000						
PHASE II CITIES: CONTRIBUTION FOR STATIONS													
STATE (includes payment of interest on Short Term Bonds)	\$36,100,000												
FEDERAL	\$186,300,000	\$2,860,000	\$2,860,000	\$2,730,000	\$2,320,000	\$1,600,000	-\$7,350,000						
FTA New Starts	\$358,000,000	\$0	\$8,500,000	\$13,500,000	\$43,000,000	\$80,000,000	\$15,000,000						
Federal Intermodal Funds	\$10,000,000												
Subtotal, Federal	\$368,000,000	\$0	\$8,500,000	\$13,500,000	\$43,000,000	\$80,000,000	\$15,000,000						
BOND PROCEEDS													
(REPAYMENT OF BOND PROCEEDS)	-\$143,000,000		-\$6,500,000	-\$13,500,000	-\$43,000,000	-\$80,000,000							
TOTAL, CAPITAL REVENUES, SEGMENT 2	\$715,700,000	\$5,720,000	\$5,720,000	\$5,460,000	\$4,640,000	\$3,200,000	\$0						
DEBT SERVICE COSTS (Included above)													
SEGMENT 2													
Interest Component of Debt Service on Short Term Bonds	\$29,400,000	\$5,720,000	\$5,720,000	\$5,460,000	\$4,640,000	\$3,200,000							
Principal Component (Repayment of Bond Proceeds)	\$143,000,000		\$6,500,000	\$20,500,000	\$38,000,000	\$80,000,000							
TOTAL, DEBT SERVICE COSTS, SEGMENT 2	\$172,400,000	\$5,720,000	\$12,220,000	\$25,960,000	\$40,640,000	\$83,200,000	\$0						
DEBT SERVICE REVENUES (Included above)													
SEGMENT 2													
MTA (Interest Component)	\$7,350,000	\$2,860,000	\$2,860,000	\$2,730,000	\$2,320,000	\$1,600,000	-\$7,350,000						
State (Interest Component)	\$7,350,000	\$2,860,000	\$2,860,000	\$2,730,000	\$2,320,000	\$1,600,000	-\$7,350,000						
FTA New Starts (Principal Component)	\$143,000,000	\$0	\$8,500,000	\$20,500,000	\$38,000,000	\$80,000,000							
FTA New Starts (Reimbursement of 50% of Interest Component)	\$14,700,000						\$14,700,000						
TOTAL, DEBT SERVICE REVENUES, SEGMENT 2	\$172,400,000	\$5,720,000	\$12,220,000	\$25,960,000	\$40,640,000	\$83,200,000	\$0						
OPERATING AND MAINTENANCE COSTS													
Operation Within Segment 1 and Segment 2 Areas													
Gold Line Phase II LRT Operations and Maintenance Costs	\$588,376,084	\$32,041,674	\$35,005,528	\$38,137,602	\$39,472,418	\$40,853,953	\$42,283,841	\$43,763,775	\$45,295,508	\$46,880,850	\$48,521,880	\$50,219,939	\$51,977,637
TOTAL, OPERATIONS AND MAINTENANCE COSTS	\$588,376,084	\$32,041,674	\$35,005,528	\$38,137,602	\$39,472,418	\$40,853,953	\$42,283,841	\$43,763,775	\$45,295,508	\$46,880,850	\$48,521,880	\$50,219,939	\$51,977,637
OPERATING AND MAINTENANCE REVENUES													
Gold Line Phase II LRT Fare Revenues	\$158,480,066	\$7,890,002	\$8,751,382	\$9,534,400	\$9,868,105	\$10,213,488	\$10,570,960	\$10,929,133	\$11,298,652	\$11,684,255	\$12,085,604	\$12,505,982	\$12,953,291
MTA Operating Support	\$429,896,018	\$24,351,672	\$26,254,146	\$28,603,201	\$29,604,314	\$30,640,464	\$31,712,881	\$32,834,643	\$33,996,855	\$35,216,595	\$36,505,176	\$37,799,957	\$39,184,346
TOTAL, OPERATIONS AND MAINTENANCE REVENUES	\$588,376,084	\$32,041,674	\$35,005,528	\$38,137,602	\$39,472,418	\$40,853,953	\$42,283,841	\$43,763,775	\$45,295,508	\$46,880,850	\$48,521,880	\$50,219,939	\$51,977,637
BEGINNING ANNUAL BALANCE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
ENDING ANNUAL BALANCE	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0

Chapter 5: PUBLIC AND AGENCY INVOLVEMENT

- Public Outreach was coordinated across the 11 corridor cities including: Pasadena, Arcadia, Monrovia, Duarte, Irwindale, Azusa, Glendora, San Dimas, La Verne, Pomona and Claremont
- Station area workshops were held at nine of the 11 corridor cities to discuss the purpose and needs as well as goals and objectives of the study in the context of the transit oriented development opportunities that exist and may be considered for future planning purposes.
- Comments from the public were solicited through individual city outreach activities, through general plan amendment reviews, through open-house meetings, and through the Study Steering Committee.
- Monthly meetings of the Study Steering Committee were held to solicit input from regional representatives and the 11 cities located in the Corridor.
- Consensus on selection of a Locally Preferred Alternative (LPA) was achieved through the outreach process involving local and regional government together with community input during key milestones of the Alternatives Analysis process.
- Resolutions or letters of support were received from all 11 of the corridor cities recommending Alternative 4: Light Rapid Transit as the preferred option. Copies of their resolutions can be found in Appendix G.

5.1 Overview of the Plan and Program¹

The focus of the public outreach effort along the Phase II Gold Line Corridor was to work with each of the cities to develop a city specific work plan to reach the necessary city and community members. Each of the cities developed their strategy for garnering input for consideration into the Alternatives Analysis (AA) process.

The purpose of the outreach effort in each city was to exchange ideas and share project information to shape the purpose and need, and goals and objectives for the study. Issues that were brought forward by the public, city staff and elected officials were also helpful in identifying sensitive problems for study consideration.

In developing the individual city strategies, there were some common elements, including:

- *Council Briefings:* A key component in developing an outreach strategy for each city was to brief the councils on the status of the Gold Line Alternatives Analysis (AA) study. This allowed a free flowing discussion with the Metro Blue Line Construction Authority (Authority) project manager and specific study- and city-related questions were answered giving the councils a comfort level required for approval of the outreach effort needed in their respective city.

¹ Prepared by Arellano and Associates.

- *Station Area Workshops:* Workshops were held with nine of the 11 corridor cities with the exception of Pasadena and Azusa -- which was in the process of updating their General Plan and had already developed specific TOD concepts surrounding their proposed stations. In general, the purpose of the workshops was to listen to the cities ideas and desires for future development in the vicinity of the proposed stations. The result of the workshops was a clear purpose and need as well as goals and objectives for the study as they relate to station area concepts. These concepts were also developed with the strong understanding of city specific traffic and development potential in mind.
- *Community Meetings:* All of the cities held community meetings at key milestones throughout the project either to develop the purpose and need as well as goals and objectives of the study or later to present the preliminary findings of the AA. This allowed residents and key stakeholders to communicate how the alternatives should be evaluated and specifically which of the alternatives would most benefit their community prior to the selection of a Locally Preferred Alternative (LPA) by the San Gabriel Valley Council of Governments (COG) and Authority boards. Members of the community that were invited to attend included: elected officials, community and ethnic groups, businesses associations, public agencies, schools of all levels, and professional and civic associations.
- *Stakeholder Meetings:* Meetings were held with interested civic groups to update their membership on the status of the project and ongoing efforts in the community.
- *Collateral Materials:* Individual city fact sheets were developed to assist city staff with updating the council members. Power Point presentations were used extensively at the council briefings and workshops as well as community meetings. A schedule of activities diagram was developed to assist communities with understanding the extensive process and key milestones needed to construct the project. A "frequently asked questions" memorandum was developed to answer specific technology questions. Flyers and press releases were developed in support of the community meetings.
- *Special Outreach Efforts:* Because the study corridor covers such a wide area and traverses 11 cities, special outreach efforts were coordinated with each city on a case-by-case basis. Some of the public notices and collateral materials were translated into Spanish for the Hispanic communities along the study corridor. Accommodations for disabled persons and translation services were also available at public meetings where appropriate.

5.2 Study Steering Committee

The Gold Line Phase II Study Steering Committee was formed by the COG and Authority to provide regional oversight and to manage the planning and city participation in the Gold Line AA study. Made up of a single delegate and alternate from each of the 11 corridor cities plus representatives from the COG and Authority, the committee met once a month to monitor the progress of the study, to review technical reports, public outreach and achieve consensus on the results of the AA.

The Blue Line Construction Authority has representatives from the City and County of Los Angeles, City of Pasadena, the Southern California Association of Governments (SCAG) and the Los Angeles Metropolitan Transportation Authority (MTA). The COG has city representatives from each of the San Gabriel Valley cities. By involving both of these agencies in the Steering Committee, a regional consensus was fostered throughout the study process and final decision making selection of a LPA. In addition, representatives from the Alameda

Corridor Construction Authority-East (ACE) and county elected officials offices regularly attend the meetings to provide input and help with the consensus building process.

The Steering Committee provided a critical outreach function in coordination with regional agencies and carrying updated project information back to the individual city councils and constituents. This critical connection allowed for no surprises during the project and a smooth decision making process to occur in the final selection and adoption of a LPA.

5.3 Project and Public Meetings

Outreach efforts for the Phase II Gold Line included a progression of information flowing from the Study Steering Committee to City Councils to the city staff and the general public. Councils were briefed on the project to provide a comfort level necessary to move forward into the community to garner input at key milestones and update them on project findings. This tailored top down approach, coordinated with the AA study schedule, helped achieve a seamless process for community input to be used in the decision making points of the analysis such as development of the purpose and need, goals and objectives and decision on selection of a locally preferred alternative. For example, station area workshops were instrumental in developing a vision for the cities proposed station areas in light of the purpose and needs, and goals and objectives of the study. This resulted in a TOD strategy that included conceptual planning of the station areas. Finally, communities were given the opportunity to review the findings of the AA and propose recommendations prior to selection of an LPA.

Table 5.1 is a summary of the meetings held in 10 of the 11 corridor cities.

**Table 5.1
Summary of Community Meetings and Dates**

<i>Event/City</i>	<i>Pasadena</i>	<i>Arcadia</i>	<i>Monrovia</i>	<i>Duarte</i>	<i>Irwindale</i>	<i>Azusa</i>	<i>Glendora</i>	<i>San Dimas</i>	<i>La Verne</i>	<i>Pomona</i>	<i>Claremont</i>
<i>Council Briefing</i>		10/01		5/02	8/01	10/01	1/02 5/02	8/01 4/02	10/01	12/01	
<i>Station Area Workshop</i>		1/02	1/02	1/02	3/02		1/02	12/01 2/02	1/02	2/02	1/02
<i>Community Meeting</i>		5/02		3/02 4/02	4/02	4/02	4/02	4/02	4/02		3/02 4/02
<i>Public Meeting with Planning Commission and City Council</i>			10/01								
<i>One-on-One Briefing with Council Representatives</i>							1/02			11/01	
<i>City Gold Line Ad-Hoc Committee Briefing</i>								10/01			
<i>Kiwanis Club Presentation</i>			10/01								
<i>Council Adoption of Locally Preferred Alternative</i>	6/02	5/02	5/02	5/02	5/02	5/02	5/02	5/02	5/02	5/02	4/02

Chapter 6: EVALUATION OF THE ALTERNATIVES

- Although all of the “build” alternatives attain the goals established for the study, the LRT alternatives rank the highest.
- The LRT alternatives attract the highest number of riders.
- The BRT alternatives have lower capital costs.
- Overall, the alternatives do not cause significant impacts on the natural or manmade environment.

In Chapter 6 the impacts of each of the alternatives are compared to one another and to a Future Baseline or “No-Build” Alternative that does not entail a major new start capital investment. All of the technical data and screening criteria are considered in this evaluation.

Section 6.1 begins with a discussion of the application of the Gold Line Corridor goals and objectives, and the evaluation criteria to the AA that will lead to the selection of a Locally Preferred Alternative (LPA). It also briefly reviews how the AA criteria address the Federal Transit Administration’s (FTA’s) New Starts requirements. This is followed in Section 6.2 with a description of the specific criteria and measures used to evaluate the alternatives. Section 6.3 discusses the cost-effectiveness of the alternatives.

In a discussion of the “trade-offs” between the alternatives, Section 6.4 summarizes those measures that differ substantially between the alternatives evaluated. This segues into Chapter 7, which outlines the next steps required to develop the implementation plan for improving transit in the study Corridor.

6.1 Comparison of Alternatives Against Project Goals and Objectives

The purpose of the AA is to determine the need for and the nature of transit service improvements in the Corridor. The various corridor goals and objectives were outlined in Chapter 2, Table 2.6.

A standard set of evaluation criteria were developed to provide a comparable level and set of criteria for use as the basis for system development and to provide those data required for FTA New Starts funding evaluation. Subsequent use of these data and the next steps in the project development plan are described in greater detail in Chapter 7.

6.1.1 FTA New Starts Criteria

Criteria required by FTA for New Starts evaluation, while reflecting some of the same criteria and measures as the corridor measures, are fewer in number. They are:

- Mobility Improvements;
- Environmental Benefits;
- Operating Efficiencies;
- Cost Effectiveness; and
- Existing Land Use, Transit Supportive Land Use Policies, and Future Patterns.

In addition, FTA considers “Other Factors” which are:

- Degree of Local Financial Commitment;
- The degree that institutions (local transportation initiatives, parking policies, etc.) are in place and are assumed in the forecasts;
- Multi-modal emphasis of the locally preferred investment strategy, including the Section 5309 New Starts project as one element;
- Environmental justice considerations and equity issues;
- Opportunities for increased access to employment for low income persons, and welfare to work initiatives;
- Outstanding or unique public involvement program activities, including private sector and institutional involvement;
- Livable communities initiatives and local economic development initiatives;
- Consideration of alternative land use development scenarios in local evaluation and decision making for the locally preferred transit investment decision; and
- Consideration of innovative financing, procurement, and construction techniques, including design-build turnkey applications.

To provide a visual representation that allows for easier differentiation among the alternatives under consideration, many of these quantitative measures have been reduced to qualitative measures. A circle system ranging from “Poor” to “Good” has been utilized.

6.2 Specific Criteria and Measurement

6.2.1 Mobility Improvements

The category of Mobility Improvements includes mobility and access; two terms that describe the quality of transportation services. Mobility refers to the choices that are available to make trips and access refers to the ability to get to destinations of choice. Each of these terms indicates a different component of the ability of a wide range of persons to get from where they are to where they want to be, when they want to be there. Some persons have little choice in how this takes place and others have a number of choices. Both categories of potential transit system customers are important to the ultimate viability and success of a transit system in fulfilling its mission in a cost effective manner. The mobility measures are found under Goals 4 and 5 in Table 6.3.

6.2.2 Environmental Measures

This section summarizes the apparent environmental issues and differences that occur between the various alternatives. It looks at the positive and/or negative environmental impacts of each alternative on the natural and manmade environment. It should be noted that for AA purposes the review of the environmental and community effects of the alternatives is only an initial assessment of fatal flaws. However, since all of the alternatives use the same alignment, the key differentiators for environmental impacts are noise and vibration. All other potential impacts would be nearly identical. A Draft Environmental Impact Statement (DEIS) would come later in the process and examine in detail the extent of potential impacts of all of the alternatives. Table 6.1 summarizes all of the environmental measures, although only key measures are included under Goal 8 in Table 6.3.

**Table 6.1
Environmental Measures**

MEASURES	Alt. 1: TSM	Alt. 2: BRT	Alt. 3: LRT, time separated	Alt. 4: LRT, time shared	Alt. 5: Non-compliant DMU, time separated	Alt. 6: Non-compliant DMU, time shared	Alt. 7: Compliant DMU, some single track
Number of Acres to be Acquired as New Right-of-Way (1)	Already acquired for Route 30 project	Sizes of parking areas at individual stations have not yet defined	15 to 20 acres for maintenance facility. Sizes of parking areas at individual stations not yet defined	15 to 20 acres for maintenance facility. Sizes of parking areas at individual stations not yet defined	15 to 20 acres for maintenance facility. Sizes of parking areas at individual stations not yet defined	15 to 20 acres for maintenance facility. Sizes of parking areas at individual stations not yet defined	15 to 20 acres for maintenance facility. Sizes of parking areas at individual stations not yet defined
Potential for Negative Impacts on Communities (2)	Minimal beyond those already addressed in Route30 project	Typical impacts: noise, traffic, visual, potential land use changes. Magnitude of changes probably less than for LRT or DMU	Typical impacts: noise, traffic, visual, potential land use changes. Magnitude of changes probably greater than BRT, but similar to DMU.	Typical impacts: noise, traffic, visual, potential land use changes. Magnitude of changes probably greater than BRT, but similar to DMU.	Typical impacts: noise, traffic, visual, potential land use changes. Magnitude of changes probably greater than BRT, but similar to LRT.	Typical impacts: noise, traffic, visual, potential land use changes. Magnitude of changes probably greater than BRT, but similar to LRT.	Typical impacts: noise, traffic, visual, potential land use changes. Magnitude of changes probably greater than BRT, but similar to LRT.
Potential Impact to Cultural Resources (3)	No additional beyond those already addressed in Route 30 project	Low potential for impacts to historic properties in Corridor	Low potential for impacts to historic properties in Corridor	Low potential for impacts to historic properties in Corridor	Low potential for impacts to historic properties in Corridor	Low potential for impacts to historic properties in Corridor	Low potential for impacts to historic properties in Corridor
Potential Impact to Ecologically-Sensitive Areas (4)	No additional beyond those already addressed in Route 30 project	Minimal potential to affect area adjoining rail ROW at Santa Fe Dam	Minimal potential to affect area adjoining rail ROW at Santa Fe Dam	Minimal potential to affect area adjoining rail ROW at Santa Fe Dam	Minimal potential to affect area adjoining rail ROW at Santa Fe Dam	Minimal potential to affect area adjoining rail ROW at Santa Fe Dam	Minimal potential to affect area adjoining rail ROW at Santa Fe Dam
Potential Impact to Flood Level or Floodplain (5)	No additional beyond those already addressed in Route 30 project	Minimal impact to floodplain from additional paving of rail ROW for BRT lanes	Potential for impact to floodplain if Irwindale site chosen for maintenance facility	Potential for impact to floodplain if Irwindale site chosen for maintenance facility	Potential for impact to floodplain if Irwindale site chosen for maintenance facility	Potential for impact to floodplain if Irwindale site chosen for maintenance facility	Potential for impact to floodplain if Irwindale site chosen for maintenance facility

