Canoga Transportation Corridor Draft Environmental Impact Report

SCH No. 2007071056

Appendix B

Alternatives Screening Report



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Canoga Transportation Corridor

Alternatives Screening Report

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1.0 INTRODUCTION

The Canoga Transportation Corridor Alternatives Screening Report documents the analysis being undertaken by the Los Angeles County Metropolitan Transportation Authority (Metro) to evaluate alternative alignments for an extension of the existing Metro Orange Line (MOL) between the Canoga MOL Station near Warner Center, in Woodland Hills, and the Chatsworth Metrolink Station in the northwestern San Fernando Valley. The main goal of this extension would be to capitalize on the success of the existing MOL and other transit services to improve mobility for West Valley residents and workers.

The western San Fernando Valley is served by transit lines provided by Metro, the City of Los Angeles Department of Transportation (LADOT) DASH and Commuter Express, Santa Clarita Transit, the Antelope Valley Transit Authority, and Simi Valley Transit. In addition, the Southern California Regional Rail Authority (SCRRA) operates the Ventura County Line of the Metrolink commuter rail service through Chatsworth with one station in the Study Area. This line shares trackway with Amtrak service between San Francisco and San Diego via Los Angeles Union Station.

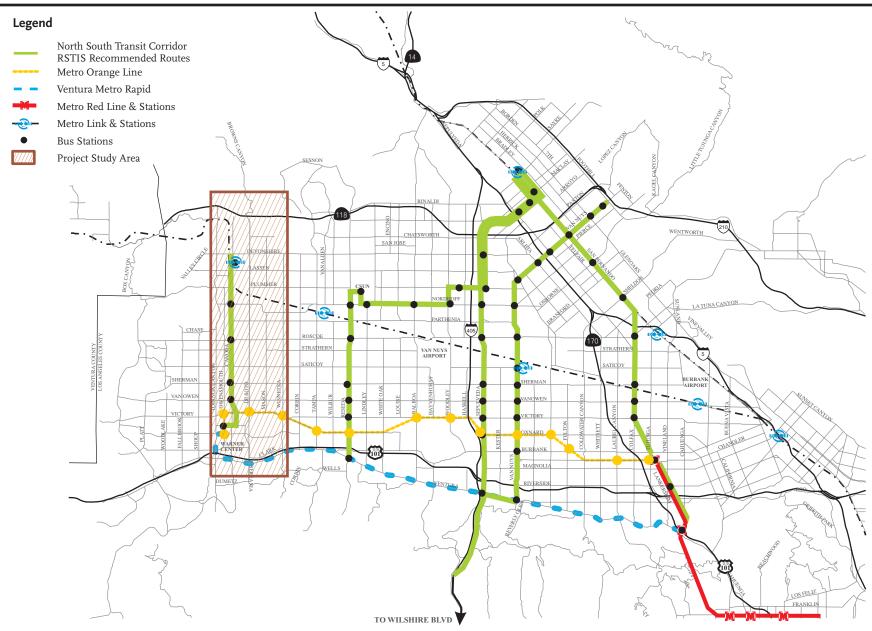
1.1 BACKGROUND/HISTORY

1.1.1 Metro San Fernando Valley North-South Transit Corridor Regionally Significant Transportation Investment Study

The San Fernando Valley North-South Transit Corridor Regionally Significant Transportation Investment Study (RSTIS), completed in April, 2003 evaluated north-south transit improvements throughout the San Fernando Valley. It considered transit enhancements on major corridors extending from Vineland in the East Valley to Topanga Canyon Boulevard in the West Valley. The RSTIS, which was approved by the Metro Board, recommended transit improvements on five northsouth corridors; (1) Lankershim-San Fernando, (2) Van Nuys, (3) Sepulveda, (4) Reseda, and (5) Canoga. Metro Rapid Bus service has been implemented on the first four corridors and Metro is currently working with LADOT on a separate study to identify additional bus speed enhancements on those four corridors, such as peak period bus lanes, queue jumps at signals and other physical improvements to enhance transit service. This Alternatives Screening Report therefore, focuses only on alternatives in the West Valley which could serve to implement the remaining RSTIS recommendation for improved north-south service in the Canoga Transportation Corridor. In order to assess a reasonable range of alternatives, potential north-south improvements in the Study Area between Topanga Canyon Boulevard on the west and Winnetka Avenue on the east were considered. There are no continuous north-south routes west of Topanga Canyon Boulevard on which service could be provided to meet the project goals and objectives. East of Winnetka Avenue, additional high-capacity north-south transit service would become competitive with the Reseda corridor.

Figure 1-1 illustrates the Study Area in relation to the RSTIS study area. The Study Area generally extends from Ventura Boulevard on the south to the SR-118 Freeway on the north, and from Winnetka Avenue on the east to Topanga Canyon Boulevard on the west. It spans the communities of Warner Center, Canoga Park, Winnetka, and Chatsworth within the City of Los Angeles.







Source: ITERIS



1.1.2 San Fernando Valley Transit Restructuring Study

Previous to the RSTIS, Metro had completed the San Fernando Valley Transit Restructuring study (1993-1994) with the basic objectives of (a) responding to the demographic and employment changes that had occurred during the previous decade and their attendant impacts on travel demand; (b) position the SFV transit network to take maximum advantage of upcoming rail improvements including both the Metro Red Line heavy rail and Metrolink commuter rail services; and (c) improve the efficiency and effectiveness of public transit in the San Fernando Valley. The study proposed a number of service improvements including:

- Transition from a grid-based network to a hybrid system with hubs at key locations: new or improved ones at Warner Center, North Hollywood and Universal City Metro Red Line stations, and California State University Northridge (CSUN).
- Maximize effective and efficient linking of north-south with east-west cross-Valley bus lines to reduce passenger transfers.
- Introduce community and neighborhood services as replacements for regional services that provide ineffective short distance travel mobility.
- Streamline and consolidate both Metro and LADOT limited-stop and express services into more effective connectors with the rail system by providing for improved north-south and east-west travel.
- Enhance transit connections to the Metrolink system and activity centers.

Metro and the City of Los Angeles have spent the last fourteen years successfully implementing the majority of the recommendations from this study. Additional work is underway as part of the new Service Sector operation with most of the remaining recommendations, including streamlining limited-stop and express services and the replacement of some standard bus services with small bus community shuttles where appropriate, being implemented in the near term.

1.1.3 Metro Rapid Program

The Metro Board approved the Metro Rapid Demonstration Project in March 1999 based on the findings and recommendations of the Regional Transit Alternatives Analysis (RTAA) that identified opportunities for the deployment of arterial bus rapid transit (BRT) service. One of the two selected demonstration corridors was Ventura Boulevard in the San Fernando Valley. The other was the Wilshire-Whittier corridor, along Wilshire Boulevard from the City of Santa Monica, through downtown Los Angeles extending into East Los Angeles along Whittier Boulevard. Metro Rapid service was implemented in June 2000 together with the Metro Red Line extension to the San



Fernando Valley and operated as a continuation of rapid transit service from the Universal City Red Line Station along Ventura Boulevard to Warner Center. The service has been highly successful with overall corridor ridership climbing by nearly 27 percent with over one third of the increase resulting from new transit ridership.



The Metro Rapid service provides limited stops at a spacing of approximately one-mile, enhanced amenities at Metro Rapid stops, and partial transit signal priority at signalized intersections. Buses share mixed flow lanes with vehicular traffic. The demonstration program clearly showed that the arterial BRT service concept could be delivered efficiently and reliably and that there was strong latent demand for this type of transit service. Based on this successful demonstration, the Metro Board approved the expansion of the Metro Rapid program to a total of 25 lines. As of June 2007, Metro Rapid lines have been implemented on Van Nuys Boulevard, Sepulveda Boulevard and Reseda Boulevards within the San Fernando Valley. Figure 1-2 illustrates the extent of the existing Metro Rapid Program.