**Table 6.1
Environmental Measures**

MEASURES	Alt. 1: TSM	Alt. 2: BRT	Alt. 3: LRT, time separated	Alt. 4: LRT, time shared	Alt. 5: Non-compliant DMU, time separated	Alt. 6: Non-compliant DMU, time shared	Alt. 7: Compliant DMU, some single track
Potential for Impact to Hazardous Materials Sites (6)	No additional beyond those already addressed in Route 30 project	Low to moderate potential to encounter	Low to moderate potential to encounter	Low to moderate potential to encounter	Low to moderate potential to encounter	Low to moderate potential to encounter	Low to moderate potential to encounter
Potential for Noise Impacts (7)	Low potential beyond those already addressed in Route 30 project	Low potential for noise impacts from buses on rail ROW	Low to moderate potential for noise impacts from electrically powered LRT vehicles on rail ROW. Mitigation usually focuses on blocking noise from wheel/rail interface.	Low to moderate potential for noise impacts from electrically powered LRT vehicles on rail ROW. Mitigation usually focuses on blocking noise from wheel/rail interface	Moderate potential for noise impacts from diesel powered vehicles on ROW. Mitigation must focus on blocking noise from high-level exhaust.	Moderate potential for noise impacts from diesel powered vehicles on ROW. Mitigation must focus on blocking noise from high-level exhaust	Moderate potential for noise impacts from DMU vehicles on ROW, since freight trains already affect ambient noise
Potential Impacts to Parklands (8)	No additional beyond those already addressed in Route 30 project	No Direct Impacts Potential noise & visual impacts at 9 parks	No Direct Impacts Potential noise & visual impacts at 9 parks	No Direct Impacts Potential noise & visual impacts at 9 parks	No Direct Impacts Potential noise & visual impacts at 9 parks	No Direct Impacts Potential noise & visual impacts at 9 parks	No Direct Impacts Potential noise & visual impacts at 9 parks
Potential Section 4(f) Issues (9)	No additional beyond those already addressed in Route 30 project	None anticipated for parks	None anticipated for parks	None anticipated for parks	None anticipated for parks	None anticipated for parks	None anticipated for parks
Potential Impact to Threatened and Endangered Species (10)	No additional beyond those already addressed in Route 30 project	No suitable habitats for T& E species identified in field review	No suitable habitats for T& E species identified in field review	No suitable habitats for T& E species identified in field review	No suitable habitats for T& E species identified in field review	No suitable habitats for T& E species identified in field review	No suitable habitats for T& E species identified in field review

**Table 6.1
Environmental Measures**

MEASURES	Alt. 1: TSM	Alt. 2: BRT	Alt. 3: LRT, time separated	Alt. 4: LRT, time shared	Alt. 5: Non-compliant DMU, time separated	Alt. 6: Non-compliant DMU, time shared	Alt. 7: Compliant DMU, some single track
Potential for Local Traffic effects (11)	Low potential for additional impacts beyond those already addressed in Route 30 project	Low to moderate potential for impacts near stations and at grade crossings.	Low to moderate potential for impacts near stations and at grade crossings	Low to moderate potential for impacts near stations and at grade crossings	Low to moderate potential for impacts near stations and at grade crossings	Low to moderate potential for impacts near stations and at grade crossings	Low to moderate potential for impacts near stations and at grade crossings
Potential Impact to Visual Quality (12)	No additional beyond those already addressed in Route 30 project	Change most likely in vicinity of stations. For line segments, a new type of vehicle passing by	Change most likely in vicinity of stations. For line segments, overhead wiring and a new type of vehicle passing by	Change most likely in vicinity of stations. For line segments, overhead wiring and a new type of vehicle passing by	Change most likely in vicinity of stations. For line segments, a new type of vehicle passing by (no overhead wiring)	Change most likely in vicinity of stations. For line segments, a new type of vehicle passing by (no overhead wiring)	Change most likely in vicinity of stations. For line segments, a new type of vehicle passing by (no overhead wiring)
Potential Impact to Water Quality (13)	No additional beyond those already addressed in Route 30 project	Moderate potential for impacts, arising from additional paving of rail ROW for bus lane. Impacts for station parking the same for all build alternatives.	Low potential for impact, little change in runoff from rail ROW when LRT added. Impacts for station parking the same for all build alternatives.	Low potential for impact, little change in runoff from rail ROW when LRT added. Impacts for station parking the same for all build alternatives.	Low potential for impact, little change in runoff from rail ROW when DMU added. Impacts for station parking the same for all build alternatives.	Low potential for impact, little change in runoff from rail ROW when DMU added. Impacts for station parking the same for all build alternatives.	Low potential for impact, little change in runoff from rail ROW when DMU added. Impacts for station parking the same for all build alternatives
Potential Impact to Jurisdictional Wetlands (14)	No additional beyond those already addressed in Route 30 project	Low potential for impact at wetlands along San Gabriel River	Low potential for impact at wetlands along San Gabriel River	Low potential for impact at wetlands along San Gabriel River	Low potential for impact at wetlands along San Gabriel River	Low potential for impact at wetlands along San Gabriel River	Low potential for impact at wetlands along San Gabriel River

**Table 6.1
Environmental Measures**

MEASURES	Alt. 1: TSM	Alt. 2: BRT	Alt. 3: LRT, time separated	Alt. 4: LRT, time shared	Alt. 5: Non-compliant DMU, time separated	Alt. 6: Non-compliant DMU, time shared	Alt. 7: Compliant DMU, some single track
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Notes:

The Baseline Alternative is defined as the future bus network, including Foothill Transit Express Bus on I-210/SR30. This table considers only the impacts of those future bus operations, not impacts associated with building the State Route 30 extension. Those construction impacts were addressed and mitigated in an EIR/EIS and are considered here as if the project were already completed.

1. The sizes of parking lots that would be necessary or desirable at each BRT/LRT/DMU station have not yet been determined. For the LRT and DMU alternatives, it is assumed that a maintenance facility in the corridor is required; for the BRT alternative, it is assumed that buses will be maintained at facilities outside of the study corridor.
2. For the Baseline alternative, construction impacts would occur from building SR 30 (the I-210 extension). The location of these impacts is well removed from the Phase II study Corridor. The Baseline alternative also includes widening of San Dimas Avenue; those impacts would be near the Corridor. Impacts for the LRT and DMU alternatives would be very similar in type, location and magnitude- noise, traffic, visual, and potential land use changes.
3. A full identification of cultural resources has not been completed. Areas with known or likely historic resources along the Corridor ROW should not be negatively affected by the "build" alternatives.
4. The only ecologically sensitive area identified from database searches and field review is at the Santa Fe dam, where sensitive habitat adjoins the rail ROW. Sensitive plants also occur on the rail ROW, but can probably be avoided.
5. The BRT alternative would have minimal impact on the floodplain of the San Gabriel River from paving part of the rail ROW for bus lanes. The LRT and DMU alternatives would have virtually no impact.
6. Full investigation has not been completed.
7. Rail corridors typically have had some hazardous material incidents over time.
8. The BRT alternative would include noise generated by buses, which are typically not significant. The LRT and DMU alternatives have the potential for noise impacts, which are most likely to occur at intersections when warning gate bells and train horns are used. LRT vehicles are electrically powered and are substantially quieter than diesel-powered DMUs. For the purposes of forecasting noise impacts, the occasional noise generated in the corridor now by freight movements does not create a "noisy" ambient condition, so the amount of noise that can be generated before reaching a significance threshold would be low.
9. No acquisition of park land is anticipated. The BRT, LRT and DMU alternatives all have the potential for noise and visual impacts for the nine parks along the rail corridor.
10. No direct impacts to park resources are anticipated.
11. No evidence of threatened or endangered species or habitats was found from database searches and field review. As discussed in item 4, an ecologically sensitive area exists in the Santa De Dam area.
12. Local traffic impacts could occur in the vicinity of new stations, and potentially at grade crossings.

**Table 6.1
Environmental Measures**

MEASURES	Alt. 1: TSM	Alt. 2: BRT	Alt. 3: LRT, time separated	Alt. 4: LRT, time shared	Alt. 5: Non-compliant DMU, time separated	Alt. 6: Non-compliant DMU, time shared	Alt. 7: Compliant DMU, some single track
<p>13. Changes in the visual environment would be most likely to occur in station areas, depending on where and how station facilities and parking are created in each community. Along the line segments, the LRT alternative would require building an overhead wiring network for power. The BRT and DMU alternatives do not require overhead wiring.</p> <p>13. The BRT alternative has some potential for water quality impacts due to run-off from its paved lanes. The LRT and DMU alternatives would involve only minimal changes to existing drainage patterns. Parking for the BRT, LRT and DMU alternatives could generate additional runoff, depending on where local parking is created, but is assumed to be discharged to existing sewerage systems.</p> <p>14. The only wetland are identified in the rail corridor is along the San Gabriel River, which is already crossed by an existing bridge.</p>							

6.2.3 Operating Efficiencies

The Operations category addresses the way in which a proposed improvement contributes to or detracts from the operating efficiency of the transit system, in terms of vehicle and staff utilization, which also impacts cost effectiveness. This is the “supply side” of the evaluation.

To better measure and compare mobility, access and operations among alternatives and to provide data necessary to select a LPA, a number of specific items were selected from those generated by the Travel Demand Model. These are found under Goal 4 in Table 6.3.

6.2.4 Financial Measures

Capital, operating and maintenance costs will clearly play a significant deciding role in the evaluation and choice of a preferred alternative for the Gold Line Corridor. These costs are used to estimate the cost-effectiveness of the individual build alternatives. Table 6.2 shows various financial criteria or measures that will assist with the comparison of the various alternatives. It contains a summary of the initial capital and annual operating and maintenance costs for the various corridor alternatives. All costs are in 2002 dollars. The capital costs include all engineering, design, construction, facilities, rolling stock and contingency costs required to implement the alternative.

Also shown in the table below is the measure of cost-effectiveness. It is a measure that provides a means of comparing the benefits of the alternatives being considered relative to their costs. This measure, expressed in 2002 dollar values, is based on the cost per new rider following the methodology prescribed by FTA. It offers an indication of the return of investment in terms of new transit trips being made as a result of the transportation improvement.

Once the LPA has been built, it will require additional funding to operate and maintain the system. The annual operating and maintenance (O&M) costs summarized in the table include all the costs related to the fixed guideway component and the support bus service component of each alternative. The annual O&M costs are those over and above the cost to operate and maintain the future No-Build Alternative.

MEASURES	Alt. 1: TSM	Alt. 2: BRT	Alt. 3: LRT, time separated	Alt. 4: LRT, time shared	Alt. 5: Non- compliant DMU, time separated	Alt. 6: Non- compliant DMU, time shared	Alt. 7: Compliant DMU, some single track
Capital costs	5,500.0	554.7	896.6	929.9	735.5	802.2	410.9
Operating and maintenance costs	1,035.0	3.4 ¹	23.6	23.6	16.4	16.4	15.25
Cost per new rider	N/A	\$23.00	\$22.15	\$24.45	\$21.30	\$22.85	\$13.90

¹ Assumes 14 buses required to operate in the peak.

6.2.6 Community Involvement Response

The people who live and work in the study Corridor are the ones most familiar with the Corridor's transportation problems, and best able to evaluate ideas for improvements. Public involvement has been an essential element to the project and various methods have been employed to involve the local community and other stakeholders in the broader AA process. The public involvement plan was used to define key issues and concerns that exist with regard to transit and land use in the corridor. The participation process was also designed to inform the public of the project and therefore incorporated various information-sharing mediums to increase public awareness and knowledge of the study. It also served as an important means of obtaining valuable local input to proactively seek the participation and views of the broader public and allowed a channel for citizen feedback to be incorporated into the project's decision-making process.

Numerous outreach efforts and techniques were used as part of the public participation process, some of which included, public meetings, station area charrettes, presentations to city councils, presentations to the study's Steering Committee, and various other participation techniques were also used to distribute key information regarding the project. More details can be found in Chapter 5.

A number of issues and concerns were raised as a result of the public participation process. The most common concerns included traffic impacts, noise impacts, safety impacts and visual impacts.

6.3 Discussion of Trade-offs

The trade-offs analysis is the actual application of the evaluation process in which all relevant criteria are considered together, including both quantifiable and non-quantifiable considerations. The relevant criteria include only those measures where discernible and significant differences can be noted between alternatives. While all of the information collected during the study and presented previously was considered in the evaluation of alternatives, some considerations do not distinguish between alternatives. Therefore, only those considerations that were deemed decisive in differentiating alternatives are presented here. Trade-offs refers to the fact that any alternative may have both positive and negative aspects and that selecting a Locally Preferred Alternative requires balancing these "trade-offs". Within a corridor, a number of types of trade-offs may exist. Examples of the types of trade-offs are:

Between alignments: one alignment may serve a greater concentration of existing population, for example, while another could stimulate new development and thus a larger future population. In the case of the Gold Line Corridor, one alignment was selected early on as the preferred alignment to test the technology alternatives since the Burlington Northern Santa Fe (BNSF) right-of-way has already been purchased by the Metropolitan Transportation Authority (MTA) and it penetrates the downtowns of all of the cities in the Corridor.

Between modes: a mode that typically has more stations enables a greater percent of riders to access the service by walking. However, the more stops the more diffuse and challenging the opportunities for transit-oriented development (TOD), and the higher the travel time.

All of the transit alternatives examined in the AA are feasible, but associated with each are varying costs and benefits. To determine how well the Corridor alternatives meet the project goals and objectives, an evaluation matrix format was used to summarize key distinguishing

data (see Table 6.4). This format will allow decision makers to differentiate between the alternatives and determine how well each meets the project goals.

**Table 6.3
Comparative Summary of Differentiating Evaluation Measures**

MEASURES	Alt. 1: TSM	Alt. 2: BRT	Alt. 3: LRT, time separated	Alt. 4: LRT, time shared	Alt. 5: Non- compliant DMU, time separated	Alt. 6: Non- compliant DMU, time shared	Alt. 7: Compliant DMU, some single track
GOAL 1: To reduce auto dependency							
• Daily transit trips in Region	1,563,600	1,569,400	1,575,500	1,575,500	1,573,800	1,573,800	1,573,800
• Number of new riders	0	5,800	11,900	11,900	10,200	10,200	10,200
• Travel time between Claremont and Pasadena in 2025	AM peak: 90 min. PM peak: 102 min.	34.5 min.	32 min.	32 min.	33 min.	33 min.	33 min.
• Reduction in daily single occupant vehicle person trips	0	3700	8100	8100	7100	7100	7100
GOAL 2: To develop a cost-effective transit system	N/A						
• Capital costs (millions of 2002 \$)	5,500.0	554.7	896.6	929.9	735.5	802.2	410.9
• Annual operating & maintenance costs (millions of 2002 \$)	1,035.0	3.4 ²	23.6	23.6	16.4	16.4	15.25
• Operating cost per passenger mile	\$0.33	\$0.33	\$0.34	\$0.34	\$0.33	\$0.33	\$0.33
• Cost per new rider	N/A	\$23.00	\$22.15	\$24.61	\$21.30	\$22.85	\$13.90
GOAL 3: Improve air quality, preserve and protect the environment							
• Potential acres of right-of-way to be acquired	N/A	15-20	15-20	15-20	15-20	15-20	15-20
• Change in vehicle miles traveled (diff. over Baseline)	N/A	-33,600	-164,000	-164,000	-153,200	-153,200	-153,200
• Potential for noise impacts	N/A	Low	Low-Medium	Low-Medium	Medium	Medium	Medium
Rating Scale: Poor-----Good							

² Assumes 14 buses required to operate in the peak.

Table 6.3 (continued)
Comparative Summary of Differentiating Evaluation Measures

MEASURES	Alt. 1: TSM	Alt. 2: BRT	Alt. 3: LRT, time separated	Alt. 4: LRT, time shared	Alt. 5: Non- compliant DMU, time separated	Alt. 6: Non- compliant DMU, time shared	Alt. 7: Compliant DMU, some single track
• Potential impact to visual quality	N/A	Low	Low-Medium	Low-Medium	Low	Low	Low
• Potential impact to water quality	N/A	Medium	Low	Low	Low	Low	Low
• Market support for TOD	N/A	Medium	Medium	Medium	Medium	Medium	Medium
• Supports community growth & redevelopment goals	N/A	Medium	High	High	High	High	High
• Development potential at stations	N/A	Medium	High	High	Medium-high	Medium-high	Medium-high
GOAL 4: Locate stations to facilitate cities' visions for landuse/development around stations	N/A						
GOAL 5: Create a system that adds identity and attractiveness to Corridor cities							
GOAL 6: To complement existing transit in the corridor, optimize previous investmtns.							
• Provides efficient intra-corridor service not currently met by other providers	Low	High	High	High	High	High	High
GOAL 7: To improve mobility, connectivity to regional and local transit systems							
• Provides a seamless connection to the Phase I LRT	N/A	Low	High	High	Low	Low	Low
GOAL 8: To implement a project within a reasonable period of time	N/A						
• New transit service in the corridor by 2008	N/A	High	Medium	Medium	Medium-high	Medium-high	Medium-high
GOAL 9: Work collaboratively with cities throughout AA process	N/A						
Rating Scale:							
Poor-----Good							

As previously indicated, data that does not show differences between the alternatives has not been included. For example, none of the alternatives negatively impacts wetlands. Therefore,

that information is not useful in differentiating between the alternatives and is not included in the summary evaluation table. This evaluation provides a relative comparison among the alternatives, giving the Corridor cities, the San Gabriel Valley Council of Governments (COG) and Metro Blue Line Construction Authority (Authority) Board of Directors the information needed to compare the level of transportation impacts across all of the alternatives.

Below is the discussion of the trade-offs by goal, followed by Table 6.4, where the advantages and disadvantages of each alternative are summarized.

GOAL 1: To reduce auto dependency.

While all of the alternatives would reduce auto dependency to a certain extent, in comparison to each other, LRT is more successful in attracting more new riders and, therefore, Alternatives 3 and 4 received a higher ranking. This is in part a function of reduced travel time and no transfer required with the Phase I LRT line.

GOAL 2: To develop a cost-effective transit system.

The single criterion that assesses the return on the investment is the cost per new rider. This is number is based on how well the capital investment is rated when it takes into account the capital costs, the annual operating and maintenance costs and the number of new riders attracted by the alternatives. The cost per new rider for BRT Alternative 2, LRT Alternative 3 and DMU Alternatives 5 and 6 is in the low \$20's range. LRT Alternative 4 is in the mid \$20's range. The cost per new rider in these ranges is considered to be somewhat high based on FTA interpretation of cost ranges. The cost per new rider for the DMU Alternative 7, however, is around \$14, which is considered a competitive number by FTA. Since this goal achievement analysis is based on how the alternatives compare to each other, DMU Alternative 7 is ranked high in achieving the goal of developing a cost-effective system, while the others rank lower.

GOAL 3: Improve air quality and preserve and protect the environment

All of the rail alternatives ranked the similarly on this goal since the total relative impacts of the technologies on the environment are not significantly different. However, there are some differences for particular environmental issues.

Air Quality: For air quality, LRT and DMU provide more benefits since they attract more riders than BRT, representing more shifts from single-occupancy vehicles and, therefore, lower vehicle miles traveled, fewer emissions and less energy consumed. However, LRT provides greater air quality benefits than DMU since LRT is electrically powered and emits no pollutants, while DMU is diesel powered and emits more pollutants than LRT. Air quality is of particular concern in this Corridor since the San Gabriel Valley has the second worst air pollution in the Los Angeles air basin.

Noise: The electrically powered LRT would be quieter than the diesel-powered DMU. Noise impacts caused by the LRT vehicle would be easier to mitigate than for DMU because the primary sources of noise are at track level for LRT, rather than at stack level for DMU. Also, the type of horn used by LRT vehicles allows the noise levels to be reduced.

Visual: LRT would require an overhead wiring system, introducing a new visual element, whereas BRT and DMU would not.

Water Quality: There would be a low potential for contaminating natural water sources in the corridor by the rail alternatives, with a somewhat higher potential impact caused by the BRT

alternative because of water runoff associated with a larger impermeable surface created by the paved busway.

GOAL 4: Locate stations that facilitate cities' visions for land use and development around stations.

Although all alternatives would place their respective stations in the same location, thus taking full advantage of adjacent land and potential uses, developers and investors view more "permanent" installations, such as rail facilities, as more conducive to superior development. Furthermore, in this country light rail stations have experienced more transit oriented development than commuter rail, which may be a function of number of operating systems; therefore, while all of the rail alternatives rate higher than the bus rapid transit alternative, LRT still is seen as more supportive of development around stations than is DMU. In assessing the existing real estate market, there is no difference between the alternatives since the market function is independent of whatever transit improvement is constructed.

GOAL 5: Create a system that adds identity and attractiveness to Corridor cities.

For the same reasons cited in Goal 4, LRT ranks slightly higher than DMU.

GOAL 6: To complement other existing transit in the corridor and optimize previous investments.

All of the alternatives would optimize the previous investment by using the rail right-of-way that was purchased by MTA. They also complement other existing transit in some way, although LRT would more directly enhance the Phase I LRT line currently under construction, as it would become an extension of an existing system and no transfer would be required. This gives LRT some advantage over the other alternatives and a higher ranking.

GOAL 7: To improve mobility and provide connectivity to regional and local transit systems.

The single differentiator in achieving this goal is that LRT provides a "seamless" connection to the Phase I LRT by not requiring a transfer, thus improving travel time and increasing ridership. Therefore, it ranks higher than the other alternatives.

GOAL 8: To implement a project within a reasonable period of time

The objective is to have a new transit system operational by 2008. While this can be accomplished with all of the alternatives, BRT could be constructed sooner, followed by the DMU (subject to availability of vehicles from the manufacturer). LRT would take the longest to construct since it requires an extensive electrical system to be installed, unlike the BRT or DMU alternatives. Therefore, BRT ranks highest.

GOAL 9: Work collaboratively with cities throughout the AA process.

This goal was equally achieved by all of the alternatives.

**Table 6.4
Advantages and Disadvantages of Alternatives**

Evaluation Category	Alternative 1: TSM (Baseline)	Alternative 2: BRT	Alternative 3: LRT, time separated	Alternative 4: LRT, time shared	Alternative 5: Non-compliant DMU, time separated	Alternative 6: Non-compliant DMU, time shared	Alternative 7: Compliant DMU, some single track
MOBILITY	Advantages: <ul style="list-style-type: none"> • 	Advantages: <ul style="list-style-type: none"> • Reduced travel time (34.5 min.). • Increased flexibility of operations could allow for reduced transfers. • Carries lowest number of riders. 	Advantages <ul style="list-style-type: none"> • Reduces highest number of single occupant vehicle trips (8,100). • Supports higher density development opportunities at 10 Corridor city stations, with potential for higher ridership. • No transfer required at Sierra Madre Villa Station. • Carries highest number of riders. 	Advantages <ul style="list-style-type: none"> • Reduces highest number of single occupant vehicle trips (8,100). • Supports higher density development opportunities at 10 Corridor city stations, with potential for higher ridership. • No transfer required at Sierra Madre Villa Station. • Carries highest number of riders. 	Advantages <ul style="list-style-type: none"> • Reduces number of single occupant vehicle trips by 7,100. • Supports higher density development opportunities at 10 Corridor city stations, with potential for higher ridership. • Carries second highest number of riders. 	Advantages <ul style="list-style-type: none"> • Reduces number of single occupant vehicle trips by 7,100. • Supports higher density development opportunities at 10 Corridor city stations, with potential for higher ridership. • Carries second highest number of riders. 	Advantages <ul style="list-style-type: none"> • Reduces number of single occupant vehicle trips by 7,100. • Supports higher density development opportunities at 10 Corridor city stations, with potential for higher ridership. • Carries second highest number of riders.
	Disadvantages: <ul style="list-style-type: none"> • Buses operate on congested streets in mixed flow traffic. • Significantly increased travel time (90-102 min.). 	Disadvantages <ul style="list-style-type: none"> • Reduces lowest number of single occupant vehicle trips (3,700). • Attracts lowest number of new riders (5,800). • Transfer required at Sierra Madre Villa Station. 	Disadvantages <ul style="list-style-type: none"> • 	Disadvantages <ul style="list-style-type: none"> • 	Disadvantages <ul style="list-style-type: none"> • Transfer required at Sierra Madre Villa Station. 	Disadvantages <ul style="list-style-type: none"> • Transfer required at Sierra Madre Villa Station. 	Disadvantages <ul style="list-style-type: none"> • Transfer required at Sierra Madre Villa Station. • Potential delays due to joint operation with freight.
ENVIRONMENTAL	Advantages <ul style="list-style-type: none"> • 	Advantages <ul style="list-style-type: none"> • Electric / Natural Gas Buses limit air quality pollution 	Advantages <ul style="list-style-type: none"> • Quietest operation due to power source. • No air quality pollution. 	Advantages <ul style="list-style-type: none"> • Quietest operation due to power source. • No air quality pollution. 	Advantages <ul style="list-style-type: none"> • 	Advantages <ul style="list-style-type: none"> • 	Advantages <ul style="list-style-type: none"> •
	Disadvantages <ul style="list-style-type: none"> • 	Disadvantages <ul style="list-style-type: none"> • Significantly lower change in vehicle miles traveled. • New significant visual element introduced at grade separated intersections. • Highest potential for adding to air pollution. • Potential for water quality impacts due to run-off from paved lanes. 	Disadvantages <ul style="list-style-type: none"> • Low to moderate potential for noise impacts to adjoining residential communities. • New visual element introduced with catenary. • Potential traffic impacts at grade crossings and stations. • Noise impacts associated with train horn at grade crossings 	Disadvantages <ul style="list-style-type: none"> • Low to moderate potential for noise impacts to adjoining residential communities. • New visual element introduced with catenary. • Potential traffic impacts at grade crossings and stations. • Noise impacts associated with train horn at grade crossings 	Disadvantages <ul style="list-style-type: none"> • Moderate potential for noise impacts to adjoining residential communities due to diesel motors. • Potential traffic impacts at grade crossings and stations. • Noise impacts associated with train horn at grade crossings 	Disadvantages <ul style="list-style-type: none"> • Moderate potential for noise impacts to adjoining residential communities due to diesel motors. • Potential traffic impacts at grade crossings and stations. • Noise impacts associated with train horn at grade crossings. 	Disadvantages <ul style="list-style-type: none"> • Moderate potential for noise impacts to adjoining residential communities due to diesel motors. • Potential traffic impacts at grade crossings and stations. • Noise impacts associated with train horn at grade crossings.
OPERATIONS	Advantages <ul style="list-style-type: none"> • 	Advantages <ul style="list-style-type: none"> • 	Advantages <ul style="list-style-type: none"> • Provides through service from East LA to Claremont. • O&M cost advantage of using same technology as on other LRT lines in LA. 	Advantages <ul style="list-style-type: none"> • Provides through service from East LA to Claremont • O&M cost advantage of using same technology as on other LRT lines in LA. 	Advantages <ul style="list-style-type: none"> • 	Advantages <ul style="list-style-type: none"> • 	Advantages <ul style="list-style-type: none"> •
	Disadvantages <ul style="list-style-type: none"> • 	Disadvantages <ul style="list-style-type: none"> • PUC requires reduced speed limits at grade crossings. • Potential ROW problems with stopping and storing layover buses at Sierra Madre Villa Station. 	Disadvantages <ul style="list-style-type: none"> • 	Disadvantages <ul style="list-style-type: none"> • 	Disadvantages <ul style="list-style-type: none"> • 	Disadvantages <ul style="list-style-type: none"> • Using different technology poses some operational challenges at Sierra Madre Villa Station due to ROW constraints. 	Disadvantages <ul style="list-style-type: none"> • Using different technology poses some operational challenges at Sierra Madre Villa Station due to ROW constraints.

Chapter 7: SELECTION OF LOCALLY PREFERRED ALTERNATIVE AND NEXT STEPS

- The Study Steering Committee and San Gabriel Valley Council of Governments recommended a preferred alternative that was adopted by the Metro Blue Line Construction Authority and inclusion in the 2004 Regional Transportation Plan by the Southern California Association of Governments.
- Environmental documents will be prepared following local, state and federal procedures.
- Issues not resolved in this study will be addressed in subsequent project development phases.

7.1 *Locally Preferred Alternative Selection*

In April 2002, the Steering Committee accepted the Draft Alternatives Analysis Report and recommended Alternative 4: Light Rail Transit, as their Locally Preferred Alternative. This alternative was then adopted by the eleven City Councils, the Governing Board of the San Gabriel Valley Council of Governments, and the Board of Directors of the Los Angeles to Pasadena Metro Blue Line Construction Authority (Refer to Appendix G).

The Steering Committee prepared a sample resolution for each jurisdiction to consider which included some the following items:

"WHEREAS the San Gabriel Valley Council of Governments (COG) and the Metro Blue Line Construction Authority (Authority) have conducted an Alternatives Analysis for extension of the Metro Gold Line from Pasadena to Claremont; and"....

"WHEREAS the Phase II Project Steering Committee has reached consensus on goals, objectives, and measures of effectiveness concerning mobility, environmental, and costs and finance; has participated regularly in the evaluation of alternatives and has reached consensus on screening of alternatives; and".....

"WHEREAS public participation has demonstrated a preference for LRT over BRT or DMU as being more consistent with the goals and objectives of the communities in the corridor, a finding supported by the Alternatives Analysis evaluation; and".....

"NOW, THEREFORE, be it resolved that the (adopting jurisdiction) adopt the Locally Preferred Alternative consisting of:

- An extension of the Metro Gold Line (due to open in 2003) light rail transit from its present terminus in eastern Pasadena to the City of Claremont;
- Preparing an EIR/S and conducting PE on the Locally Preferred Alternative;
- Addressing of all issues and concerns raised through public participation in the EIR/S and PE;
- Developing an intermodal station in each of the additional ten cities along the extension to be served by the Metro Gold Line; and
- Expanding bus services and bicycle, pedestrian and auto access facilities at each of the intermodal stations."

Based on the recommendation of the Steering Committee, the study participants, through action of their City Councils or Boards, adopted the Locally Preferred Alternative as recommended by the Steering Committee based on public input and their review of the Draft Alternatives Analysis Report and supporting technical documentation. Listed below are the jurisdictions along with their date of adoption of the Locally Preferred Alternative (Refer to Appendix G for copies of the resolutions and letters). All actions were taken in public session.

<i>Jurisdiction</i>	<i>Adoption Date</i>
San Gabriel Valley Council of Governments, Governing Board	April 18, 2002
Los Angeles to Pasadena Metro Blue Line Construction Authority, Board of Directors	April 24, 2002
City of Pasadena, City Council	June 10, 2002
Arcadia, City Council	May 21, 2002
Monrovia, City Council	May 14, 2002
Duarte, City Council	May 14, 2002
Irwindale, City Council	May 23, 2002
Azusa, City Council	May 6, 2002
Glendora, City Council	May 14, 2002
San Dimas, City Council	May 14, 2002
La Verne, City Council	May 6, 2002
Pomona, City Council	May 20, 2002
Claremont, City Council	April 23, 2002

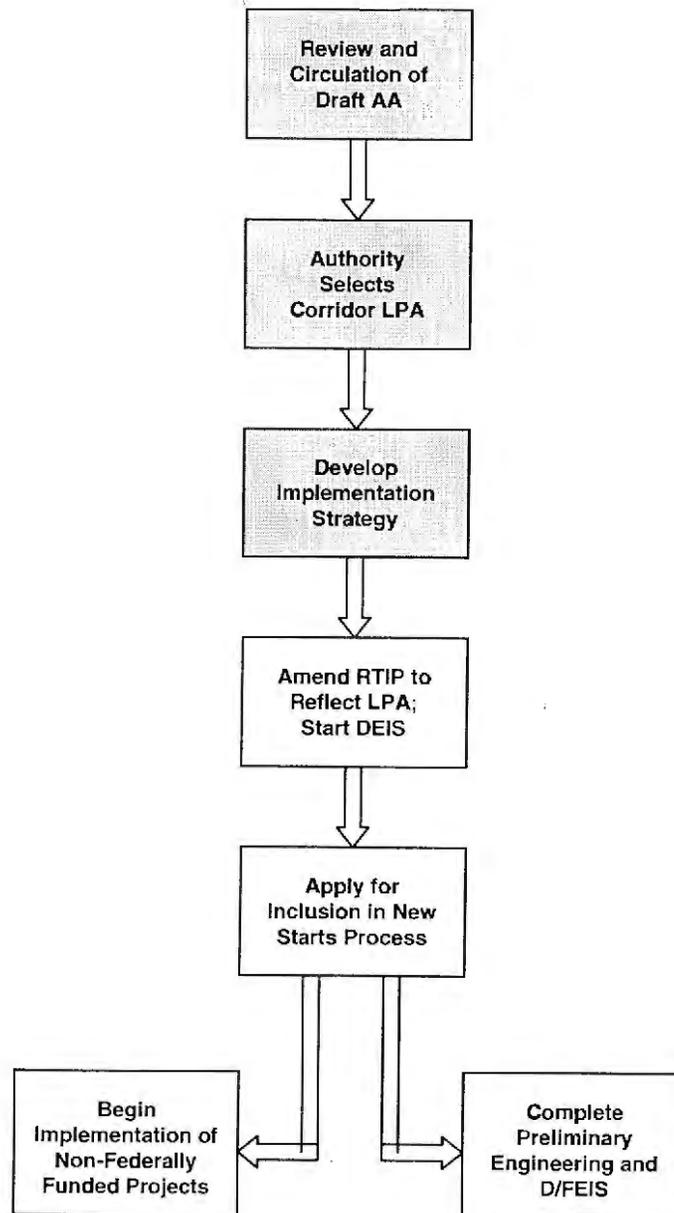
7.2 Next Steps

The next steps in the project implementation process are shown in Figure 7.1. The shaded boxes represent the project development steps that have been completed to date and the remaining steps are described below.

Amend RTIP to Reflect LPA: A request has been submitted by the Authority and COG to the Southern California Association of Governments (SCAG) to include the LPA for the Gold Line Extension in the 2004 update of the Regional Transportation Plan (RTP) for the Los Angeles Metropolitan Area. These actions are a precursor to amending the Regional Transportation Improvement Plan (RTIP). SCAG issued a letter on September 20, 2002, stating, "SCAG supports extension of the Metro Gold Line to Montclair and SCAG staff are working to include this project in the 2004 update of the Regional Transportation Plan." A copy of this letter can be found in Appendix G.

By adding the LPA to the RTIP, its priority in the region as part of the overall strategy for mobility and air quality improvements will be indicated. The action by SCAG is a major milestone in the FTA process for project funding, and will be completed prior to requesting authorization from the FTA to enter into Preliminary Engineering.

Figure 7.1: Project Implementation Process



Complete DEIS: In early 2003 the Authority will proceed with the preparation of a Draft Environmental Impact Statement and Report on the LPA, which should be completed by December 2003.

Apply to FTA for New Starts: In summer 2003 the Authority will submit the Section 5309 Report for FTA review and rating of the Gold Line Phase II Extension.