1.1.4 Metro Orange Line (MOL)

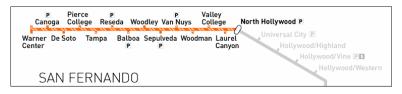
The existing MOL was completed in 2006 connecting Warner Center and the North Hollywood Red Line Station within an exclusive rightof-way for most of its operation. It follows the alignment of the Metro-owned former Southern Pacific (Burbank-Chandler) rightproviding of-way a second enhanced east-west transit service between the North Hollywood Metro Red Line station and Warner Center. The stations are similar in design to light rail stations, with canopies over the platforms, seating, lighting, bicycle



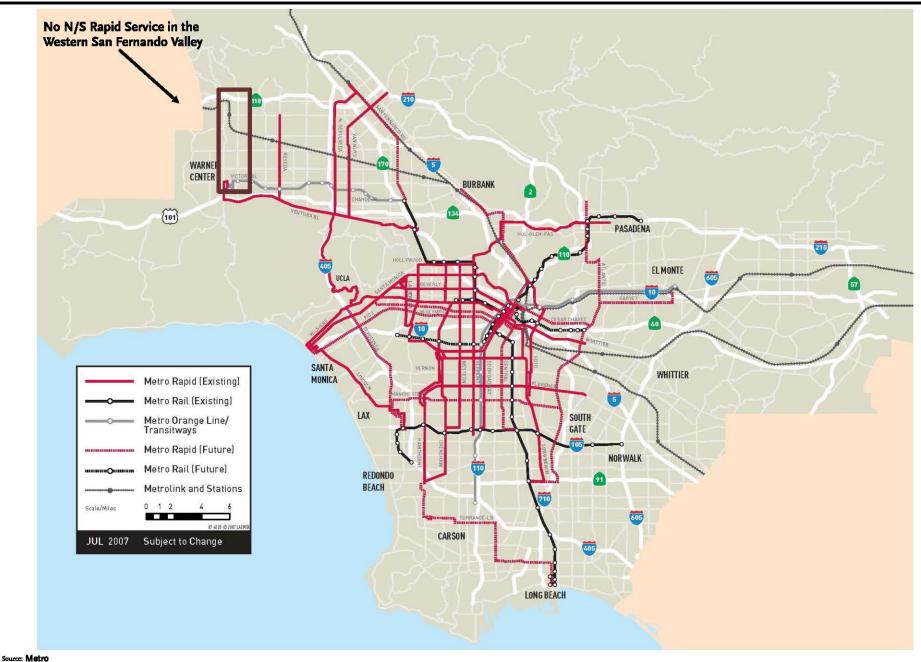
parking, and advance fare collection machines. In the Warner Center area, after stopping at the Canoga Station, which is the last station on the exclusive right-of-way, the MOL buses travel on street to reach the Warner Center Transit Hub on Owensmouth Avenue, the western terminus of the line. The MOL currently has 14 stations with direct access to Valley College, Van Nuys Government Center, the Sepulveda Dam Recreation Area, and Pierce College. Six of the 14 stations have park-and-ride lots. The MOL also includes eight miles of bike and pedestrian paths and extensive landscaping.

The Canoga Station opened in early 2007, providing a park-and-ride lot in the Warner Center area. The MOL has been a tremendous success and is currently carrying 25,000 riders per day, exceeding the forecasts for ridership in 2020. The success of the Metro Orange Line has led to the desire to determine how this service could be expanded to serve other parts of the San Fernando Valley. Metro decided to continue studying potential expansion of the MOL service and other transportation alternatives that would improve north-south transit service in the western San Fernando Valley, with the intent of identifying a set of alternatives that could be carried into the environmental review phase.

Metro Orange Line Route and Stations











2.0 PURPOSE AND NEED

2.1 SETTING

The need for a regional transportation improvement is driven by a number of factors. These include relieving congestion, providing transportation options to persons without auto mobility, enhancing the connectivity of transportation facilities, better serving pedestrian-oriented land uses and activity centers, increasing the efficiency of transit services, and making transit service more accessible and environmentally beneficial. This section identifies the existing and planned improvements to the transportation conditions in the Study Area and documents those improvements to north-south travel and regional transit connectivity that are needed to meet travel demands.

2.2 REGIONAL CONTEXT

The Southern California Region is home to 18 million people. Each City or community in Southern California is inexorably linked to the rest of the region by economic ties (i.e. employment). According to Metro's 2004 Congestion Management Plan, over 45% percent of the San Fernando Valley's home-to-work trips are made to destinations outside of the San Fernando Valley. Therefore, transit connections to regional transit facilities are important in supplying the demand for regional travel in the Study Area, as well as in the San Fernando Valley.

2.2.1 Regional Transit Network

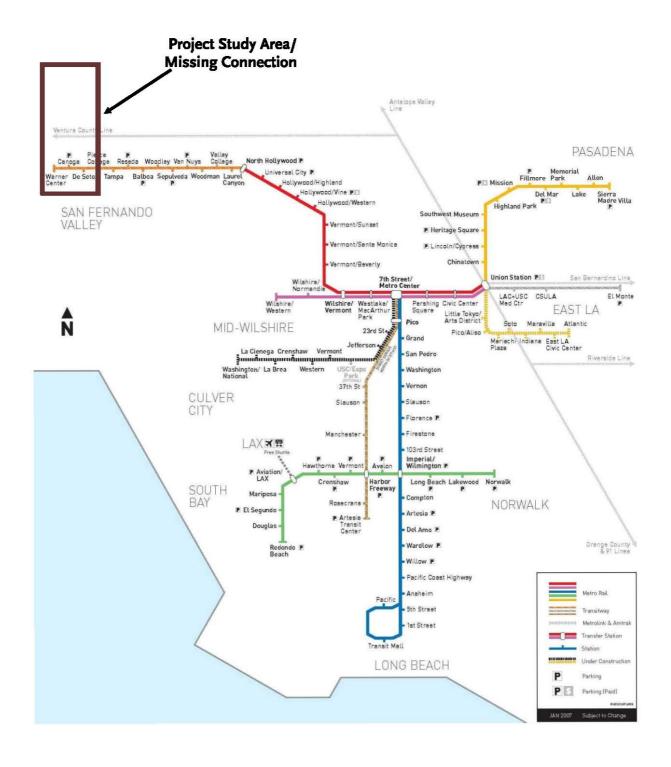
In the Study Area, Metro Local Bus service provides connections to regional transportation services, which extend between counties, including the inter-county commuter rail network, Metrolink, operated by the Southern California Regional Rail Authority (SCRRA) and Amtrak service, which operates daily trains between San Diego and northern California, with more frequent service between San Diego and Santa Barbara. Amtrak and the Ventura County line of Metrolink share a station in Chatsworth. Figure 2-1 illustrates the existing and planned Metro Rail and Transitway network in relation to the regional rail network. As seen in Figure 2-1, there are no high-capacity transit service connections to Metrolink in the Study Area. Figure 1-2 in the previous section illustrates the existing Metro Rapid program and the lack of high-capacity transit service in the western San Fernando Valley.