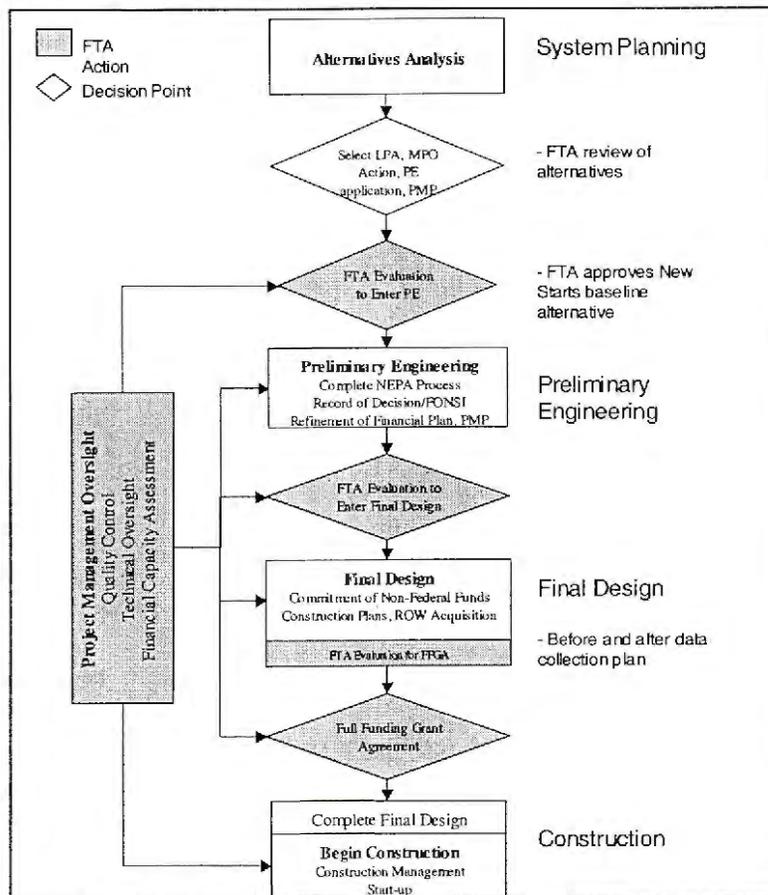
PE/D/FEIS/R Stage: In summer 2003, the Authority will request authorization from FTA to enter into preliminary engineering (PE). Before FTA can approve a project sponsor's request to

initiate PE, the project must have 1) completed alternatives analysis, 2) have a fully developed financial plan, 3) have FTA agreement on a Baseline Alternative, 4) have the locally preferred alternative adopted into the region's financially constrained long range plan, 5) receive an overall FTA rating of Recommended or Highly Recommended based upon the 5309 New Starts project justification criteria and 6) provide confidence in the degree of local financial commitment. In the PE/FEIS stage of the process, precise route alignments are confirmed, detailed cost estimates are made, financial plans are approved, and environmental impact documents are prepared. Throughout the PE/FEIS stage there is continued dialogue with residents and businesses in the corridor, and with elected officials.

Final Design/FFGA: FTA will authorize final design and construction, the last two stages in the project development process, only when the results of the PE/FEIS work show the project is cost effective and environmentally sound. A request for a Full Funding Grant Agreement (FFGA) will be made in 2005.

Figure 7.2 describes the chronology and steps in project implementation for an FTA funded project and shows where the Authority stands at the conclusion of the AA stage.

Figure 7.2: FTA Process



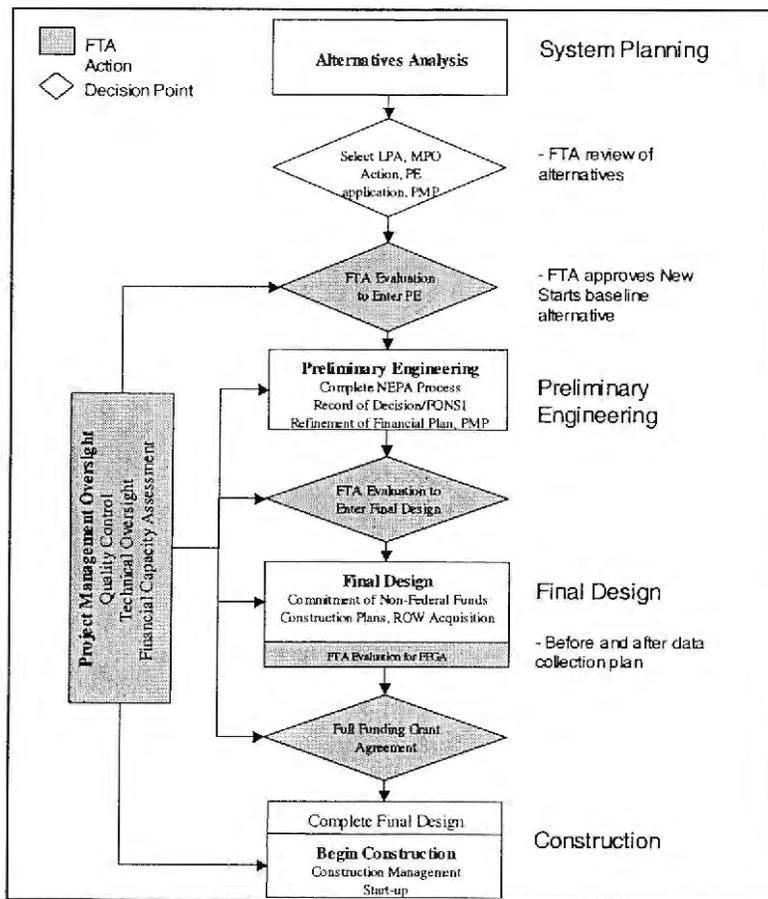
Source: FTA, July 2001

initiate PE, the project must have 1) completed alternatives analysis, 2) have a fully developed financial plan, 3) have FTA agreement on a Baseline Alternative, 4) have the locally preferred alternative adopted into the region's financially constrained long range plan, 5) receive an overall FTA rating of Recommended or Highly Recommended based upon the 5309 New Starts project justification criteria and 6) provide confidence in the degree of local financial commitment. In the PE/FEIS stage of the process, precise route alignments are confirmed, detailed cost estimates are made, financial plans are approved, and environmental impact documents are prepared. Throughout the PE/FEIS stage there is continued dialogue with residents and businesses in the corridor, and with elected officials.

Final Design/FFGA: FTA will authorize final design and construction, the last two stages in the project development process, only when the results of the PE/FEIS work show the project is cost effective and environmentally sound. A request for a Full Funding Grant Agreement (FFGA) will be made in 2005.

Figure 7.2 describes the chronology and steps in project implementation for an FTA funded project and shows where the Authority stands at the conclusion of the AA stage.

Figure 7.2: FTA Process



Source: FTA, July 2001

7.3 Areas of Concern to be Addressed in Subsequent Project Development Phases

Several areas of concern have been identified by city staffs and the general public that will be address during the DEIS phase of project development. Details are provided in each city resolution in Appendix G. A summary of these and other areas of concern identified during the AA process are provided below:

Traffic Impacts at Grade Crossings

The cities in the Corridor have identified traffic impacts at grade crossings to be an area of concern and have expressed a desire for more detailed analysis to occur than was conducted during the assessment of “grade separation threshold” in the AA study. The Institute of Transportation Engineering Guidelines report identifies that the use of thresholds alone cannot be the only factor used to determine if a grade separation is warranted. Other factors such as a crossing Level of Service (LOS) analysis and/or a queuing analysis should be conducted. These additional analyses will be conducted in the next phase of this project. In addition, crossings that were not chosen for this preliminary analysis due to lack of verifiable traffic volume data will be analyzed in the next phase of this project.

Delay and Accident Analysis

To better assess the issue of safety at grade crossings and determine what if any safety improvements or upgrades are warranted, a detailed delay and accident analysis will be conducted in subsequent phases to determine what improvements would be required in the Gold Line Phase II Corridor. This will include identifying the geometry of grade crossings and site specific conditions, traffic and/or transit delay, preparing an accident analysis, and examining low and high cost safety improvements/upgrades, including raised medians and/or four-quadrant gates should be examined in the next phase to discourage motorists from driving around the lowered gate.

Noise

The noise impacts to adjoining properties located next to the rail right-of-way was raised by city staffs and by the general public. The concern was noise generated from the transit vehicles, frequency of passing trains, and the use of horns by rail vehicles at grade crossings. This concern was consistently raised during public meetings held along the Corridor. These potential impacts and mitigation measures will be assessed in more detail as part of the environmental impact analysis to be conducted in the next phase of project development.

Parking

All of the cities expressed concern with potential parking impacts on residential neighborhoods adjoining the stations, the downtown, and other areas. An additional concern for cities on the eastern portion of the extension is the traffic impact of riders coming from other cities in the San Gabriel Valley and San Bernardino County. These potential impacts and mitigation will be assessed during the next phase of project development.

Impacts of Adjacent Transit on Property Values

The public asked questions on how a transit improvement will affect the value of adjacent properties. In the next project phase research will be conducted based on existing property value assessments in North America to adequately respond to this question.

Visual

City staff and the general public raised concerns about the visual impacts of a new transit improvement in the Corridor, specifically poles, wires, and sound walls. This concern will be assessed in detail during the Draft Environmental Impact Statement/Report phase of the study. The results of the assessment will be closely coordinated with the cities in the Corridor and the public. This assessment will include developing mitigation plans for addressing any unacceptable impacts.

Railroad Agreements

Initial coordination meetings were held during the AA phase with BNSF. However, specific agreements were not pursued or obtained. Although the MTA owns the right-of-way (ROW), certain agreements were signed with the purchase of the ROW and will need to be revisited in subsequent phases of project development.

Coordination with Federal, State and Local Agencies

Coordination was conducted with local agencies during the AA phase and several meetings with FTA were held to keep them apprised of the study and obtain input. However, as part of the DEIS/R phase, state and local agencies will be more actively engaged during the DEIS/R process and mechanisms for maintaining their input will be put in place.

Local Financial Commitment

A local financial commitment for the local share of the project LPA will be identified and secured during the subsequent project development phase.

APPENDICES

APPENDICES

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APPENDIX B	Frequency of Transit Service	B-1
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APPENDIX D	References	D-1
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Appendix A Major Activity Centers		
<i>City</i>	<i>Name</i>	<i>Type of Usage</i>
Pasadena	East Foothill Industrial Center	Manufacturing & Employment
	Hastings Village	Commercial and Employment
	Sierra Madre Villa Transit Station of the Pasadena Gold Line	Transportation
Arcadia	Los Angeles County and State Arboretum	Recreation and Special Events
	Santa Anita Race Track	Recreation and Employment
	Santa Anita Fashion Park	Commercial and Employment
	Arcadia Civic Center	Public Service & Employment
	Civic Center Athletic Field and Recreation Area	Recreation
	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	

Appendix A Major Activity Centers		
<i>City</i>	<i>Name</i>	<i>Type of Usage</i>
	Artisan Screen Process	Manufacturing & Employment
	California Amforge	Manufacturing & Employment
	Hansen's Juices, Inc.	Manufacturing & Employment
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
Frank G. Bonelli Regional County Park		Recreation
Frontier Village		Commercial and Employment
Lowe's/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
	Paper Pak Industries	Manufacturing & Employment
	La Verne Recreation Park	Recreation

Appendix A Major Activity Centers		
<i>City</i>	<i>Name</i>	<i>Type of Usage</i>
	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 (2) **	Public Service and Employment
	Pilgrim Place	Public Service and Employment
	Blaisdell Community Building	Recreation and Public Service
	Blaisdell Park	Recreation
	College Park	Recreation
* There are over 48 hi-tech businesses located in this corridor.		
** There are two Claremont Manors.		

**Appendix B
Frequency of Transit Service**

<i>Operator</i>	<i>Line</i>	<i>Days</i>	<i>AM Peak 6-9am</i>	<i>Midday 9am-3pm</i>	<i>PM Peak 3-7pm</i>	<i>Evening 7pm-11pm</i>	<i>Owl 11pm-6am</i>	<i>Hours of Service</i>
Azusa Transit	1	Weekday	55	55	55			7am-6pm
		Saturday	55	55	55			9am-5pm
Duarte Transit	Blue	Weekday	60	60	60			7am-7pm
		Saturday	60	60	60			8am-6pm
	Green	Weekday	60	60	60			7am-7pm
Foothill Transit	184	Weekday	45	45	45			5am-7pm
		Weekend	45	45	45			6am-7pm
	185	Weekday	30	30	30	60		5am-10:30pm
		Weekend	30	30	30			6am-8pm
	187	Weekday	15	15	15	30	20	4am-1am
		Saturday	30	30	30	60		5am-12pm
		Sunday	60	60	60	60		6am-10pm
	191	Weekday	30	60	30	60		5am-8:30pm
		Weekend	60	60	60			6am-7:30pm
	272	Weekday	30	30	30	60		5am-10pm
		Weekend	30	30	30			6am-7pm
	274	Weekday	22	60	60	60		5am-9pm
		Weekend	60	60	60	60		6:30am-8pm
	276	Weekday	45	60	60	60		5:00am-9pm
		Weekend	60	60	60	60		6:00am-8pm
	280	Weekday	15	15	15	30	30	5am-11:30pm
		Weekend	15	15	15	15	15	6am-11:30pm
	291	Weekday	15	30	15	60	60	5am-12am
		Weekend	30	30	30	30		6am-7:30pm
	292	Weekday	60	60	60	60		6am-9pm
		Weekend	60	60	60	60		7am-9pm
	479	Weekday	30	60	30	60		5am-9pm
		Weekend	60	60	60	60		6am-8pm
480	Weekday	5	15	15	45	15-60	12am-12am	
	Weekend	30	15	15	60	60	12am-12am	
492	Weekday	30	25	30	45		5am-10:30pm	
	Weekend	60	60	60	60		6am-8pm	
494	Weekday	30		30			EB 5:30am-8:30pm WB 4pm-7pm	
498	Weekday	15		20			EB 5am-10am WB 2:30pm-7:30pm	
499	Weekday	20		20			EB 5:30am-9am WB 3pm-8pm	
690	Weekday	30		30			EB 5am-9am WB 3:30pm-8pm	
699	Weekday	20		20			EB 4am-9:30am WB 2pm-8:30pm	
721	Weekday	75		75			NB 6am-9am SB 3pm-7pm	
MTA	79	Weekday	25	30	25	45	60	5:30am-1am
		Saturday	40	30	30	50	60	6am-1am
		Sunday	45	45	45	50	60	7am-1am
	177	Weekday	60	60	60	60		6am-8am

**Appendix B
Frequency of Transit Service**

<i>Operator</i>	<i>Line</i>	<i>Days</i>	<i>AM Peak 6-9am</i>	<i>Midday 9am-3pm</i>	<i>PM Peak 3-7pm</i>	<i>Evening 7pm-11pm</i>	<i>Owl 11pm-6am</i>	<i>Hours of Service</i>
	181	Weekday Saturday Sunday	15 30 60	20 30 40	20 30 40	50 30 45		5am-9:30pm 5am-9pm 5am-9pm
	188	Weekday Saturday Sunday	25 20 60	30 30 60	30 30 60	50 60 60		5am-11pm 6am-11:30pm 6am-11:30pm
	260	Weekday Saturday Sunday	10 15 30	10 20 20	15 25 30	50 50 60	25 35	4am-11:15pm 5am-11:15pm 6am-11:15pm
	264	Weekday	60	50	60			5am-8pm
	266	Weekday Saturday Sunday	25 50 50	40 40 40	35 40 40	60 60 60	50 60	4am-11:30pm 5am-11:30pm 5:30am-10pm
	267	Weekday Weekend	35 60	50 60	35 60	60 60		5:30am-8:30pm 6am-8pm
	268	Weekday Saturday Sunday	35 60 60	45 60 60	25 60 60	50 60 60		5:30am-9pm 7am-9pm 7am-8:15pm
	270	Weekday Saturday Sunday	50 60 60	45 60 60	45 60 60	60 60 60	60	5am-10:30pm 6am-8pm 6am-8pm
	379	Weekday	25		25			6am-9am 3pm-7pm
	401	Weekday Weekend	15 60	35 60	15 60	60 60		6am-11:15pm 6:30am-11pm
	487	Weekday Saturday Sunday	30 60 60	45 60 60	10 60 60	35 60 60		6am-10pm 6:15am-9:30pm 7am-9:15pm
	489	Weekday	25		40			6am-6pm
	491	Weekday Saturday Sunday	25 60 60	50 60 60	35 60 60	10-60 60 60		5am-8:30pm 6am-10pm 7am-9pm

**Appendix C
Project and Public Meetings**

<i>City</i>	<i>Meeting Description</i>	<i>Meeting Summary</i>
Arcadia	Tuesday, October 16, 2001 Council Briefing	<ul style="list-style-type: none"> • Presented a staff report recommending designation of land on Front Street, east of Santa Anita between St. Joseph and Santa Clara Streets for further study on a potential station site. • Comments/Questions: <ul style="list-style-type: none"> ○ There are at-grade crossings issues in Phase I, what about Phase II? ○ Should the city proceed with curb and gutter repairs adjacent to proposed station site? ○ Concern over duration of crossing gates as light rail passes through intersections. ○ Concern over safety and speed of trains through the intersections.
	Tuesday, January 29, 2002 Station Area Workshop	<ul style="list-style-type: none"> • City staff representation: Assistant City Manager, City Engineer, Redevelopment and Planning staff. • Review of proposed station area, followed by dialogue on City of Arcadia plans for the surrounding land use and presentation of Transit Oriented Development (TOD). • City wants consideration of an elevated and grade-separated structure between Santa Anita/Colorado intersection and the Huntington/1st intersection as mitigation for anticipated heavy traffic. • Key recommendations: <ul style="list-style-type: none"> ○ Use northwest corner of Santa Anita & Santa Clara as a potential redevelopment opportunity. ○ "AA Building Materials" site is a potential area for redevelopment consideration. ○ The northeast corner of Santa Anita & Huntington is also a potential redevelopment opportunity.

	<p>Monday, May 13, 2002 Community Meeting</p>	<ul style="list-style-type: none"> • 32+ people attended the community meeting. • 12 comments were received. • Summary of comments: <ul style="list-style-type: none"> ○ Very supportive of light rail in Arcadia and a station. ○ Concerned about noise abatement and want more work done on how to mitigate noise. ○ Parking and local traffic circulation is also an issue that should be given more evaluation in upcoming studies.
	<p>Tuesday, May 21, 2002 Council Adoption of Resolution</p>	<ul style="list-style-type: none"> • Resolution of Support adopted by City Council.
<p>Monrovia</p>	<p>Monday, October 15, 2001 Public Meeting with Planning Commission and City Council</p>	<ul style="list-style-type: none"> • Presentation of project study and Phase I construction made to Planning Commission, City Council and public. • 50+ in attendance. • Issues summary: <ul style="list-style-type: none"> ○ Noise and vibration ○ At-grade intersections ○ Funding and schedule ○ Station location/restoration of depot ○ Freight and light rail use of rail lines and potential conflict ○ Operations and trip length ○ Concern of nearby residential uses and their impact
	<p>Thursday, October 18, 2001 Kiwanis Club Presentation</p>	<ul style="list-style-type: none"> • Presentation of project study and Phase I construction. • 30+ in attendance. • Comments/Questions summary: <ul style="list-style-type: none"> ○ Is funding secure and what is the schedule? ○ How are the station locations determined? ○ What are the size of the trains and how much noise do they produce?

	<p>Tuesday, January 22, 2002 Station Area Workshop</p>	<ul style="list-style-type: none"> • City staff representation: Assistant City Manager, City Engineer, Redevelopment Senior Project Manager and Planning staff. • Review of proposed station area, followed by dialogue on City of Monrovia plans for the surrounding land use and presentation of Transit Oriented Development (TOD). • City using MTA grant to restore historic train station. The city wants land use around the station that creates a walking environment. • Key recommendations: <ul style="list-style-type: none"> ○ Trying to create a gateway to Monrovia via Myrtle Avenue. ○ Concerned about overhead wires, want more options for how to incorporate them with existing structures. ○ The city would like to see higher density, affordable housing and senior housing near the station area.
	<p>Tuesday, May 14, 2002 Council Adoption of Resolution</p>	<ul style="list-style-type: none"> • Resolution of Support adopted by City Council.
<p>Duarte</p>	<p>Wednesday, January 30, 2002 Station Area Workshop</p>	<ul style="list-style-type: none"> • City staff representation: City Engineer, Redevelopment and Planning staff. • Review of proposed station area, followed by dialogue on City of Duarte plans for the surrounding land use and presentation of Transit Oriented Development. • City interested in maximizing the City of Hope with 2,500 employees and 300,000 annual visitors. • Key recommendations: <ul style="list-style-type: none"> ○ High density residential needs to be further explored with community. ○ Station is viewed more as a destination than a park-n-ride. ○ City of Hope connection with other high tech industries along alignment would be viewed as a strong positive.
	<p>Wednesday, March 6, 2002 Community Meeting</p>	<ul style="list-style-type: none"> • Presentation was made of the project study and Phase I construction. • 10+ people attended. • Comments/Questions summary: <ul style="list-style-type: none"> ○ Horn blowing ○ Use of eminent domain ○ Privacy/Soundwall

	Wednesday, March 20, 2002 Community Meeting	<ul style="list-style-type: none"> • Presentation was made of the project study and Phase I construction and proposed station areas. • 8+ people attended • Comments/Questions summary: <ul style="list-style-type: none"> ○ Station location should benefit the entire city. Recommended Mountain as a better location than Monte Vista. ○ Concern over transit parking spilling over to residential neighborhoods. ○ Wanted explanation of funding and city obligations.
	Friday, April 5, 2002 Community Meeting	<ul style="list-style-type: none"> • Presentation was made of the draft Alternatives Analysis (AA). • 10+ people attended. • Comments/Questions summary: <ul style="list-style-type: none"> ○ Why is alternative technologies being considered? ○ Is city considering higher land use densities around stations? ○ Need either elevation of trains or grade separations.
	Friday, April 19, 2002 Community Meeting	<ul style="list-style-type: none"> • Presentation was made of the project study and recommendations. • 10+ people attended. • Comments/Questions summary: <ul style="list-style-type: none"> ○ Are cities responsible for station funding and development? ○ How big are the trains being proposed and how many passengers do they carry? ○ How many tracks will be used and will they mingle with freight services?
	Tuesday, May 14, 2002 Council Briefing and Adoption of Resolution	<ul style="list-style-type: none"> • Resolution of Support adopted by City Council.
Irwindale	Thursday, August 23, 2001 City Council Briefing	<ul style="list-style-type: none"> • Presentation made to City Council over viewing status of project. City Manager mentioned that staff was working with Authority to place station on Irwindale Avenue.

	Monday, March 18, 2002 Station Area Workshop	<ul style="list-style-type: none"> • City staff representation: Assistant City Manager, Redevelopment and Planning staff. • Review of proposed station area, followed by dialogue on City of Irwindale plans for the surrounding land use and presentation of Transit Oriented Development (TOD). • 13+ people from the general public attended including representatives from Miller Brewery. The discussion focused on placement of the station near the Miller Brewing site.
	Monday, April 15, 2002 Community Meeting	<ul style="list-style-type: none"> • 10+ people attended the community meeting to discuss the findings of the Draft Alternatives Analysis (AA) report.
	Thursday, April 25, 2002 Community Briefing	<ul style="list-style-type: none"> • Presentation was made to the City Council on status of the project.
	Thursday, May 23, 2002 Council Adoption of Resolution	<ul style="list-style-type: none"> • Resolution of Support adopted by City Council.
Azusa	Monday, October 15, 2001 City Council Briefing	<ul style="list-style-type: none"> • Presentation was made to the City Council on status of project. City was interested in who would own, operate and maintain each station along the corridor.
	Thursday, April 18, 2002 Community Meeting	<ul style="list-style-type: none"> • 52+ people attended the community meeting. • 4 people filled out comment cards. • Summary of comments: <ul style="list-style-type: none"> ○ Supports the light rail concept and thinks it will help alleviate I-210 congestion.
	Monday, May 6, 2002 Council Adoption of Resolution	<ul style="list-style-type: none"> • Resolution of Support adopted by City Council.
Glendora	Tuesday, January 8, 2002 One-on-One Briefing with Council Representatives	<ul style="list-style-type: none"> • Short briefing with council members to discuss project study and timeline.
	Tuesday, January 22, 2002 City Council Briefing	<ul style="list-style-type: none"> • Presentation made to City Council on project status. Discussion of station areas and potential growth inducing nature of light rail technology.

	Tuesday, January 29, 2002 Station Area Workshop	<ul style="list-style-type: none"> • City staff representation: Community Services Department, transportation and planning staff. • Review of proposed station area, followed by dialogue on City of Glendora plans for the surrounding land use and presentation of Transit Oriented Development (TOD). • City is built-out and has experienced a small decline in population. Parking near the proposed station will be a big issue and how that affects local traffic and circulation patterns. • Key recommendations: <ul style="list-style-type: none"> ○ City is concerned with cost of station development. ○ Proposed at-grade crossings at Foothill/Grand and at Lone Hill concerns the city due to heavy traffic in those areas. ○ City would like to limit growth in terms of density.
	Saturday, April 27, 2002 Community Meeting	<ul style="list-style-type: none"> • 29+ people attended the community meeting. • 5 comment cards were received. • Summary of comments: <ul style="list-style-type: none"> ○ Would like to see originally planned station at Lone Hill Avenue. ○ Worried about property values of residential property close to the alignment. ○ Generally supportive of project. ○ Interested in the funding and schedule for completing the project. ○ Concerned about the noise and aesthetics.
	Tuesday, May 14, 2002 Council Adoption of Resolution	<ul style="list-style-type: none"> • Resolution of Support adopted by City Council.
	Tuesday, May 28, 2002 Council Briefing	<ul style="list-style-type: none"> • Attended council briefing to support council members in their resolution of support for the project.
San Dimas	Tuesday, August 14, 2001 City Council Briefing	<ul style="list-style-type: none"> • Presentation to City Council and public regarding the project status. Some of the issues raised include: parking, funding, cost estimates and station area planning.

	Tuesday, October 16, 2001 City Gold Line Ad-Hoc Committee Briefing	<ul style="list-style-type: none"> • Briefing to Ad-Hoc committee on Phase I construction and Phase II study progress. The city brought forward additional station locations for consideration. Other issues that were discussed including funding and improvement of at-grade crossings.
	December 10, 2001 Station Area Workshop	<ul style="list-style-type: none"> • City staff representation: Senior Engineer, transportation and planning staff. • Review of proposed station area, followed by dialogue on City of San Dimas plans for the surrounding land use and presentation of Transit Oriented Development (TOD). • City established a blue ribbon citizen advisory committee for the purpose of overseeing the Gold line activities. • Key recommendations: <ul style="list-style-type: none"> ○ City would like to preserve old packaging house building as part of the station planning. ○ The preferred site for the station is adjacent to the historic San Dimas train station. The park-n-ride is catty corner across the street. ○ Interested in developing Specific Plan for the station area and rail corridor.
	Tuesday, February 19, 2002 Station Area Meeting	<ul style="list-style-type: none"> • Reviewed project status and focused on station area planning.
	Tuesday, April 2, 2002 Community Meeting	<ul style="list-style-type: none"> • 14+ people attended the community meeting.
	Tuesday, April 23, 2002 City Council Briefing	<ul style="list-style-type: none"> • A short presentation was given to the City Council highlighting the progress of the project.
	Tuesday, May 14, 2002 City Council Adoption of Resolution and Town Hall Public Meeting	<ul style="list-style-type: none"> • Town Hall meeting followed by a Resolution of Support adopted by City Council.
La Verne	Monday, October 15, 2001 City Council Briefing	<ul style="list-style-type: none"> • Presentation was made to City Council on the project status and Phase I construction. Issues that were discussed with the council include funding, station locations, parking and traffic.

	<p>Wednesday, January 30, 2002 Station Area Workshop</p>	<ul style="list-style-type: none"> • City staff representation: Assistant City Manager, Community Development Director, City Engineer and planning staff • Review of proposed station area, followed by dialogue on City of La Verne plans for the surrounding land use and presentation of Transit Oriented Development (TOD). • City is coordinating station planning with Fairplex and University of La Verne. Parking, shuttle service and walkability are primary concerns. • Key recommendations: <ul style="list-style-type: none"> ○ Arrow Highway is a key street for station area planning. A Specific Plan has been done for this area. ○ Downtown area is moving towards ULV. ○ Interested in pursuing money from TEA-21 for "good design." ○ Overhead wires and horns are community concerns that need to be addressed further. ○ Parking in residential neighborhoods is a concern.
	<p>Wednesday, April 24, 2002 Community Meeting and Planning Commission</p>	<ul style="list-style-type: none"> • Presentation of project status was made to the City Planning Commission. • Issues discussed at the meeting included aesthetics, noise, funding, at-grade crossings and related congestion, station area planning and parking.
	<p>Monday, May 6, 2002 Council Adoption of Resolution</p>	<ul style="list-style-type: none"> • Resolution of Support adopted by City Council.
Pomona	<p>Wednesday, November 28, 2001 One-on-One Briefing with Council Representatives</p>	<ul style="list-style-type: none"> • Short presentation of project status to council representatives. Project funding and station placement and funding were issues of concern for the city.
	<p>Monday, December 3, 2001 City Council Briefing</p>	<ul style="list-style-type: none"> • A presentation overviewing the status of the project was given to the City Council. Issues discussed include station area planning and funding.

	<p>Thursday, February 21, 2002 Station Area Workshop</p>	<ul style="list-style-type: none"> • City staff representation: City Manager, City Engineer, redevelopment and planning staff. • Review of proposed station area, followed by dialogue on City of Pomona plans for the surrounding land use and presentation of Transit Oriented Development (TOD). • City is considering changing the zoning in the rail corridor to "Transit Oriented Development." This will help with image problem along Foothill and provide a gateway to and through the city. • Key recommendations: <ul style="list-style-type: none"> ○ Existing Metro Link station needs to better connect with city and higher visibility. ○ Want to limit the size of parking near station and bring more commercial uses through redevelopment. ○ There is big demand for senior housing in the city. ○ Need coordination with Garey Street which is major N/S corridor connecting with I-10, SR-71 and SR-60. ○ Potential exists for TOD to include student housing to support ULV in La Verne.
	<p>Monday, May 20, 2002 Council Adoption of Resolution</p>	<ul style="list-style-type: none"> • Resolution of Support adopted by City Council.

Claremont	Tuesday, January 22, 2002 Station Area Workshop	<ul style="list-style-type: none"> • City staff representation: City Manager, City Engineer, redevelopment and planning staff • Review of proposed station area, followed by dialogue on City of Claremont plans for the surrounding land use and presentation of Transit Oriented Development (TOD). • City is in the midst of a village expansion near the proposed station, which is the terminus of the Phase II alignment. Housing is under construction and should be completed by 2008. • Key recommendations: <ul style="list-style-type: none"> ○ Parking will be a big issue because of the station is the terminus of the Phase II project. ○ The platform for the station should be located west to Indian Hill Boulevard and not in front of historic train depot. ○ TOD strategies in the city will be triggered by approval and funding of the proposed light rail project. ○ A bus transfer station is located adjacent to the proposed station.
	Thursday, March 14, 2002 Community Meeting	<ul style="list-style-type: none"> • An open house was held in the community to provide project status information and evaluation documentation.
	Monday, April 8, 2002 Community Meeting and Traffic and Transportation Commission	<ul style="list-style-type: none"> • A presentation was made of the draft Alternatives Analysis (AA) report and discussion of selection of a Locally Preferred Alternative (LPA).
	Tuesday, April 23, 2002 Council Adoption of Locally Preferred Alternative	<ul style="list-style-type: none"> • Resolution of Support adopted by City Council.

APPENDIX D

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APPENDIX E

GLOSSARY AND ACRONYMS

AA – Alternatives Analysis

Alignment – the route that an improvement, such as a bus or light rail line, could take through a corridor

Alternative – a feasible transportation improvement that is under consideration

At-grade – running on street level

BRT – bus rapid transit

Bus Rapid Transit – a bus system operating on an exclusive bus-only lane

Capital costs – the expense of designing and constructing a new project

Corridor – a narrow band of land, usually surrounding a roadway or linking communities

EIR – Environmental Impact Report, a State of California-required report to be developed in conjunction with the EIS

EIS – Environmental Impact Statement, a federally-required detailed report to be developed once the locally preferred alternative is selected

Impact – an effect that a transportation improvement could have on the natural or manmade environment

Level of Service – a qualitative measurement of the operations conditions within a traffic system and how these conditions are perceived by drivers and passengers. LOS A is free-flow, while LOS F is the worst condition.

Light Rail Transit – an electric urban railway system that can operate in street with traffic or on its own right-of-way, powered by an overhead wire or catenary

Locally Preferred Alternative – the transportation improvement selected by decision-makers as the solution to the transportation needs and problems in a corridor

LOS – Level of Service

LPA – Locally Preferred Alternative

LRT – light rail transit

Mixed-traffic – automobiles and transit vehicles sharing the same roadway

Mixed-use – a type of development where residences and businesses are located in the same area

O & M costs – operations and maintenance costs, or the expense of keeping a project running once it is built

TOD – Transit Oriented Development

Transit Oriented Development – (TOD) Mixed used, higher density development located within ½ mile of a transit station

Transit – public transportation such as buses or trains

APPENDIX F

LIST OF PREPARERS

San Gabriel Valley Council of Governments – Steering Committee

Nick Conway	Chief Executive Officer
Mickey Segal	City of Arcadia Delegate
Cristina Madrid	City of Azusa Delegate
Algird Leiga	City of Claremont Delegate
John Fasana	City of Duarte Delegate
Richard Jacobs	City of Glendora Delegate
Rosemary Ramirez	City of Irwindale Delegate
Jon Blickenstaff	City of La Verne Delegate
Lara Blakely	City of Monrovia Delegate
Sid Tyler	City of Pasadena Delegate
Eddie Cortez	City of Pomona Delegate
Denis Bertone	City of San Dimas Delegate
Harry Baldwin	City of San Gabriel Delegate

Metro Blue Line Construction Authority

Richard D. Thorpe	Chief Executive Officer
Paul Taylor	Project Manager

Parsons Brinckerhoff Quade & Douglas, Inc.

Tom Jenkins, P.E.	Project Director
Myrna Valdez	Project Manager
John Dyer	Principal-in-Charge
Amanda Elioff, P.E.	QA/QC
Simon Zweighaft, P.E.	Technical Review Advisor
GB Arrington	Station Area Planning
Doris Chan	Planning
Greg Chew	Station Area Planning
Diana Gonzalez	GIS Mapping
James Hencke	Station Area Planning
Donna McCormick	Deputy Project Manager, Community Impacts
Dawn McKinstry	Travel Demand Forecasting
Farid Naguib, T.E.	Traffic Planning and Analysis
Phil O'Brian	Digital Imaging
Stephanie Roberts	Deputy Project Manager, Traffic Planning and Analysis
Ken Seaverns	Digital Imaging
Patrick Sweeney	Station Area Planning
George Vail	GIS Mapping
Kimberly Yu	Planning

Applied Earthworks

Melinda Horne	Cultural Resources
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Arrellano and Associates

Chester Britt	Public Involvement
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Chambers Group, Inc. Biological Services

Economics Research Associates

Sujata Srivastava Real Estate/Market Analysis

Harris Miller Miller & Hanson, Inc. Noise and Vibration

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John Stutsman, P.E. Technical Review Advisor
Pete Zimmerman Engineering Task Manager
Vikki Li Civil Design
Jack Rich Freight Railroad Operations
Joaquin Siques Safety and Security

Leighton and Associates

Ross Khiabani Geotechnical

Manuel Padron & Associates, Inc.

Manuel Padron Technical Review Advisor
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McCormick Rankin International

John Bonsall BRT Conceptual Engineering
Neil Ahmed Civil Design

Myra L. Frank & Associates, Inc.