2.2.2 Regional Transportation Planning Efforts

2.2.2.1 2001 Metro Long-Range Transportation Plan (LRTP)

The 2001 LRTP for Los Angeles County, prepared by Metro, evaluates the long-term transportation needs of the County over the next twenty-five years. It includes recommendations for a Baseline Plan that includes projects already approved by the Metro Board, a Constrained Plan that includes projects that can be funded with funds available by allocation over the next twenty-five years, and a Strategic Plan that includes high priority projects that would be funded if more revenue became available. A high-capacity north-south transit service in the western San Fernando Valley is included in the Constrained Plan without the identification of a specific route. The Constrained Plan also includes an expansion of the Metro Rapid network, with the Strategic Plan including 22 new routes. None of the new Metro Rapid routes identified in the plan would traverse the western San Fernando Valley in a north-south alignment.







2.2.2.2 Regional Transportation Plan (RTP)

DESTINATION 2030 is the 2004 Regional Transportation Plan (RTP) for the six-county Region in Southern California including Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial. The Regional Transportation Plan (RTP) focuses on improving the balance between land use and the current as well as future transportation systems. The Southern California Association of Governments (SCAG) is required to develop, maintain and update the RTP on a three year cycle. The next update is expected to be approved this year (2007). On its TIER 2 project programming category, this plan includes a transitway investment along a north-south corridor in the western San Fernando Valley.

2.3 DEMOGRAPHICS

2.3.1 Population and Employment Growth Trends

Los Angeles County is the most populous county in California. The County is estimated to have had approximately 9.5 million residents in 2000, and is anticipated to have approximately 12.2 million residents in 2030. This represents a growth of over 28 percent over 30 years. The City of Los Angeles is the second most populous city in the United States, and the most populous in the State of California. Los Angeles was home to approximately 3.7 million people in the year 2000, according to the 2000 Census, and is predicted to grow to over 4.3 million people by the year 2030, representing 16 percent growth in that 30 year time frame.

The San Fernando Valley was originally developed as an agricultural area. It became a suburb of Los Angeles as an affordable living option for workers commuting into downtown Los Angeles and elsewhere in the County. In the 1980's, major employment centers located in the Valley, however, many residents continued to commute to their jobs while residents from other areas began commuting into the Valley. This resulted in a very large population and rapid job growth with a heavy pattern of commuting throughout the area.

Table 2-1 shows that in the year 2001, 1,393,082 people lived in the San Fernando Valley. By 2030, this area is predicted to have a population of 1,582,476 people, an increase of almost 190,000 people or approximately 14 percent.

Employment in the San Fernando Valley is also expected to grow steadily as well (see Table 2-1). In 2001, there were 573,002 jobs in the Valley. By the year 2030, the numbers of jobs in the Valley is expected to have grown to 723,501, a 26 percent increase.

In summary, the San Fernando Valley (including the Study Area), is expected to continue to grow throughout the next 23 years to 2030, with growth in the Study Area slightly lower than that for the San Fernando Valley as a whole.

The potential North-South transit corridor under consideration is in close proximity to employment concentrations located in Chatsworth, Canoga Park and Warner Center, as well as some more densely populated communities, including reasonable densities of transit dependent population.



Table 2-1 Population and Employment Trends Area 2000/2001 2030 Percent Growth						
Aica	2000/2001	2030	2000 – 2030			
Population						
Study Area	166,476	193,906	16%			
San Fernando Valley	1,393,082	1,582,476	14%			
City of Los Angeles	3,711,969	4,309,625	16%			
County of Los Angeles	9,5 million	12,2 million	28%			
Southern California Region	16.6 million	22.9 million	38%			
Employment						
Study Area	140,533	174,533	24%			
San Fernando Valley	573,002	723,501	26%			
City of Los Angeles	1,276,578	1,637,475	28%			
County of Los Angeles	4,5 million	5,6 million	27%			
Southern California Region	7.5 million	10.2 million	36%			

Source: SCAG RTP Model/Metro 2008 LRTP

Figure 2-2 and Figure 2-3 illustrate additional socioeconomic data that provide indicators of potential transit ridership. Figure 2-2 shows population and employment density by census tracts, attributed to the residential and commercial land use parcels. The darker green and orange colors indicate higher concentrations of population and employment respectively.

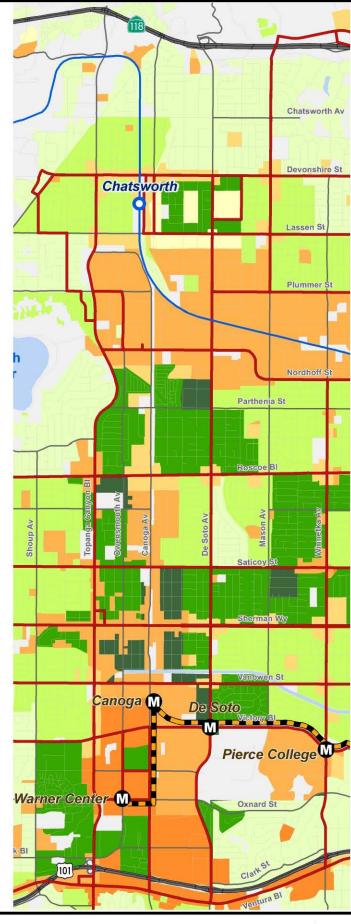
The highest population densities are concentrated around (though not necessarily adjacent to) the Canoga Avenue corridor in Canoga Park and the southern end of Chatsworth, as well as just east of the Chatsworth Transportation Center.

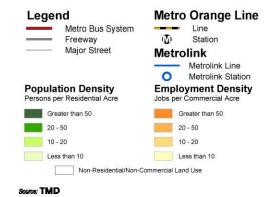
The most transit dependant population for the western San Fernando Valley, as shown in Figure 2-4, is in the area on both sides (though most densely on the east) of the Canoga Transportation Corridor through Canoga Park and southern Chatsworth, as well as just east of the Chatsworth Transportation Center. This group consists of those under 15, over 64 and adults with incomes under the poverty line. While there are good densities of transit dependents within reasonable proximity of the corridor (< 1 mile), little of this population is directly adjacent to the corridor (< 0.25 mile walk).

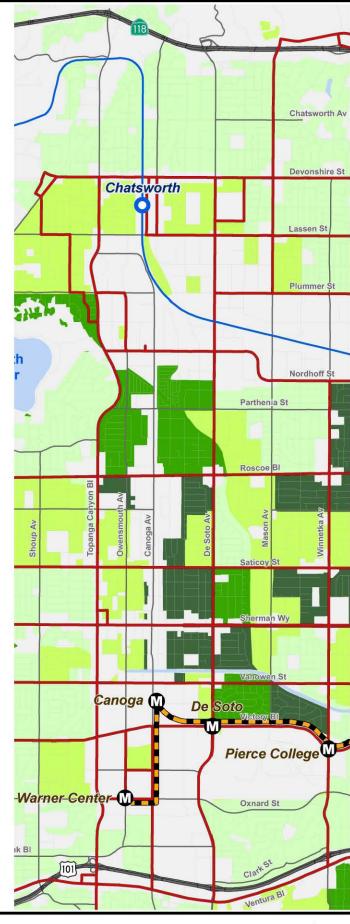
The highest employment densities are in the Warner Center area through to Ventura Boulevard and the mid-section of Chatsworth between Nordhoff and Lassen Streets. In addition, a narrow band of employment surrounds the Canoga Avenue corridor through Canoga Park. The highest concentration of employment around the Canoga corridor suggests demand may exist from other parts of the San Fernando Valley, eastern Ventura County and even Santa Clarita and the Antelope Valley to access employment located in this corridor.

Figure 2-3 illustrates census data regarding high transit usage for the western San Fernando Valley. There are areas of high transit usage in particular just east of the Canoga Avenue corridor (to De Soto) through Canoga Park, and to a lesser extent in the area of southern Chatsworth (Roscoe to Nordhoff Street, Topanga Canyon Boulevard to De Soto Avenue) surrounding the corridor. Enhanced transit in this corridor is well placed to improve transit mode share in areas already with a higher level of dependence, especially given the lack of transit on the Canoga alignment to date.