Myra Frank Technical Review Advisor
Steve Brooks Environmental Task Manager
Gwynneth Doyle Planning
Tracey Dudman GIS
Krista Kline Planning
Alfred LaFave Acquisitions and Displacements
Jack Ottaway Economic/Real Estate Analysis, Demographics
Richard Starzak Cultural Resources

Sharon Greene and Associates

Sharon Greene Funding Analysis

Wagner Engineering & Surveying, Inc. Surveying and Aerial Photography

APPENDIX G

RESOLUTIONS AND LETTERS OF SUPPORT FROM CORRIDOR CITIES

SOUTHERN CALIFORNIA



**ASSOCIATION of
GOVERNMENTS**

Main Office

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

t (213) 236-1800

f (213) 236-1825

www.scag.ca.gov

Officers: President: Councilmember Hal Berson, Los Angeles • First Vice President: Mayor Pro Tem Bev Perry, Brea • Second Vice President: Supervisor Charles Smith, Orange County • Immediate Past President: Supervisor Jon Mikels, San Bernardino County

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Los Angeles County: Yvonne Brathwaite Burke, Los Angeles County • Zev Yaroslavsky, Los Angeles County • Melanie Andrews, Compton • Harry Baldwin, San Gabriel • Bruce Barrows, Cerritos • George Bass, Bell • Hal Berson, Los Angeles • Ken Blackwood, Lomita • Robert Bruesch, Rosemead • Gene Daniels, Paramount • Ruth Galanter, Los Angeles • Eric Garcetti, Los Angeles • Wendy Greuel, Los Angeles • James Hahn, Los Angeles • Janice Hahn, Los Angeles • Nate Holden, Los Angeles • Sandra Jacobs, El Segundo • Tom LaBonge, Los Angeles • Bonnie Lowenthal, Long Beach • Lawrence Kirkley, Inglewood • Keith McCarthy, Downey • Cindy Miskowksi, Los Angeles • Pam O'Connor, Santa Monica • Nick Pacheco, Los Angeles • Alex Padilla, Los Angeles • Jan Perry, Los Angeles • Beatrice Proo, Pico Rivera • Mark Ridley-Thomas, Los Angeles • Ed Reyes, Los Angeles • Karen Rosenthal, Claremont • Dick Stanford, Azusa • Tom Sykes, Walnut • Paul Talbot, Alhambra • Sidney Tyler, Jr., Pasadena • Dennis Washburn, Calabasas • Jack Weiss, Los Angeles • Bob Youssifian, Glendale • Dennis F. Zine, Los Angeles

Orange County: Charles Smith, Orange County • Ron Bates, Los Alamitos • Ralph Bauer, Huntington Beach • Art Brown, Buena Park • Lou Bone, Tustin • Elizabeth Cowan, Costa Mesa • Cathryn DeYoung, Laguna Niguel • Richard Dixon, Lake Forest • Alta Duke, La Palma • Shirley McCracken, Anaheim • Bev Perry, Brea • Tod Ridgeway, Newport Beach

Riverside County: Bob Buster, Riverside County • Ron Loversidge, Riverside • Greg Pettis, Cathedral City • Ron Roberts, Temecula • Jan Rudman, Corona • Charles White, Moreno Valley

San Bernardino County: Jon Mikels, San Bernardino County • Bill Alexander, Rancho Cucamonga • Lee Ann Garcia, Grand Terrace • Bob Hunter, Victorville • Susan Lien, San Bernardino • Gary Oritt, Ontario • Debra Robertson, Rialto

Ventura County: Judy Mikels, Ventura County • Glen Becerra, Santa Valley • Carl Morehouse, San Buenaventura • Tom Young, Fort Huachuca

Riverside County Transportation Commission: Robin Lowe, Hemet

Ventura County Transportation Commission: Bill Davis, Santa Valley

June 21, 2001

Mr. Nicholas T. Conway, Executive Director
San Gabriel Valley Council of Governments
c/o Arroyo Associates
3871 E. Colorado Boulevard #100
Pasadena, CA 91107-3871

Subject: Gold Line Phase II Extension (Pasadena to Claremont)
Letter of Completion

Dear Mr. Conway:

On November 29, 1993 the Federal Highway Administration (FHWA) and the Federal Transit Administration (FTA) issued final guidance on new regulations stemming from ISTEA passage. The Major Investment Study (MIS) is one of the ISTEA requirements.

Subsequently TEA-21 removed the ISTEA requirement for a "stand-alone" MIS, and the U.S. Department of Transportation (DOT) issued proposed new MIS regulations and guidance.

SCAG's adopted 1998 and 2001 RTPs require a transportation alternatives analysis study for all regionally significant transportation investments (RSTIS) that might use federal funds. Projects in this category usually add transit capacity and/or improve highways.

Primary RSTIS components are (1) alternatives analysis, (2) public involvement, and (3) consultation among the MPO, County Transportation Commissions, transit operators, Caltrans, FHWA, FTA, State Resource Agencies and other investment stakeholders.

The range of alternatives considered in the **Gold Line Phase II Extension (Pasadena to Claremont)** is sufficient to meet the RSTIS Guidelines as adopted by SCAG's Transportation and Communications Committee. You conducted an exemplary public and agency outreach process that provided adequate opportunities for public involvement. Moreover, numerous meetings including the RSTIS Peer Review Group facilitated public agency involvement.

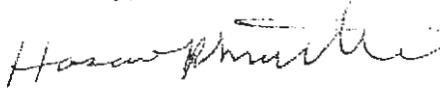
We encourage the Metro Blue Line Construction Authority to develop fully all five elements of the Locally Preferred Alternative during the environmental impact evaluation and project development process. Eleven cities and the San Gabriel Valley Council of Governments have already adopted each of the five Locally Preferred Alternative elements.

On June 20, 2002 the *RSTIS Peer Review Group* met and determined that (1) the **Gold Line Phase II Extension** meets SCAG and FTA/FHWA requirements, and (2) that the project is ready to advance from the planning to the environmental impact and project development phase.

Attachment A includes five recommendations to guide next steps based on our preliminary assessment of the **Gold Line Phase II Extension RSTIS** issues.

This correspondence documents the RSTIS Peer Review Group findings that the **Gold Line Phase II Extension (between Pasadena and Claremont)** meets the Metropolitan Planning Rules, and is therefore granted this *Letter of Completion*. If you have any questions, please contact me at (213) 236-1944 or Al Bowser at (213) 236-1843.

Sincerely,

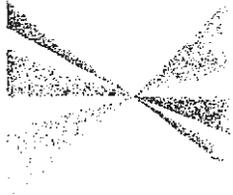


Hasan Ikhrata
Interim Director of Planning and Policy

Attachment

cc: Paul Taylor, Kaku Associates
Metro Blue Line Construction Authority
Sandra Balmir, FTA/FHWA Los Angeles Metro Office
Robert Cady, FHWA
Alan Bowser/File, SCAG

SOUTHERN CALIFORNIA



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Los Angeles County: Yvonne Brathwaite Burke, Los Angeles County • Zev Yaroslavsky, Los Angeles County • Melanie Andrews, Compton • Harry Idwin, San Gabriel • Bruce Barrows, Cerritos • George Bass, Bell • Hal Berenson, Los Angeles • Ken Ackwood, Lomita • Robert Bruesch, Rosemead • Gene Daniels, Paramount • Ruth Galanter, Los Angeles • Eric Garcetti, Los Angeles • Wendy Sue, Los Angeles • James Hahn, Los Angeles • Alice Hahn, Los Angeles • Nate Holden, Los Angeles • Sandra Jacobs, El Segundo • Tom Bonge, Los Angeles • Bonnie Lowenthal, Long Beach • Lawrence Kirkley, Inglewood • Keith McCarthy, Downey • Cindy Mischowski, Los Angeles • Pam O'Connor, Santa Monica • Nick Checco, Los Angeles • Alex Padilla, Los Angeles • Ron Perry, Los Angeles • Beatrice Proo, Pico Rivera • Mark Ridley-Thomas, Los Angeles • Ed Reyes, Los Angeles • Karen Rosenthal, Claremont • Dick Stanford, Azusa • Tom Sykes, Walnut • Paul Talbot, Hawthorne • Sidney Tyler, Jr., Pasadena • Dennis Ashburn, Calabasas • Jack Weiss, Los Angeles • John Yousefian, Glendale • Dennis P. Zioe, Los Angeles

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Ventura County: Judy Mikels, Ventura County • Glen Zaccaria, Simi Valley • Carl Morehouse, San Buenaventura • Tom Young, Fort Bragg

Yosemite County Transportation Commission: John Lowe, Fresno

Yosemite County Transportation Commission: Bill Davis, Sierra Vista

July 15, 2002

REC'D AUG 26 2002

Mr. Nicholas T. Conway, Executive Director
San Gabriel Valley Council of Governments
c/o Arroyo Associates
3871 E. Colorado Boulevard #101
Pasadena, CA 91107-3970

**Subject: Gold Line Phase II Extension (Pasadena to Claremont)
Letter of Completion**

Dear Mr. Conway:

The Transportation and Communications Committee reviewed and confirmed the Gold Line Phase II Extension (Pasadena to Claremont) Letter of Completion that resulted from the RSTIS Peer Review Process and clarifies that letter with this correspondence.

Upon a duly made and seconded motion initiated by Supervisor Jon Mikels (County of San Bernardino), the TCC approved the following:

"That the logical terminus of the Gold Line Phase II Extension is the City of Montclair, and further, with SANBAG's financial contribution SCAG supports a study to extend the eastern terminus of the proposed Gold Line Phase II Extension from the City of Claremont to the Montclair Transit Center. Further, this study should be coordinated during the next steps of the environmental impact evaluation and project development process for the Gold Line Phase II Extension."

This correspondence clarifies RSTIS Peer Review Group action taken on June 21, 2001 regarding the Gold Line Phase II Extension (Pasadena to Claremont) that granted a **Letter of Completion**. If you have any questions please contact me at (213) 236-1889 or Al Bowser at (213) 236-1843.

Sincerely,

Hasan Ikhmeta

Interim Director of Planning and Policy

CC: Paul Taylor, Kaku Associates
Metro Blue Line Construction Authority
Sandro Balmin, FTA/PHWA, Los Angeles Metro Office
Ruthen Cady, FHW
Al Bowser, FTA, SCAG

**Gold Line Phase II Extension (Pasadena to Claremont)
Locally Preferred Alternative**

Letter of Completion

Addressed to:

Mr. Nicholas T. Conway
SGVCOG

June 21, 2002

Locally Preferred Alternative

Adopted by 11 cities and San Gabriel Valley COG

1. An extension of the Metro Gold Line (due to open in 2003) light rail transit from its present terminus in eastern Pasadena to the City of Claremont;
2. Preparing an EIR/EIS and conducting preliminary engineering on the Locally Preferred Alternative;
3. Addressing in the EIR/EIS, and preliminary engineering all environmental issues and concerns raised through public participation, and including the following:
 - Noise, especially horns on trains;
 - Aesthetics and visual disturbance, especially poles and overhead wires;
 - Traffic and congestion at intersections;
 - Parking impacts on residential neighborhoods, downtown, and other areas;
 - Financial impacts to the City to build a station and parking structure;
 - Impacts of train frequency;
 - Impact of riders coming from cities to the east without a station in Montclair;
4. Developing an intermodal station in each of the cities along the extension to be served by the Metro Gold Line; and
5. Expanding bus service and bicycle, pedestrian and auto access facilities at each of the intermodal stations.

RESOLUTIONS OF SUPPORT FOR LOCALLY-PREFERRED ALTERNATIVE

San Gabriel Valley Council of Governments
Metro Blue Line Construction Authority
City of Pasadena
City of Arcadia
City of Monrovia
City of Duarte
City of Irwindale
City of Azusa
City of Glendora
City of San Dimas
City of LaVerne
City of Pomona
City of Claremont

RESOLUTION NO 02-06

A RESOLUTION OF THE GOVERNING BOARD OF THE SAN GABRIEL VALLEY COUNCIL OF GOVERNMENTS ADOPTING THE LOCALLY PREFERRED ALTERNATIVE CONSISTING OF: AN EXTENSION OF THE METRO GOLD LINE LIGHT RAIL TRANSIT FROM ITS PRESENT TERMINUS IN EASTERN PASADENA TO THE CITY OF CLAREMONT; PREPARING AN EIR/S AND CONDUCTING PE ON THE LOCALLY PREFERRED ALTERNATIVE; ADDRESSING OF ALL ISSUES AND CONCERNS RAISED THROUGH PUBLIC PARTICIPATION IN THE EIR/S AND PE; DEVELOPING AN INTERMODAL STATION IN EACH OF THE ADDITIONAL TEN CITIES ALONG THE EXTENSION TO BE SERVED BY THE METRO GOLD LINE; AND EXPANDING BUS SERVICES AND BICYCLE, PEDESTRIAN AND AUTO ACCESS FACILITIES AT EACH OF THE INTERMODAL STATIONS.

WHEREAS the San Gabriel Valley Council of Governments (COG) and the Metro Blue Line Construction Authority (Authority) have conducted an Alternatives Analysis for extension of the Metro Gold Line from Pasadena to Claremont; and

WHEREAS said Alternatives Analysis evaluates a "no-project" alternative as well as bus rapid transit (BRT), light rail transit (LRT) and diesel multiple unit (DMU) trains serving the corridor from Pasadena to Claremont; and

WHEREAS the eleven cities in the corridor have formed a Phase II Project Steering Committee comprised of an elected representative and a staff project manager from each city; and

WHEREAS the Phase II Project Steering Committee has reached consensus on goals, objectives, and measures of effectiveness concerning mobility, environmental, and costs and finance; has participated regularly in the evaluation of alternatives and has reached consensus on screening of alternatives; and

WHEREAS each of the eleven cities is defining a strategy for using the Metro Gold Line as a tool to shape future transit-oriented development along the corridor which, for many of the cities is contiguous to historic central business districts; and

WHEREAS over two dozen public meetings have been held and more are planned to discuss project alternatives and their role in each city's future; and

WHEREAS public participation has demonstrated a preference for LRT over BRT or DMU as being more consistent with goals and objectives of the communities in the corridor, a finding supported by the Alternatives Analysis evaluation; and

WHEREAS issues and concerns have been raised in the public participation process, the most common of which relate to noise and traffic impacts;

WHEREAS the Authority is joining with COG to gain approval of federal matching funds to conduct preliminary engineering (PE) of the Metro Gold Line extension and address project impacts through environmental impact report and statement (EIR/S); and

NOW, THEREFORE, be it resolved by the Governing Board of the San Gabriel Valley Council of Governments adopts the Locally Preferred Alternative consisting of:

- an extension of the Metro Gold Line (due to open in 2003) light rail transit from its present terminus in eastern Pasadena to the City of Claremont;
- preparing an EIR/S and conducting PE on the Locally Preferred Alternative;
- addressing of all issues and concerns raised through public participation in the EIR/S and PE;
- developing an intermodal station in each of the additional ten cities along the extension to be served by the Metro Gold Line; and
- expanding bus services and bicycle, pedestrian and auto access facilities at each of the intermodal stations.

PASSED, APPROVED, AND ADOPTED this 18th day of April, 2002.

SAN GABRIEL VALLEY COUNCIL OF GOVERNMENTS

By Lara L. Blakely
Lara L. Blakely, President

Attest:

Nicholas Conway
Nicholas Conway, Secretary

RESOLUTION NO. 2002-R-04

RESOLUTION IN SUPPORT OF THE
LOCALLY PREFERRED ALTERNATIVE FOR PHASE II

WHEREAS the San Gabriel Valley Council of Governments (COG) and the Metro Blue Line Construction Authority (Authority) have conducted an Alternatives Analysis for extension of the Metro Gold Line from Pasadena to Claremont; and

WHEREAS said Alternatives Analysis evaluates a "no-project" alternative as well as bus rapid transit (BRT), light rail transit (LRT) and diesel multiple unit (DMU) trains serving the corridor from Pasadena to Claremont; and

WHEREAS the eleven cities in the corridor have formed a Project Steering Committee comprised of an elected representative and a staff project manager from each city; and

WHEREAS the Project Steering Committee has reached consensus on goals, objectives, and measures of effectiveness concerning mobility, environmental, and costs and finance; has participated regularly in the evaluation of alternatives and has reached consensus on screening of alternatives; and

WHEREAS each of the eleven cities is defining a strategy for using the Metro Gold Line as a tool to shape future transit-oriented development along the corridor which, for many of the cities is contiguous to historic central business districts; and

WHEREAS over two dozen public meetings have been held and many more are planned to discuss project alternatives and their role in each city's future; and

WHEREAS public participation has demonstrated a preference for LRT over BRT or DMU as being more consistent with goals and objectives of the communities in the corridor, a finding supported by the Alternatives Analysis evaluation; and

WHEREAS issues and concerns have been raised in the public participation process, the most common of which relate to noise and traffic impacts;

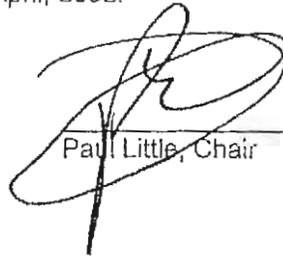
WHEREAS the Authority is joining with COG to gain approval of federal matching funds to conduct preliminary engineering (PE) of the Metro Gold Line extension and address project impacts through environmental impact report and statement (EIR/S); and

WHEREAS before granting funds for further work the Federal Transit Administration requires adoption of a Locally Preferred Alternative;

NOW, THEREFORE, BE IT RESOLVED that Board of Directors of the Los Angeles to Pasadena Metro Blue Line Construction Authority adopts the Locally Preferred Alternative consisting of:

- o an extension of the Metro Gold Line (due to open in 2003) light rail transit from its present terminus in eastern Pasadena to the City of Claremont;
- o preparing an EIR/S and conducting PE on the Locally Preferred Alternative;
- o addressing of all issues and concerns raised through public participation in the EIR/S and PE;
- o developing an intermodal station in each of the ten cities along the extension to be served by the Metro Gold Line; and
- o expanding bus services and bicycle, pedestrian and auto access facilities at each of the intermodal stations.

Passes, approved and adopted this 24th day of April, 2002.



Paul Little, Chair

ATTEST:

I, Jane Barnes, Clerk of the Board of the Los Angeles to Pasadena Metro Blue Line Construction Authority, do hereby certify that the foregoing Resolution was duly and regularly adopted by the Los Angeles to Pasadena Metro Blue Line Construction Authority at a regular meeting held on the 24th day of April 2002, by the following vote:

Ayes: Acosta/Deigun/Reyes/Chavez/Little
Nays: 0
Absent: Bonza
Abstain: 0

Jane Barnes
Clerk of the Board
Los Angeles to Pasadena Metro Blue Line Construction Authority

I hereby certify that the foregoing document is a full, true and correct

copy of Resolution 8122
on file in the office of the City Clerk
of the city of Pasadena, Calif.