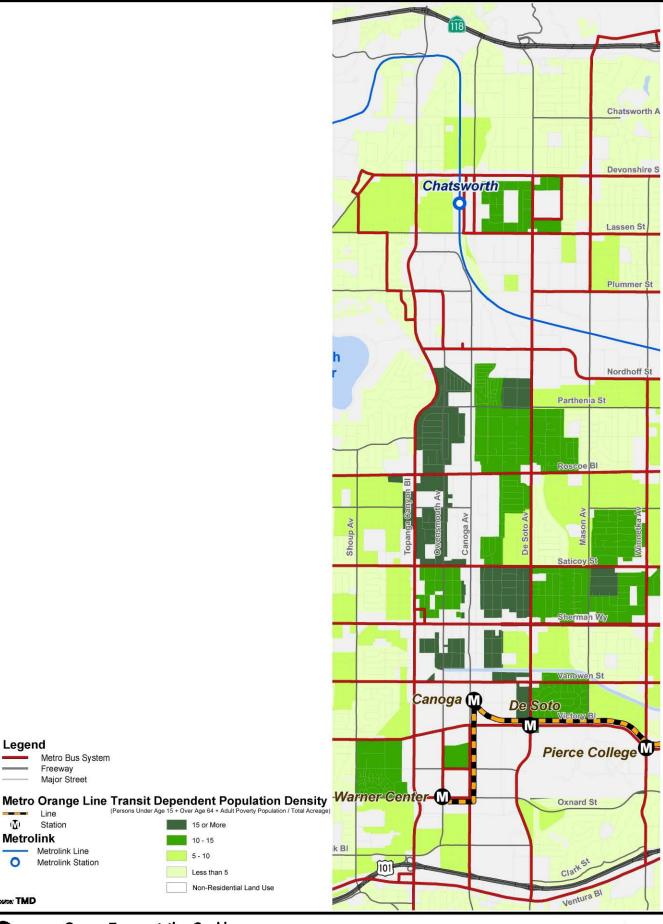














Source: TMD

Legend

(Z)

Metrolink

Metro Bus System Freeway Major Street

Station

Metrolink Line

Metrolink Station

Canoga Transportation Corridor Alternatives Screening Report

15 or More

Less than 5

10 - 15

5 - 10

2.4 ACTIVITY CENTERS

Major activity centers are potential good attractors of transit services due to their employment density, relatively high traffic congestion, cost of parking and occasional pedestrian amenities. One of the purposes of the Canoga Transportation Corridor will be to provide enhanced regional connecting service to as many of these activity centers as possible. Figure 2-5 illustrates the location of activity centers within the corridor, and the following is a list of different types of major activity centers in the corridor Study Area:

Medical Facilities

• Kaiser Foundation Hospital, Woodland Hills

Colleges & Universities

Pierce College

Regional Shopping Centers

- Westfield Shoppingtown Topanga Plaza
- Westfield Promenade Mall

Major Employment Centers

- Warner Center
- Chatsworth Industrial Center

Major Transit Hubs

- Warner Center Transit Hub
- Chatsworth Metrolink Station



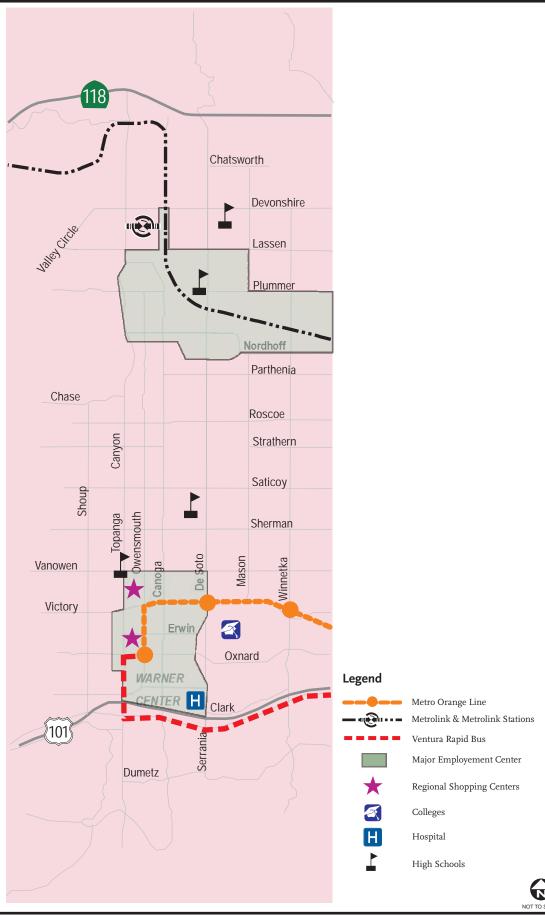
Warner Center



The Kaiser Foundation Hospital is a large medical center located in or near the north-south corridor in Woodland Hills adjacent to De Soto Avenue and Burbank Boulevard. Medical centers represent concentrations of employment, but they also represent locations where many visitor trips are made with many made via transit.

One junior college, Los Angeles Pierce College, is located adjacent to Warner Center near the De Soto and Winnetka Metro Orange Line stations. Four high schools, Canoga Park, Chatsworth, New Academy, and William Tell Aggeler Opportunity are also located within the corridor Study Area. Two large shopping centers are located within the Study Area as well. They include Westfield Promenade in Woodland Hills, and Westfield Shoppingtown Topanga in Canoga Park. A proposal for a new mixed-use development linking these two shopping centers is currently under going environmental review.







Source: ITERIS

2.5 LAND USE PLANNING AND POLICIES

This section includes relevant goals, objectives, and policies from land use planning documents applicable to the project area. The planning documents that apply to the Canoga Transportation Corridor include the following:

- SCAG Regional Comprehensive Plan and Guide
- SCAG Regional Transportation Plan
- Compass Blueprint 2% Strategy
- 2001 Long Range Transportation Plan for Los Angeles County
- Metro Bicycle Transportation Strategic Plan 2006
- Los Angeles General Plan Framework
- General Plan Transportation Element
 - o Land use/ Transportation Policy
 - Street and Bicycle Plans
- Community Plans
 - o Canoga Park- Winnetka Woodland Hills West Hills Community Plan
 - o Chatsworth-Porter Ranch Community Plan
- Specific Plan
 - Warner Center
 - o Devonshire/Topanga Corridor
- Other Plans/ Guidelines
 - o Community Design Overlay District
 - o Streetscape Plan
- Los Angeles Municipal Zoning Code
- Los Angeles River Revitalization Master Plan

2.5.1 Regional Plans

2.5.1.1 SCAG Regional Comprehensive Plan and Guide

The Southern California Association of Governments (SCAG) is designated by the federal government as the region's Metropolitan Planning Organization (MPO). SCAG's Regional Comprehensive Plan and Guide (RCPG) provides a 20 year framework for local and regional development. The Plan suggests that the region's transportation and planning agencies in cooperation and coordination with local jurisdictions should promote policies and strategies that further integrate land use and transportation.

2.5.1.2 SCAG Regional Transportation Plan (RTP)

The SCAG Regional Transportation Plan (RTP), adopted in April 2004 focuses on improving the balance between land use and the transportation network. The 2004 RTP recommends strategic investment in transit projects that include the expansion of bus rapid transit (BRT) services, like the Metro Orange Line, throughout the region.