Sharon K. McCain
City Clerk
for

RESOLUTION NO. 8122

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASADENA TO SUPPORT THE PHASE II EXTENSION OF THE METRO GOLD LINE FROM PASADENA TO CLAREMONT AND RECOMMEND LIGHT RAIL TRANSIT AS THE PREFERRED MODE OF TRANSPORTATION ALONG THE I-210 CORRIDOR

WHEREAS the San Gabriel Valley Council of Governments (COG) and the Metro Blue Line Construction Authority (Authority) have conducted an Alternatives Analysis for extension of the Metro Gold Line from Pasadena to Claremont; and

WHEREAS said Alternatives Analysis evaluates a "no-project" alternative as well as bus rapid transit (BRT), light rail transit (LRT) and diesel multiple unit (DMU) trains serving the corridor from Pasadena to Claremont; and

WHEREAS the eleven cities in the corridor have formed a Project Steering Committee comprised of an elected representative and a staff project manager from each city; and

WHEREAS the Project Steering Committee has reached consensus on goals, objectives, and measures of effectiveness concerning mobility, environmental, and costs and finance; has participated regularly in the evaluation of alternatives and has reached consensus on screening of alternatives; and

WHEREAS each of the eleven cities is defining a strategy for using the Metro Gold Line as a tool to shape future transit-oriented development along the corridor which, for many of the cities is contiguous to historic central business districts; and

WHEREAS over two dozen public meetings have been held and many more are planned to discuss project alternatives and their role in each city's future; and

WHEREAS public participation has demonstrated a preference for LRT over BRT or DMU as being more consistent with goals and objectives of the communities in the corridor, a finding supported by the Alternatives Analysis evaluation; and

WHEREAS issues and concerns have been raised in the public participation process, the most common of which relate to noise and traffic impacts;

WHEREAS the Authority is joining with COG to gain approval of federal matching funds to conduct preliminary engineering (PE) of the Metro Gold Line extension and address project impacts through environmental impact report and statement (EIR/S); and

WHEREAS before granting funds for further work the Federal Transit Administration requires adoption of a Locally Preferred Alternative;

NOW, THEREFORE, BE IT RESOLVED that the City of Pasadena supports the Locally Preferred Alternative consisting of:

1. An extension of the Metro Gold Line (due to open in 2003) light rail transit from its present terminus in eastern Pasadena to the City of Claremont;
2. Preparing an EIR/S and conducting PE on the Locally Preferred Alternative;
3. Addressing of all issues and concerns raised through public participation in the EIR/S and PE;

4. Developing an intermodal station in each of the ten cities along the extension to be served by the Metro Gold Line; and
5. Expanding bus services and bicycle, pedestrian and auto access facilities at each of the intermodal stations.

Adopted at the regular meeting of the City Council on the 10th day of June 2002, by the following vote:

AYES: Councilmembers Gordo, Haderlein, Holden, Madison,
Vice Mayor Little, Mayor Bogaard
NOES: None
ABSENT: Councilmembers Streator, Tyler
ABSTAIN: None


JANE L. RODRIGUEZ, City Clerk

Approved as to form:

 5/14/02

Nicholas G. Rodriguez
Assistant City Attorney

10213172
CA154
SGV

RESOLUTION NO. 6302

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF ARCADIA, CALIFORNIA, SUPPORTING THE ADOPTION OF THE METRO GOLD LINE PHASE II LOCALLY PREFERRED ALTERNATIVE ANALYSIS DRAFT REPORT SPECIFIC TO THE EXTENSION OF THE METRO GOLD LINE LIGHT RAIL ROUTE FROM PASADENA TO CLAREMONT, CALIFORNIA, AS SUBMITTED BY THE SAN GABRIEL VALLEY COUNCIL OF GOVERNMENTS, THE METRO BLUE LINE CONSTRUCTION AUTHORITY, AND THE GOLD LINE PHASE II PROJECT STEERING COMMITTEE; AND FURTHER RECOMMENDING THAT GRADE SEPARATIONS BE PART OF THE FINAL PROJECT AT STREET CROSSINGS IN THE CITY OF ARCADIA.

RECEIVED

JUN 03 2002

PBL
CONST AUTHORITY

WHEREAS, the San Gabriel Valley Council of Governments ("COG") and the Metro Blue Line Construction Authority ("Authority") have conducted a Locally Preferred Alternative Analysis ("Analysis") for the extension of the Metro Gold Line from Pasadena to Claremont, California; and

WHEREAS, said Analysis evaluates a "no-project" alternative as well as Bus Rapid Transit ("BRT"), Light Rail Transit ("LRT"), and Diesel Multiple Unit ("DMU") trains serving the corridor from Pasadena to Claremont, California; and

WHEREAS, the eleven cities in the corridor have formed a Gold Line Phase II Project Steering Committee ("Committee") comprised of an elected representative and a staff project manager from each city; and

WHEREAS, the Committee has reached consensus on goals, objectives and measures of effectiveness concerning mobility, environmental, and costs and finance; has participated regularly in the evaluation of alternatives; and has reached consensus on screening of alternatives; and

WHEREAS, each of the eleven cities is defining a strategy for using the Metro Gold Line as a tool to shape future transit-oriented development along the corridor which, for many of the cities, is contiguous to historic central business districts; and

WHEREAS, public meetings have been held to discuss project alternatives and their role in each city's future; and

WHEREAS, LRT is preferred over BRT or DMU as being more consistent with goals and objectives of the communities in the corridor, a finding supported by the Alternatives Analysis evaluation; and

WHEREAS, issues and concerns have been raised in the public participation process, the most common of which relate to noise and traffic impacts; and

WHEREAS, the Authority is joining with the COG to gain approval of federal matching funds to conduct Preliminary Engineering of the Metro Gold Line extension and address project impacts through Environmental Impact Report and Statement ("EIR/S"); and

WHEREAS, before granting funds for further work, the Federal Transit Administration requires adoption of a Locally Preferred Alternative.

NOW THEREFORE, THE CITY COUNCIL OF THE CITY OF ARCADIA, CALIFORNIA, DOES HEREBY FIND, DETERMINE AND RESOLVE AS FOLLOWS:

SECTION 1. The City Council supports the Locally Preferred Alternative consisting of:

1. Extend the Metro Gold Line light rail transit (due to open in July 2003) from its present terminus in eastern Pasadena through the City of Arcadia, continuing to the City of Claremont, California;

2. Prepare an EIR/S and conduct the Preliminary Engineering on the Locally Preferred Alternative;
3. Address all issues and concerns raised through public participation in the EIR/S and Preliminary Engineering;
4. Develop an intermodal station in each of the ten cities along the extension to be served by the Metro Gold Line; and
5. Expand demand response and fixed-route bus services, along with bicycle, pedestrian and auto access facilities at each of the intermodal stations.

SECTION 2. The City of Arcadia strongly recommends that the final project include new grade separations at Santa Anita Avenue and First Avenue in the City of Arcadia, and that the final project preserve existing grade crossings at Colorado Boulevard and Second Avenue.

SECTION 3. The City Clerk shall certify to the adoption of this Resolution.

Passed, approved and adopted this 21st day of May 2002.

/S/ GAIL A. MARSHALL

Mayor of the City of Arcadia

ATTEST:

/S/ JUNE D. ALFORD

City Clerk of the City of Arcadia

APPROVED AS TO FORM:

Stephan P. Ventas

City Attorney of the City of Arcadia

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) SS:
CITY OF ARCADIA)

I, JUNE D. ALFORD, City Clerk of the City of Arcadia, hereby certifies that the foregoing Resolution No. 6302 was passed and adopted by the City Council of the City of Arcadia, signed by the Mayor and attested to by the City Clerk at a regular meeting of said Council held on the 21st day of May, 2002 and that said Resolution was adopted by the following vote, to wit:

AYES: Councilmember Chang, Kovacic, Segal, Wuo and Marshall

NOES: None

ABSENT: None

/s/ JUNE D. ALFORD

City Clerk of the City of Arcadia

RESOLUTION NO. 2002-33

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF MONROVIA SUPPORTING THE SELECTION OF A LOCALLY PREFERRED ALTERNATIVE FOR EXTENSION OF THE METRO GOLD LINE FROM PASADENA TO CLAREMONT

WHEREAS, the San Gabriel Valley Council of Governments (COG) and the Metro Blue Line Construction Authority ("Authority") have conducted an Alternatives Analysis for extension of the Metro Gold Line from Pasadena to Claremont; and

WHEREAS, said Alternatives Analysis evaluates a "no-project" alternative as well as bus rapid transit (BRT), light rail transit (LRT) and diesel multiple unit (DMU) trains serving the corridor from Pasadena to Claremont; and

WHEREAS, the eleven cities in the corridor have formed a Project Steering Committee comprised of an elected representative and a staff project manager from each city; and

WHEREAS, the Project Steering Committee has reached consensus on goals, objectives, and measures of effectiveness concerning mobility, environmental, and costs and finance; has participated regularly in the evaluation of alternatives and has reached consensus on screening of alternatives; and

WHEREAS, each of the eleven cities is defining a strategy for using the Metro Gold Line as a tool to shape future transit-oriented development along the corridor which, for many of the cities is contiguous to historic central business districts; and

WHEREAS, over two dozen public meetings have been held and many more planned to discuss project alternatives and their role in each city's future; and

WHEREAS, public participation has demonstrated a preference for LRT over BRT or DMU as being more consistent with goals and objectives of the communities in the corridor, a finding supported by the Alternatives Analysis evaluation; and

WHEREAS, issues and concerns have been raised in the public participation process, the most common of which relate to noise and traffic impacts;

WHEREAS, the Authority is joining with COG to gain approval of federal matching funds to conduct preliminary engineering (PE) of the Metro Gold Line extension and address project impacts through environmental impact report and statement (EIR/S); and

WHEREAS, before granting funds for further work the Federal Transit Administration requires adoption of a Locally Preferred Alternative;

NOW, THEREFORE, BE IT RESOLVED that the City of Monrovia supports the Locally Preferred Alternative consisting of:

Section 1. An extension of the Metro Gold Line (due to open in 2003) light rail transit from its present terminus in Eastern Pasadena to the City of Claremont;

Section 2: preparing an EIR/S and conducting PE on the Locally Preferred Alternative;

Section 3: addressing of all issues and concerns raised through public participation in the EIR/S and PE:

Section 4: developing an intermodal station in each of the ten cities along the extension to be served by the Metro Gold Line; and

Section 5: expanding bus services and bicycle, pedestrian and auto access facilities at each of the intermodal stations.

PASSED, APPROVED and ADOPTED this 14th day of May, 2002 by the following vote:

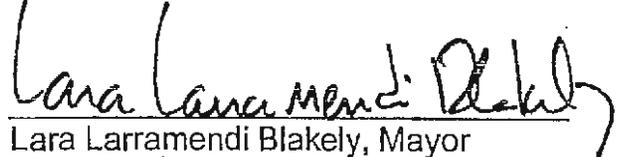
AYES: COUNCILMEMBERS ADAMS, FRANCO, GARCIA; MAYOR PRO TEM HAMMOND, MAYOR BLAKELY

NOES:

ABSTAIN:

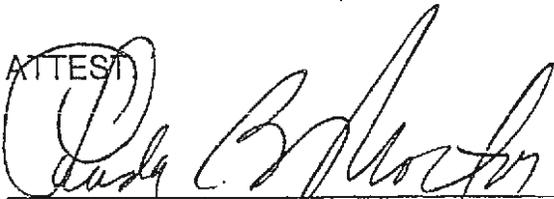
EXCUSED:

BY:



Lara Larramendi Blakely, Mayor
City of Monrovia, California

ATTEST



Linda B. Proctor, CMC, City Clerk
City of Monrovia, California

APPROVED AS TO FORM:

Craig A. Steele
City Attorney

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) §
CITY OF MONROVIA)

I, LINDA B. PROCTOR, CMC, City Clerk of the City of Monrovia, California, do hereby certify that the foregoing Resolution No. 2002-33 supporting the selection of a locally preferred alternative for extension of the Metro Gold Line from Pasadena to Claremont was duly adopted and passed at a regular meeting of the City Council on the 14th day of May 2002 by the following vote:

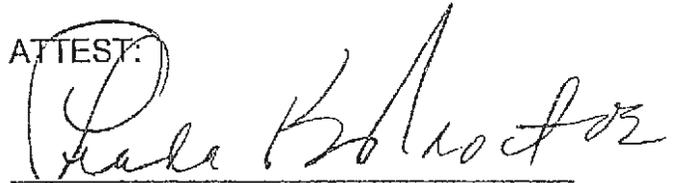
AYES: COUNCILMEMBERS ADAMS, FRANCO, GARCIA, MAYOR PRO TEM HAMMOND, MAYOR BLAKELY

NOES:

ABSTAIN:

EXCUSED:

ATTEST:



Linda B. Proctor, CMC, City Clerk
City of Monrovia, California

RESOLUTION NO. 02-14

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF DUARTE
ADOPTING THE LOCALLY PREFERRED ALTERNATIVE
PERTAINING TO THE METRO GOLD LINE**

WHEREAS, the San Gabriel Valley Council of Governments (COG) and the Metro Blue Line Construction Authority (Authority) have conducted an Alternatives Analysis for extension of the Metro Gold Line from Pasadena to Claremont; and

WHEREAS, said Alternatives Analysis evaluates a "no-project" alternative as well as bus rapid transit (BRT), light rail transit (LRT), and diesel multiple unit (DMU) trains serving the corridor from Pasadena to Claremont; and

WHEREAS, the eleven cities in the corridor have formed a Phase II Project Steering Committee comprised of an elected representative and a staff project manager from each city; and

WHEREAS, the Phase II Project Steering Committee has reached consensus on goals, objectives, and measures of effectiveness concerning mobility, environmental, and costs and finance, and has participated regularly in the evaluation of alternatives, and has reached consensus on screening of alternatives; and

WHEREAS, each of the eleven cities is defining a strategy for using the Metro Gold Line as a tool to shape future transit-oriented development along the corridor which, for many of the cities, is contiguous to historic central business districts; and

WHEREAS, over two dozen public meetings have been held and more are planned to discuss project alternatives and their role in each city's future; and

WHEREAS, public participation has demonstrated a preference for LRT over BRT or DMU as being more consistent with goals and objectives of the communities in the corridor, a finding supported by the Alternatives Analysis evaluation; and

WHEREAS, issues and concerns have been raised in the public participation process, the most common of which relate to noise and traffic impacts; and

WHEREAS, the Authority is joining with COG to gain approval of federal matching funds to conduct preliminary engineering (PE) of the Metro Gold Line extension and address project impacts through environmental impact report and statement (EIR/S);

NOW, THEREFORE, the City Council of the City of Duarte, California, does hereby resolve to adopt the Locally Preferred Alternative consisting of:

1. An extension of the Metro Gold Line (due to open in 2003) light rail transit from its present terminus in eastern Pasadena to the City of Claremont;
2. Preparing an environmental impact report and statement on the Locally Preferred Alternative;
3. Addressing all issues and concerns raised through public participation in the environmental impact report and statement and the preliminary engineering, including the following community concerns: noise, traffic impacts at railroad crossings, decline in property values, grade separation issues, use and design of soundwalls, noise easements, frequency and duration of train whistles, aesthetic issues and station location;
4. Developing an intermodal station in each of the additional ten cities along the extension to be served by the Metro Gold Line; and
5. Expanding bus services and bicycle, pedestrian, and auto access facilities at each of the intermodal stations.

PASSED, APPROVED, and ADOPTED this 14th day of May, 2002.

/s/ Phillip R. Reyes
Mayor Phillip R. Reyes

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ss.
CITY OF DUARTE)

I, Marla Akana, City Clerk of the City of Duarte, County of Los Angeles, State of California, hereby attest to the above signature and certify that Resolution No. 02-14 was adopted by the City Council of said City of Duarte at a regular meeting of said Council held on the 14th day of May, 2002, by the following vote:

AYES: Councilmembers: Chapjian, Fasana, Finlay, Paras, Reyes

NOES: Councilmembers: None

ABSENT: Councilmembers: None

/s/ Marla Akana
City Clerk Marla Akana
City of Duarte, California

RESOLUTION NO. 2002-27-1818**A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF IRWINDALE
ADOPTING THE LOCALLY PREFERRED
ALTERNATIVE OF LIGHT RAIL TRANSIT FOR THE
PASADENA GOLD LINE PHASE II EXTENSION TO CLAREMONT**

WHEREAS, the San Gabriel Valley Council of Government (COG) and the Metro Blue Line Construction Authority (Authority) have conducted an Alternatives Analysis for extension of the Metro Gold Line from Pasadena to Claremont; and

WHEREAS, said Alternatives Analysis evaluates a "no-project" alternative as well as bus rapid transit (BRT), light rail transit (LRT), and diesel multiple unit (DMU) trains serving the corridor from Pasadena to Claremont; and

WHEREAS, the eleven cities in the corridor have formed a Project Steering Committee comprised of an elected representative and a staff project manager from each city; and

WHEREAS, the Project Steering Committee has reached consensus on goals, objectives, and measures of effectiveness concerning mobility, environmental, and costs and finance; has participated regularly in the evaluation of alternatives and has reached consensus on screening of alternatives; and

WHEREAS, each of the eleven cities is defining a strategy for using the Metro Gold Line as a tool to shape future transit-oriented development along the corridor which, for many of the cities is contiguous to historic central business districts; and

WHEREAS, over two dozen public meetings have been held and many more are planned to discuss project alternatives and their role in each city's future; and

WHEREAS, public participation has demonstrated a preference for LRT over BRT or DMU as being more consistent with goals and objectives of the communities in the corridor, a finding supported by the Alternatives Analysis evaluation; and

WHEREAS, issues and concerns have been raised in the public participation process, the most common of which relate to noise and traffic impacts; and

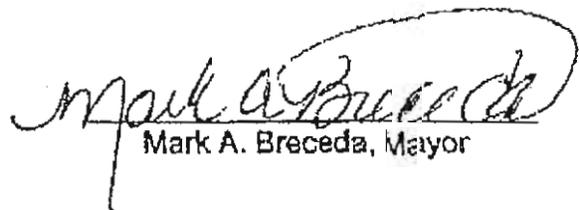
WHEREAS, the Authority is joining with COG to gain approval of federal matching funds to conduct preliminary engineering (PE) of the Metro Gold Line extension and address project impacts through environmental impact report and statement (EIR/S); and

WHEREAS, before granting funds for further work the Federal Transit Administration requires adoption of a Locally Preferred Alternative.

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Irwindale adopts the Locally Preferred Alternative consisting of:

1. An extension of the Metro Gold Line (due to open in 2003) light rail transit from its present terminus in eastern Pasadena to the City of Claremont;
2. Preparing an EIR/S and conducting PE on the Locally Preferred Alternative;
3. Addressing of all issues and concerns raised through public participation in the EIR/S and PE, including:
 - A. Completion of a transit-oriented specific area plan for the area, and financial participation from the Gold Line project.
 - B. Implementation of a traffic study for the area. Consideration of traffic calming devices, a station area gateway and a pedestrian and bicycle-friendly environment around the station area and along West Optical Drive and North Irwindale Avenue.
 - C. Beginning of negotiations with Miller Brewing Company about the fields adjacent to the potential station location. Seeking partial funding for the planning from the Gold Line.
4. Developing an intermodal station in each of the ten cities along the extension to be served by the Metro Gold Line; and
5. Expanding bus services and bicycle, pedestrian and auto access facilities at each of the intermodal stations.

PASSED, APPROVED, AND ADOPTED this 23rd day of May 2002.