2.5.1.3 Compass Blueprint 2% Strategy

The Compass Blueprint 2% Strategy is a guideline to implement the Growth Vision for Southern California. It recommends "modest changes to current land uses and transportation trends on only 2% of the land area of the region – the 2% Strategy Opportunity Areas." The goals of the Growth Vision are mobility, livability, prosperity, and sustainability. To achieve these goals on the ground, the Growth Vision encourages:

- Focusing growth in existing and emerging centers and along major transportation corridors
- Creating significant areas of mixed-use development and walkable communities
- Targeting growth around existing and planned transit stations
- Preserving existing open space and stable residential areas

The identified 2% Opportunity Areas are key areas in the region for targeting growth where projects, plans, and policies are consistent with Compass Blueprint principles. The Canoga Transportation Corridor area has been designated as part of the 2% Opportunity Area. Figure 2-6 illustrates SCAG-designated 2% Opportunity Strategy areas.

2.5.2 County of Los Angeles Plans

2.5.2.1 2001 Long Range Transportation Plan for Los Angeles County

The Los Angeles County Metropolitan Transportation Authority (Metro) is the Regional Transportation Planning Agency (RTPA) in Los Angeles County. Metro is responsible for planning and programming transportation in Los Angeles County, in accordance with Government Code Section 130051. The Long Range Transportation Plan (LRTP) provides the blueprint for future transportation improvements in Los Angeles County and is currently being updated. The 2001 plan placed a heavy emphasis on the development of the Rapid Bus program. It included the Metro Orange Line as one of the funded transit corridor projects in the early years of the plan, with a projected opening in 2004. The 2001 LRTP also made note of a \$100 million Traffic Congestion Relief Program (TCRP) grant for construction of a bus transit project in the San Fernando North/South Corridor, acknowledging the need for north-south transit improvements to connect to the Metro Orange Line and the Ventura Boulevard Rapid Bus.

2.5.2.2 Metro Bicycle Transportation Strategic Plan - 2006

In June 2006, Metro adopted the Metro Bicycle Strategic Plan to replace the earlier 1996 sub-regional bicycle master plans in Los Angeles County. Metro's 2006 regional plan shifted the focus from arterial bikeways to a strategy using bicycles with transit to fully utilize and enhance the regional transit system. The Northern Extension of the Metro Orange Line was not included in the Strategic Plan, but the plan did propose consideration of bike-transit hubs at stations along the Metro Orange Line and at Metrolink stations, including the Chatsworth Metrolink Station. If the Northern Extension of the Metro Orange Line had been an approved project at the time of the development of the Strategic Plan, it is likely that the stations along the extension would have been listed as candidate sites for bike-transit hubs.



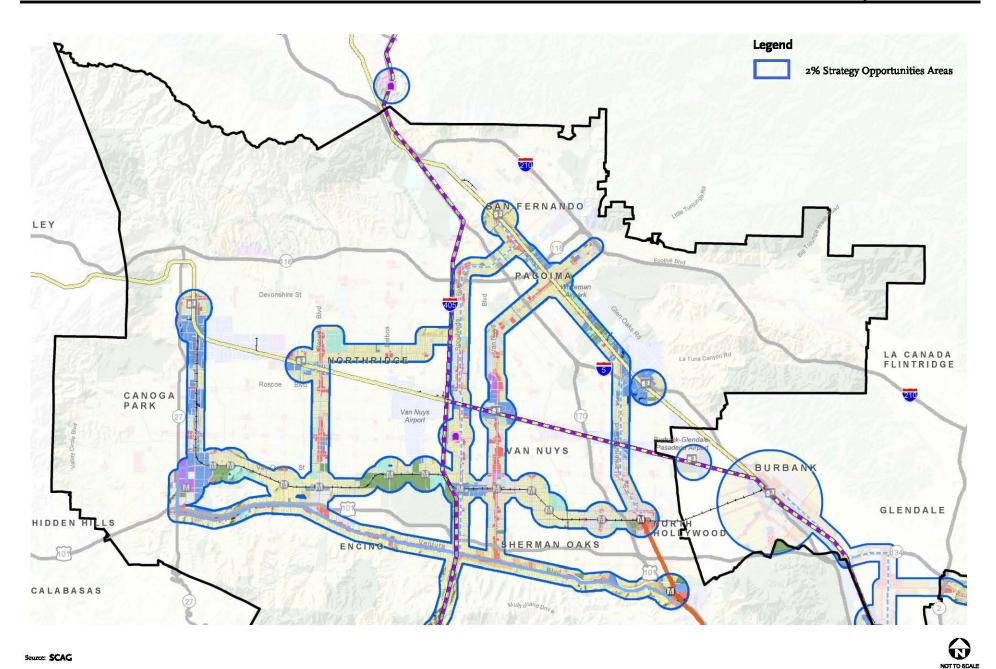




Figure 2-6 2% Strategy Opportunity Areas

Bike-transit hubs are on-street or off-street transit stops or transit centers with one or more municipal transit operators and travel modes, and high volumes of transit riders. They may include some or all of the following features:

- May include a combination of on- and off-street customer service and bus service/layover facilities; may include some operational support facilities
- Accessed by full range of modes; rail and bus transfer, auto, drop off, walking and bicycle
- May include shared or transit-only park- and-ride facilities
- May be located adjacent to transit-oriented retail and/or mixed use development; may be integrated with on-site development
- Customer services and amenities may include:
 - Service identity
 - o Customer Protection (canopy, shelter or building element)
 - o Service maps/timetables
 - o Neighborhood area map/information
 - o Ticket vending machines
 - o Lighting, seating and phones
 - o Bicycle racks/lockers
 - Sidewalk/intersection paving improvements (for improved pedestrian and ADA access and safety)
 - o Communication systems (such as VMS) to provide real-time travel, service problem, and delay information
 - o Closed-circuit television cameras and security speaker telephones
 - o Landscaping
 - o Public art

Most of this menu of potential bike-transit hub features will be provided at stations along the Canoga Transportation Corridor. As the station locations are designed, the features that would enhance the stations and help make them bike-transit hubs will be reviewed for inclusion in each station area plan.

2.5.3 City of Los Angeles Plans

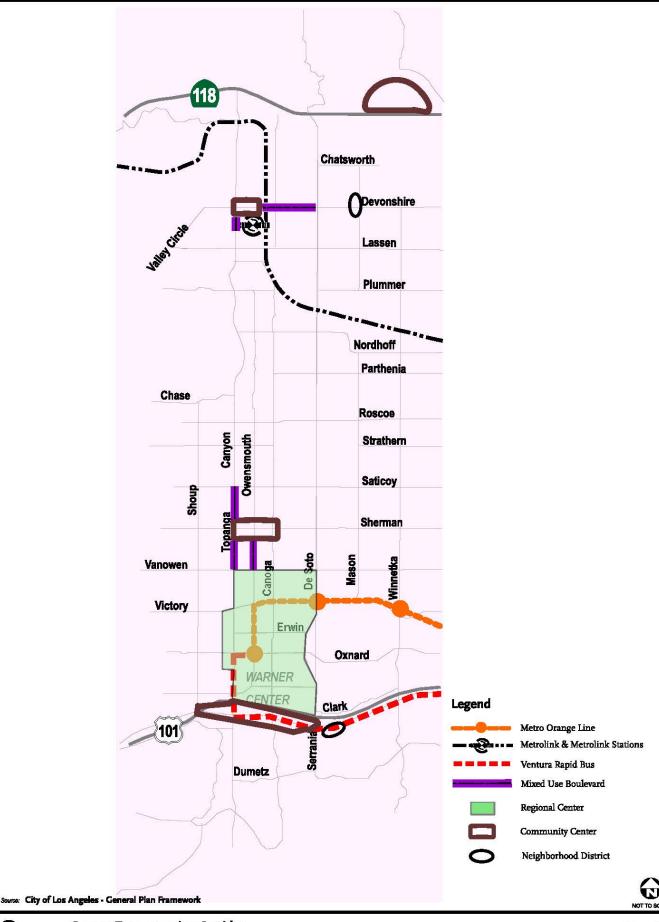
2.5.3.1 General Plan Framework

The Los Angeles General Plan Framework (adopted in December 1996 and re-adopted in 2001) is a special purpose element of the General Plan that establishes a vision for the future of the City by establishing development policy at a citywide level and within a citywide context.