Mark A. Breceda, Mayor

ATTEST:


Linda J. Kimbro, CMC
Deputy City Clerk

STATE OF CALIFORNIA }
COUNTY OF LOS ANGELES } ss.
CITY OF IRWINDALE }

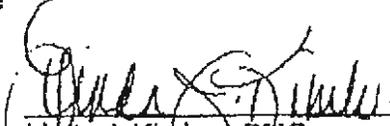
I, Linda J. Kimbro, Deputy City Clerk of the City of Irwindale, do hereby certify that the foregoing Resolution No. 2002-27-1818 was adopted at a regular meeting of the Irwindale City Council held on May 23, 2002, by the following vote:

AYES: Councilmembers: Tapia, Garcia, Ramirez, Mayor Breceda

NOES: Councilmembers: None

ABSENT: Councilmembers: Miranda

ABSTAIN: Councilmembers: None



Linda J. Kimbro, CMC
Deputy City Clerk

State of California
County of Los Angeles
City of Irwindale

I, Linda J. Kimbro, Deputy City Clerk, do hereby certify that the attached is a full, true and correct copy of the original,

Resolution No. 2002-27-1818

and on file in the City files of the City of Irwindale, and that I have carefully compared the same with the original.



Deputy City Clerk

RESOLUTION NO. 02-C48

A RESOLUTION OF THE CITY COUNCIL
OF THE CITY OF AZUSA SUPPORTING THE EXTENSION
OF THE METRO GOLD LINE FROM PASADENA TO CLAREMONT,
AND APPROVING THE LOCALLY PREFERRED
TRANSPORTATION ALTERNATIVE OF LIGHT RAIL TRANSIT

WHEREAS, the San Gabriel Valley Council of Governments (COG) and the Metro Blue Line Construction Authority (Authority) have conducted an Alternatives Analysis for extension of the Metro Gold Line from Pasadena to Claremont; and

WHEREAS, the eleven cities along the San Gabriel Valley rail corridor have formed a Project Steering Committee, comprised of an elected representative and a staff project manager from each city, and

WHEREAS, the Project Steering Committee has reached consensus on goals, objectives, and measures of effectiveness, and has participated regularly in the evaluation of alternatives and has reached consensus on screening of alternatives, and

WHEREAS, the City Council of the City of Azusa has evaluated the alternative modes of transportation, including bus rapid transit (BRT), light rail transit (LRT) and diesel multiple unit (DMU) trains serving the corridor from Pasadena to Claremont, including their advantages and disadvantages,

WHEREAS, the Authority is joining with COG to gain approval of federal matching funds to conduct preliminary engineering of the Metro Gold Line extension and address project impacts through environmental impact report and statement (EIR/S); and

WHEREAS, before granting funds for further work the Federal Transit Administration requires adoption of a Locally Preferred Alternative,

NOW, therefore, the City Council of the City of Azusa does hereby resolve as follows:

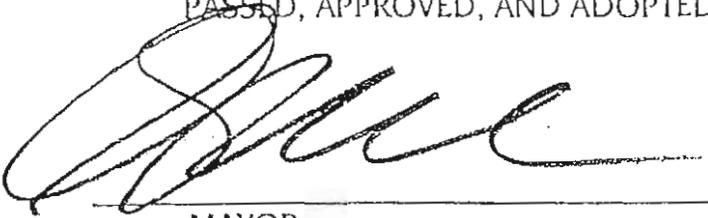
SECTION 1: The City Council supports the Light Rail Transit option as the Locally Preferred Alternative mode of transportation.

SECTION 2: In support of this Preferred Alternative, the City Council also supports the following:

1. The extension of the Metro Gold Line light rail transit from its present terminus in eastern Pasadena to the City of Claremont;

2. Preparation of an EIR/S and conducting preliminary engineering on the Locally Preferred Alternative;
3. Addressing all issues and concerns raised through public participation in the EIR/S and preliminary engineering studies;
4. Developing intermodal stations in each of the ten cities along the extension to be served by the Metro Gold Line; and
5. Expanding bus services and bicycle, pedestrian and auto access facilities at each of the intermodal stations.

PASSED, APPROVED, AND ADOPTED this 6th day of May, 2002.



MAYOR

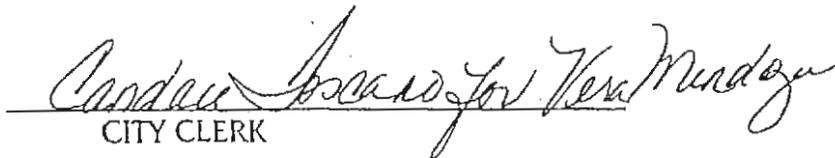
I HEREBY CERTIFY that the foregoing resolution was duly adopted by the City Council of the City of Azusa, at a regular meeting thereof, held on the 6th day of May, 2002, by the following vote of the Council:

AYES: COUNCIL MEMBERS: HARDISON, STANFORD, ROCHA, CHAGNON, MADRID

NOES: COUNCIL MEMBERS: NONE

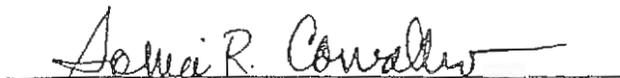
ABSENT: COUNCIL MEMBERS: NONE

ABSTAIN: COUNCIL MEMBERS: NONE



CITY CLERK

APPROVED AS TO FORM:



CITY ATTORNEY

A RESOLUTION APPROVING AND SUPPORTING THE PREFERRED ALTERNATIVE CONSISTING OF EXTENDING THE METRO GOLD LINE LIGHT RAIL TRANSIT FROM ITS PRESENT TERMINUS IN EASTERN PASADENA TO THE CITY OF CLAREMONT

CITY COUNCIL
CITY OF GLENDORA

WHEREAS the City of Glendora and the Metro Blue construction Authority (Authority) have conducted an Alternative Analysis for the extension of the Metro Gold Line from Pasadena to Claremont; and

WHEREAS said Alternative Analysis evaluates a "no-project" alternative as well as the bus rapid transit (BRT), light rail transit (LRT) and diesel multiple unit (DMU) trains serving the corridor from Pasadena to Claremont; and

WHEREAS the eleven cities in the corridor have formed a Project Steering Committee comprised of the elected representatives and a staff project manager from each city; and

WHEREAS the Project Steering Committee has reached consensus in goals, objectives, and measures of the effectiveness concerning mobility, environmental, and costs and finance; has participated regularly in the evaluation of alternatives and has reached consensus on screening of alternatives; and

WHEREAS each of the eleven cities is defining a strategy for using the Metro Gold Line as a tool to shape future transit-oriented development along the corridor which, for many of the cities is contiguous to historic central business districts; and

WHEREAS over two dozen public meetings have been held and many more are planned to discuss projects alternatives and their role in each city's future; and

WHEREAS public participation has demonstrated a preference for LRT over BRT or DMU as being more consistent with the goals and objectives of the communities in the corridor, a finding supported by the Alternative Analysis evaluation; and

WHEREAS issues and concerns have been raised in the public participation process, the most common of which relates to noise and traffic impacts;

WHEREAS the Authority is joining with COG to gain approval of federal matching funds to conduct preliminary engineering (PE) of the Metro Gold Line extension and address project impacts through environmental impact report and statement (EIR/S); and

WHEREAS before granting funds for future work the Federal Transit Administration requires adoption of a Locally Preferred Alternative;

NOW THEREFORE, BE IT RESOLVED that the City of Glendora supports the Locally Preferred Alternative;

1. An extension of the Metro Gold Line (due to opening 2003) light rail transit from its present terminus in eastern Pasadena to the City of Claremont;
2. preparing an EIR/S and conducting PE on the Locally Preferred Alternative;
3. addressing of all issues and concerns raised through public participation in the EIR/S and PE;
4. develop at least one intermodal station in each of the ten cities along the extension to be served by the Metro Gold Line; and
5. expanding bus service and bicycle, pedestrian and auto access facilities at each of the intermodal stations.

APPROVED AND ADOPTED this 14th day of May, 2002.

CITY OF GLENDORA

/s/ MARSHALL MOUW

By: _____
Marshall Mouw, Mayor

ATTEST:

/S/ JO ANN SHARP

City Clerk

APPROVED AS TO FORM:

/S/ D. WAYNE LEECH

City Attorney

State of California)
County of Los Angeles) ss.
City of Glendora)

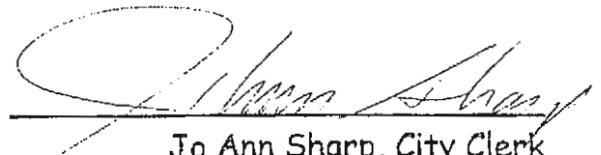
I, Jo Ann Sharp, City Clerk of the City of Glendora, California, do hereby certify that the foregoing resolution, being Resolution No. 02-48, was duly passed, approved and adopted by the City Council of the City of Glendora, approved and signed by the Mayor, and attested by the City Clerk, all at a Regular Meeting of said City Council held on the 14th day of May 2002, and that the same was passed and adopted by the following vote, to wit:

AYES: Mouw, Conway, Clifford, Hamlow, Herman

NOES: None

ABSENT: None

DATE: 5-20-02



Jo Ann Sharp, City Clerk
City of Glendora

RESOLUTION NO. 02-29

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF SAN DIMAS APPROVING THE LOCALLY PREFERRED ALTERNATIVE CONSISTING OF AN EXTENSION OF THE METRO GOLD LINE LIGHT RAIL TRANSIT FROM ITS PRESENT TERMINUS IN EASTERN PASADENA TO THE CITY OF CLAREMONT AND REQUESTING PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT AND STATEMENT AND PRELIMINARY ENGINEERING TO STUDY ALL ISSUES INVOLVED WITH SAID EXTENSION

WHEREAS, the San Gabriel Valley Council of Governments (COG) and the Metro Blue Line Construction Authority ("Authority") have conducted an Alternative Analysis for extension of the Metro Gold Line ("Gold Line") from Pasadena to Claremont; and

WHEREAS said Alternatives Analysis evaluated a "no-project" alternative as well as bus rapid transit (BRT), light rail transit (LRT) and diesel multiple unit (DMU) trains serving the corridor from Pasadena to Claremont; and

WHEREAS the eleven cities in the corridor have formed a Project Steering Committee comprised of an elected representative and a staff project manager from each city; and

WHEREAS the Project Steering Committee has reached consensus on goals, objectives, and measure of effectiveness concerning mobility, environmental, costs and finance and has participated regularly in the evaluation of alternatives and has reached consensus on screening of alternatives; and

WHEREAS each of the eleven cities is defining a strategy for using the Gold Line as a tool to shape future transit-oriented development along the corridor which, for many of the cities is contiguous to historic central business districts; and

WHEREAS over two dozen public meetings have been held and many more are planned to discuss project alternatives and their role in each city's future; and

WHEREAS public participation has demonstrated a preference for LRT over BRT or DMU as being more consistent with goals and objectives of the communities in the corridor, a finding supported by the Alternatives Analysis evaluation; and

WHEREAS issues and concerns have been raised in the public participation process, the most common of which relate to noise and traffic impacts;

WHEREAS the Authority is joining with COG to gain approval of federal matching funds to conduct preliminary engineering (PE) of the Gold Line extension and address

project impacts through preparation of an environmental impact report and statement (EIR/S); and

WHEREAS before granting funds for further work, the Federal Transit Administration requires adoption of a Locally Preferred Alternative;

NOW, THEREFORE, BE IT RESOLVED that the City of San Dimas does hereby find, determine and resolve as follows:

- I. This City supports the Locally Preferred Alternative consisting of the extension of the Gold Line; and
- II. This City supports preparation of an Environmental Impact report and Statement and conducting Preliminary Engineering on the Locally Preferred Alternatives and through the public participation process exploring all issues and concerns, including:
 - A. Development of an appropriate Traffic Mitigation and visual impact plan for the intersection of Bonita Avenue and Cataract Avenue.
 - B. Relocation of the existing spur/siding line at the southeast corner of Bonita Avenue and Cataract Avenue.
 - C. Development of an intermodal station in the city along the extension to be served by the Gold Line.
 - D. Development of a Drainage Study to Analyze the Capacity of existing storm drains and culvert systems crossings within the railroad right-of-way.
 - E. Expansion of bus services and bicycle, pedestrian and auto access facilities at each of the intermodal stations.

RESOLVED, FURTHER, that a copy of this Resolution shall be sent to the Chairman of the Authority.

APPROVED AND ADOPTED THIS 14th DAY OF MAY, 2002.


MAYOR

ATTEST:


CITY CLERK

I HEREBY CERTIFY that Resolution No. 02-29 was passed at the regular meeting of the San Dimas City Council held on May 14, 2002 by the following vote:

AYES: Councilmembers Bertone, McHenry, Templeman, Morris

NOES: None

ABSENT: None

ABSTAIN: Mayor Pro Tem Ebiner



City Clerk

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RESOLUTION 02-23

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LA VERNE, COUNTY OF LOS ANGELES, STATE OF CALIFORNIA, ENDORSING (1.) LIGHT RAIL TRANSIT FROM ITS PRESENT TERMINUS IN EASTERN PASADENA TO THE CITY OF CLAREMONT AS THE LOCALLY PREFERRED ALTERNATIVE; (2.) THE PREPARATION OF AN ENVIRONMENTAL IMPACT REPORT /STATEMENT ADDRESSING ALL ISSUES RAISED THROUGH PUBLIC PARTICIPATION; (3.) PROCEEDING WITH PRELIMINARY ENGINEERING ON THE LOCALLY PREFERRED ALTERNATIVE; (4.) DEVELOPING AN INTERMODAL STATION IN ALL OF THE CITIES ALONG THE CORRIDOR TO BE SERVED BY THE METRO GOLD LINE INCLUDING A STATION IN THE CITY OF LA VERNE; (5.) EXPANDING BUS SERVICES AND BICYCLE, PEDESTRIAN, AND AUTO ACCESS FACILITIES AT EACH OF THE INTERMODAL STATIONS

WHEREAS the City Council has previously indicated its support of the concept of light rail transit between the terminus of the Gold Line station in Pasadena extending eastward to the City of Claremont; and

WHEREAS the right-of-way is located along the Burlington Northern Santa Fe/Blue Line Construction Authority tracks adjacent to the University of La Verne, Oldtown Lordsburg and near the San Polo Business Park and Los Angeles County Fairplex; and

WHEREAS the locally preferred alternative includes a station in the City of La Verne; and

WHEREAS the City of La Verne has been an active member of the Gold Line Phase II Project Steering Committee since its inception; and

WHEREAS the San Gabriel Valley Council of Governments (COG) and the Metro Blue Line Construction Authority (Authority) have conducted an Alternatives Analysis for extension of the Metro Gold Line from Pasadena to Claremont; and

WHEREAS the Alternatives Analysis evaluates a "no project" alternative, a bus rapid transit (BRT) and diesel multiple unit (DMU) trains serving the corridor; and

WHEREAS the Project Steering Committee has reached consensus on goals, objectives, and measures of effectiveness concerning mobility, environmental issues, costs, and finance; has participated regularly in the evaluation of alternatives and has reached consensus on screening of alternatives; and

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2 WHEREAS each of the eleven cities is defining a strategy for using Metro
3 Gold Line as a tool to shape future transit-oriented development along the
4 corridor which, for many of the cities, is contiguous to historic central business
5 districts; and

6 WHEREAS over two dozen public meetings have been held and many
7 more are planned to discuss project alternatives and their role in each city's
8 future; and

9 WHEREAS public participation has demonstrated a preference for LRT
10 over BRT or DMU as being more consistent with goals and objectives of the
11 communities in the corridor, a finding supported by the Alternatives Analysis
12 evaluation; and

13 WHEREAS issues and concerns have been raised in the public
14 participation process including noise, aesthetics/visual disturbance, traffic and
15 congestion at intersections, parking impacts, financial impacts on the City,
16 frequency of trains, and impacts from San Bernardino County riders; and

17 WHEREAS, the Authority is joining with the COG to gain approval of
18 federal matching funds to conduct preliminary engineering of the Metro Gold Line
19 extension and address project impacts through an environmental impact report
20 and statement; and

21 WHEREAS before granting funds for further work the Federal Transit
22 Administration requires adoption of a Locally Preferred Alternative.

23 NOW, THEREFORE, IT IS HEREBY RESOLVED by the City Council of
24 the City of La Verne as follows:

25 Section 1. The City of La Verne supports the Locally Preferred Alternative
26 consisting of:

- 27 1. An extension of the Metro Gold Line (due to open in 2003) light rail transit
28 from its present terminus in eastern Pasadena to the City of Claremont;
2. Preparing an EIR/EIS and conducting preliminary engineering on the
Locally Preferred Alternative;
3. Addressing in the EIR/EIS and preliminary engineering all environmental
issues and concerns raised through public participation, and including the
following:
 - Noise, especially horns on trains;

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- Aesthetics and visual disturbance, especially poles and overhead wires;
- Traffic and congestion at intersections;
- Parking impacts on residential neighborhoods, downtown, and University of La Verne;
- Financial impacts to the City to build a station and parking structure;
- Impacts of train frequency;
- Impact of riders coming from cities to the east without a station in Montclair;

4. Developing an intermodal station in each of the cities along the extension to be served by the Metro Gold Line; and
5. Expanding bus service and bicycle, pedestrian and auto access facilities at each of the intermodal stations.

Section 2. The Mayor shall sign and the City Clerk shall certify to the passage and adoption of this Resolution and thereupon the same shall take effect and be in force.

APPROVED AND ADOPTED this 6th day of May, 2002.

/S/ JON BLICKENSTAFF

Mayor of the City of La Verne

ATTEST:

/S/ N. KATHLEEN HAMM

N. Kathleen Hamm, City Clerk

STATE OF CALIFORNIA)
COUNTY OF LOS ANGELES) ss. CITY CLERK'S CERTIFICATE
CITY OF LA VERNE)

I, N. KATHLEEN HAMM, City Clerk of the City of La Verne, California, DO HEREBY CERTIFY that the forgoing **Resolution No. 02-23** was duly adopted by said City Council at a regular meeting of the said City Council held on the **6th day of May, 2002**, and by the following vote to wit:

AYES: Council Members: Harden, Gatti, Harvey, and Mayor Blickenstaff.
NOES: Council Members: None.
ABSENT: Council Members: Rodriguez.
ABSTAIN: Council Members: None.

N.KATHLEEN HAMM
City Clerk of the City of
La Verne, California



By Lupe Estrella
Deputy City Clerk

(SEAL)