The Framework's land use policies encourage the retention of stable neighborhoods and provide incentives for growth in commercial and mixed-use centers, along major boulevards, industrial districts, and in close proximity to transit stations. The Framework designates categories of activity centers according to the level of intensity, height, and type of use. The highest development intensities are targeted generally within one-quarter mile of transit stations. One of the goals of the Framework is that "transit stations function as a primary focal point of the City's development."

Figure 2-7 illustrates the location of districts, centers and mixed-use boulevards identified in the General Plan Framework.





2.5.3.2 General Plan Transportation Element

The Transportation Element of the City's General Plan (adopted by the City Council on September 8, 1999) establishes goals, policies, and objectives to further the development of an efficient citywide transportation system. Street classifications and roadway design standards are described and illustrated in the Transportation Element. The Element's policies seek to promote the development of a transportation network that promotes alternative modes of transportation, including transit, pedestrian, and bicycle accommodation. The Transportation Element establishes the following policies applicable to the Canoga Transportation Corridor:

- Promote the expansion of express and local bus service in priority corridors not served by the funded rail systems to provide alternatives to auto travel, increase transit ridership, and encourage the development of future rail service along specific corridors.
- Identify and develop transit priority streets that serve regional centers, major economic activity areas, and rail stations to enhance the speed, quality, and reliability of transit service.
- Promote the development of station locations that maximize service to activity centers and permit the concentration of development around stations.
- Promote the enhancement of transit access to neighborhood districts, community and regional centers, and mixed-use boulevards.
- Enhance pedestrian circulation in and around neighborhood districts, community centers, regional centers, transit portals/loading zones, and commercial development through facilities orientation and design.

Land Use/Transportation Policy

The Land Use Transportation Policy, prepared by the City of Los Angeles and the Los Angeles Metropolitan Transportation Authority (Metro) and adopted by the City Council in November 1993, contains policies to integrate land use and transportation. It is "a long-term strategy for integrating land use, housing, transportation, and environmental policies into the development of a city form that complements and maximizes the utilization of the region's transit system." Among the objectives of the Land Use Transportation Policy are to:

- Focus future growth of the City around transit stations
- Increase land use intensity in transit station areas, where appropriate.
- Accommodate mixed-use commercial/residential development
- Reduce reliance on the automobile
- Protect and preserve existing single family neighborhoods

Street Plan

The Transportation Element differentiates between corridors by their relative priority for transit provision in the City. Designations of the alignments relative to transit services within the Study Area include:

- Transit Priority Arterial Streets
 - o Topanga Canyon Boulevard between Ventura Boulevard and Devonshire Street
 - o Victory Boulevard between Topanga Canyon Boulevard and Lankershim Boulevard



- Future Transit Priority Arterial Streets
 - o Devonshire Street between Topanga Canyon Boulevard and Van Nuys Boulevard
 - o Roscoe Boulevard between Topanga Canyon Boulevard and Glenoaks Boulevard

Bicycle Plan

The City's Bicycle Plan, a portion of the Transportation Element, designates the following bikeways within the Study Area:

- Class II Bikeway
 - o Topanga Canyon Boulevard between Santa Susana Pass Road and Mulholland Drive
 - o Winnetka Avenue between Devonshire Street and Ventura Boulevard
 - o Devonshire Street between Topanga Canyon Boulevard and Woodman Avenue
- Commuter Bikeway
 - o De Soto Avenue between Rinaldi Street and Victory Boulevard
 - o Roscoe Boulevard between Topanga Canyon Boulevard and Balboa Boulevard

The City of Los Angeles Bicycle Plan is currently being updated. A Class I bicycle path was implemented as part of the Metro Orange Line extending across the San Fernando Valley from North Hollywood to Warner Center. This facility is maintained by LADOT and will be added to the Bicycle Plan as part of this update. The plan will seek to identify connections to the bikeway along the Metro Orange Line. Figure 2-8 illustrates the current City of Los Angeles Bicycle Master Plan.

2.5.4 City of Los Angeles Community Plans

For land use planning purposes, the City of Los Angeles is divided into 35 community planning areas. The Canoga Transportation Corridor lies within two Community Plan areas in the City of Los Angeles:

- Chatsworth-Porter Ranch
- Canoga Park-Winnetka-Woodland Hills-West Hills

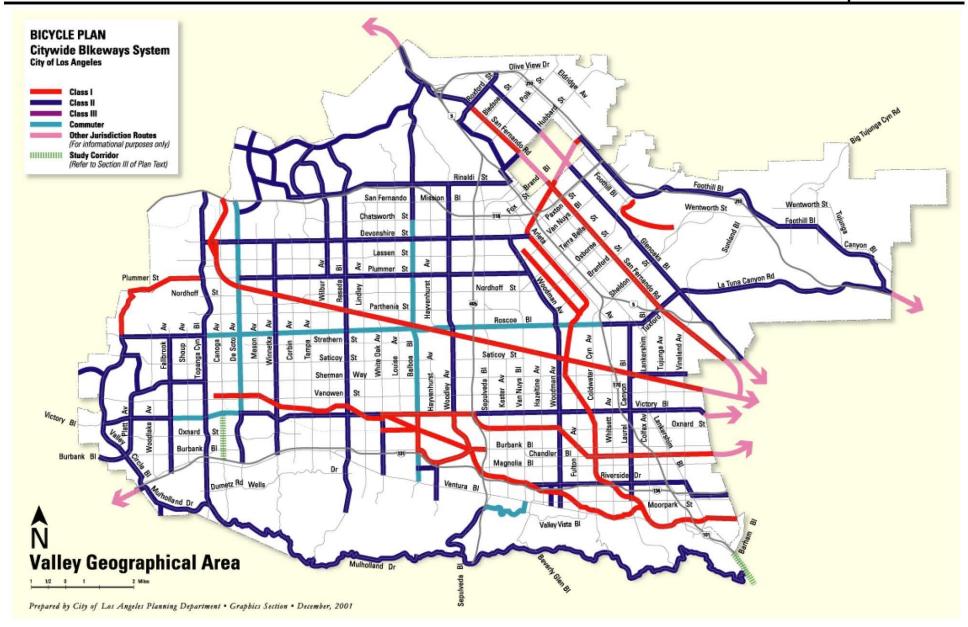
These Community Plans contain numerous land use and transportation policies that are mixed-use and transit-supportive. The Community Plans for the corridor propose specific circulation improvements including a series of bus and Metrolink improvements and the creation of a community transit center. Figure 2-9 illustrates the General Plan land use designations for the Canoga Transportation Corridor. Figure 2-10 illustrates the location of all Community Planning Areas in the City of Los Angeles.

2.5.4.1 Chatsworth-Porter Ranch Community Planning Area

The Chatsworth–Porter Ranch Community Plan (adopted September 1993, map revised June 2000) addresses the general land use guidelines that affect the project area and the surrounding Chatsworth and Porter Ranch communities.

The Chatsworth–Porter Ranch Community Plan encompasses the Metro ROW along Canoga Avenue north of Roscoe Boulevard. The Community Plan recognizes this ROW for transit purposes by:

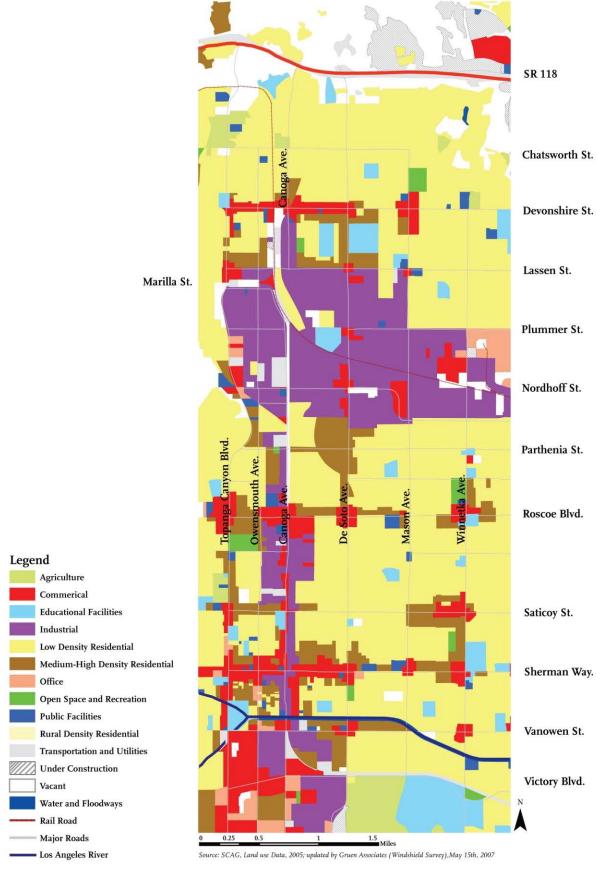




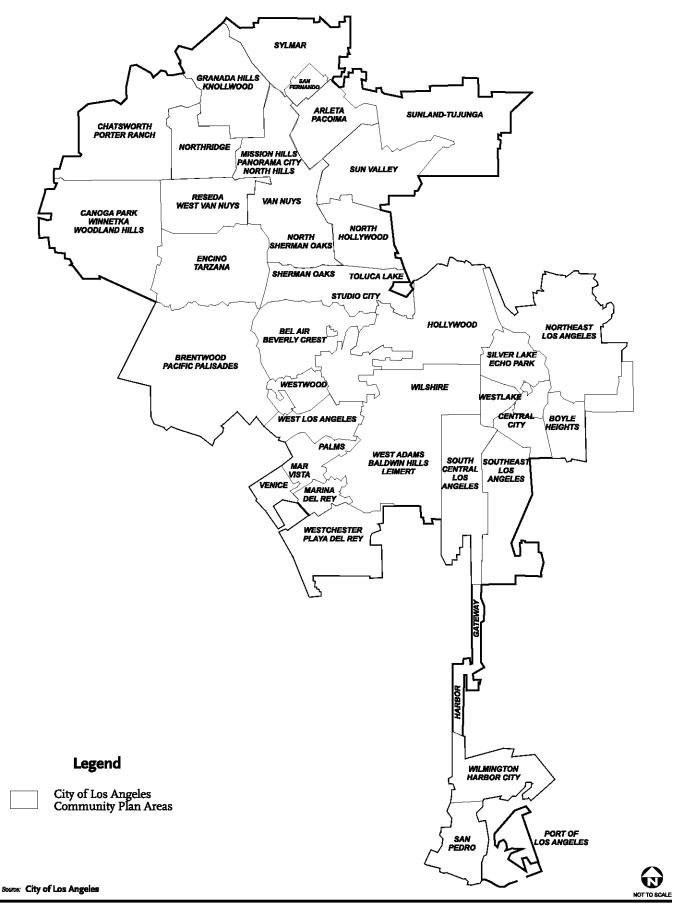
Source: City of Los Angeles - General Plan Framework







Source: Gruen Associates



- Identifying the right-of-way for transit purposes
- Identifying community transit centers that include the commuter train station, mixed use commercial, day care center, and secured parking, including a park-and-ride
- Encouraging a program in which the City and the owners(s) of the railroad right-of-way collaborate in order to establish the uses of the right-of-way for transit facilities, transit links between major centers and open spaces
- Encouraging new legislation amending the Municipal Code to result in discretionary review of any change in use that occurs on established transit right-of-way
- Encouraging the landscaping of the right-of-way to provide aesthetic and noise buffers to protect adjacent residential uses

2.5.4.2 Canoga Park - Winnetka- Woodland Hills - West Hills Community Planning Area

The Canoga Park–Winnetka–Woodland Hills–West Hills Community Plan (adopted in 1993 and updated in 1999) encompasses the Metro right-of-way (ROW) along Canoga Avenue between Roscoe Boulevard to Victory Boulevard. The Plan recognizes the Metro right-of-way as an important development opportunity for a variety of public transportation improvements, including light rail or busways, recreational bike/walking/equestrian trails, or opportunities for industrial development where it exists contiguous to existing industrial area.

2.5.5 City of Los Angeles Specific Plans

2.5.5.1 Warner Center Specific Plan

The Warner Center Specific Plan was approved in October, 2002 and is currently being updated. The Specific Plan area is bounded by Vanowen Street on the north, the Ventura (US-101) Freeway on the south, De Soto Avenue on the east, and just west of Topanga Canyon Boulevard. Warner Center is planned for a mix of retail, office, light industrial, and multi-family residential land uses. The Specific Plan provides for phased development within Warner Center with complementing transit improvements.

2.5.5.2 Devonshire/Topanga Corridor Specific Plan

The Devonshire/Topanga Corridor Specific Plan was adopted in September, 1993. The Plan spans Devonshire Street between Mason Avenue and Topanga Canyon Boulevard and along Topanga Canyon Boulevard between Devonshire Street and Lassen Street. The Devonshire/Topanga Corridor is primarily a commercial area. The purpose of the Plan is to ensure that future commercial development in the area occur in a manner compatible with the surrounding residential community and within the capacity of the circulation system as defined in the Chatsworth-Porter Ranch Community Plan. In addition, the area along Devonshire Street between Topanga Canyon Boulevard and Jovita Avenue is within the Chatsworth Business Improvement District.

2.5.6 Other City Plans

The central Canoga Park area, generally located along Sherman Way between Topanga Canyon Boulevard and De Soto Avenue, has several Community Design and Streetscape Plans. They are generally divided into two areas, Downtown Canoga Park (between Topanga Canyon Boulevard and Canoga Avenue) and the Canoga Park Commercial Corridor (extending from Eton Avenue to De Soto Avenue). In addition, the area bounded by Saticoy Street on the north, Vanowen Street on the



South, Topanga Canyon Boulevard on the west, and De Soto Avenue on the east is under a Targeted Neighborhood Initiative Program.

2.5.6.1 Community Design Overlay District

Downtown Canoga Park

The Downtown Canoga Park Community Design Overlay District (adopted November 2000) was established to improve the character of buildings in the area and retain the viability of the area as a pedestrian-oriented retail district.

Canoga Park Commercial Corridor

The Community Design Overlay District, established by the City in October 2001, became effective in June 2002. The District was established to improve the appearance and enhance the identity of the Canoga Park Commercial Corridor through the application of design guidelines and standards.

2.5.7 Municipal Zoning Code

The Los Angeles Municipal Code regulates land use and development throughout the City. The Code identifies uses that are permitted on the land parcels within the City. The zoning along the corridor is consistent with the planned use designation described in the City's Community Plans for the corridor. According to the Zoning Code, the entire length of the Metro ROW is zoned "PF" (Public Facilities). This zoning is compatible with a busway along the right-of-way.

2.5.8 Los Angeles River Revitalization Master Plan

The Los Angeles River Revitalization Master Plan (adopted May, 2007) outlines areas of opportunity to address the renewal of the River's environmental qualities that can catalyze change in diverse communities. The area spanning Canoga Avenue and Owensmouth Avenue along the River is one of the five opportunity areas selected for more detailed development of revitalization concepts. In this location, the Plan recommends creation of a community park and restoration of the River's ecological environment, including naturalization of the concrete channel and linkages to surrounding land uses and facilities.

The Plan recognizes the Canoga Transportation Corridor as an opportunity to partner with Metro to create an open space amenity along Canoga Avenue. The Plan recommends that the proposed Metro Orange Line extension should consider locating a bus stop at the River crossing at Canoga Avenue to improve open space access. It also proposes enhanced pedestrian and bicycle facilities on the arterial streets to connect with regional amenities including the Metro Orange Line and its bike path.

2.5.9 Reseda/Canoga Park Redevelopment Plan

The Redevelopment Plan prepared by the Community Redevelopment Agency of the City of Los Angeles (adopted December 1994) intends to "revitalize and redevelop land within the project area in order to eliminate blight and remedy the conditions which caused it." The southern portion of the Canoga Transportation corridor lies within the Reseda/Canoga Park Redevelopment Project Area. Among the objectives of the Plan, the following are applicable to the Canoga Transportation Corridor:



- Promote and encourage the establishment and development of businesses which serve the identified needs of the community, enhance the commercial environment, and maximize the creation of jobs and economic opportunities for area residents.
- The improvement of the quality of life and the environment, and the promotion and preservation of a positive image and safe environment for the community.
- The replacement and improvement of the community's supply of housing (inside or outside the Project Area), including opportunities for very low, low- and moderate-income households, multi family housing and areas with concentrated damage. Restore housing choices and rehabilitate and reconstruct housing for all income and age groups, including opportunities for home ownership.

2.6 EXISTING TRAFFIC CONDITIONS

The San Fernando Valley's street network is largely a grid pattern with generally alternating major and secondary arterial streets primarily spaced at ½-mile intervals. These are also typically supported by intermediate ¼-mile collector streets. This regular pattern of the arterial system provides a significant amount of traffic carrying capacity and a variety of routing alternatives. Due to this fact, turn volumes at the intersections of arterials tend to be moderate in comparison to many other subregions where most turns occur at widely spaced arterial crossings. Therefore, the Valley's grid street pattern is still predominantly controlled by two-phase traffic signals, which provide generally adequate levels of traffic progression. However, in the past several years, in response to increasing congestion many exclusive left-turn phases have been installed to facilitate the clearance of heavy left turns within the Study Area. Especially in the Topanga Canyon Boulevard and De Soto Avenue corridors many of the two-phase signals have been converted to multi-phase signals with exclusive left and right-turn phasing both in north-south and east-west directions. Multi-phase signals occasionally result in break-down of signal progression along the congested corridors.

2.6.1 Roadway Characteristics/Descriptions

Major Highways typically have a 100- to 104-foot right-of-way, with four to six travel lanes, a two-way left turn lane (or in limited cases a raised median), and curbside parking, which is restricted to non-peak periods on De Soto Avenue and sections of Topanga Canyon Boulevard. Secondary Highways typically have a 90-foot right-of-way with primarily four travel lanes and curbside parking; however, the median type often varies depending on the width of the street. Figure 2-11 illustrates the number of through lanes on various segments of the arterials located within the study corridor and Table 2-2, Table 2-3, and Table 2-4 present segment-by-segment details on the physical characteristics of the corridor arterial streets. The tables include the number of travel lanes, provision for an additional travel lane during peak periods, and parking restrictions. All three roadways have at least two through travel lanes except for Canoga Avenue north of Nordhoff Street in Chatsworth.

Topanga Canyon Boulevard and De Soto Avenue are the two significant north-south Major Highways that extend the length of the Valley within the Canoga Transportation Corridor. Topanga Canyon Boulevard provides a surface street connection through the Santa Monica Mountains to Pacific Coast Highway through the community of Topanga to Topanga Beach.

Both Topanga Canyon Boulevard and De Soto Avenue have interchanges with complete ramp connections to the Ronald Reagan (SR-118) Freeway and the Ventura (US-101) Freeway.







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	SEGMENT	No. of	If Parking	NORTHBOUND	No. of	If Parking	SOUTHBOUND	Speed
FROM	ТО	Lanes	prohibited, adds a lane	Parking Restrictions	Lanes	prohibited, adds a lane	Parking Restrictions	limit
TOPANGA CANYON								
Victory Blvd	Kittridge St	3	N	NSAT	2	Υ	NPR	40
Kittridge St	Vanowen St	3	N	NSAT	2	Υ	NPR	
Vanowen St	Bassett St	2	Υ	NS 7a-5p School Days	2	Υ	2hr 8a-6p Ex. Sun	
Bassett St	Schoolcraft St	2	Y	NS 7a-5p School Days	2	Υ	NPR	
Schoolcraft St	Hart St	2	Υ	NS 7a-5p School Days	2	Υ	2hr 8a-6p Ex. Sun	
Hart St	Gault St	2	Υ	2hr 8a-6p Ex. Sun	2	Υ	NPR	
Gault St	Sherman Way	2	Y	NPR	2	Y	NPR	
Sherman Way	Cantlay St	2	Υ	1hr 8a-6p Ex. Sun	2	Υ	NPR	
Cantlay St	Wyandotte St	2	Υ	1hr 8a-6p Ex. Sun	2	Υ	NPR	
Wyandotte St	Leadwell St	2	Υ	NPR	2	Υ	NPR	
Leadwell St	Valerio St	2	Υ	NPR	2	Υ	NPR	
Valerio St	Runnymede St	2	Y	NPR	2	Y	NPR	
Runnymede St	Cohasset St	2	N	NSAT	2	Υ	NPR	
Cohasset St	Covello St	2	Y	1hr 8a-6p Ex. Sat & Sun	2	Υ	NPR	40
Covello St	Saticoy St	2	Y	1hr 8a-6p Ex. Sat & Sun	2	Y	1hr 8a-6p Ex. Sun / Handicap Parking	40
Saticoy St	Elkwood St	2	Υ	NP 9a-11a Wed S.C	2	Υ	NP 9a-11a Thurs S.C	
,		2	Y	NP 9a-11a Wed S.C	2	Y	NP 9a-11a Thurs S.C / 15min 6a-6p	
Elkwood St	Strathern St						Ex. Sat & Sun	
Strathern St	Lanark St	2	Y	NS 3-7p Ex. Sat & Sun	2	N	NSAT	40
Lanark St	Roscoe Blvd	2	Y	NP 9a-11a Wed S.C / NS 3-7p Ex. Sat & Sun / NSAT	2	N	NSAT	45
Roscoe Blvd	Schoenborn St	3	N	NSAT	2	N	NSAT	
Schoenborn St	Eccles St	2	N	NSAT	2	N	NSAT	
Eccles St	Chase St	2	Y	NPR	2	Υ	NPR	
Chase St	Parthenia St	2	Y	NPR	2	Υ	NPR	45
Parthenia St	Gresham St	2	Y	NP 8a-11a Fri S.C	2	Υ	NPR	45
Gresham St	Nordoff St	2	Υ	NP 8a-11a Fri S.C	2	Υ	NPR	45
Nordoff St	Prairie St	2	Υ	NPR	2	Υ	NPAT / NPR	45
Prairie St	Plummer St	2	Υ	NS 3-7p Ex. Sat & Sun	2	N	NSAT	45
Plummer St	Marilla St	2	Y	NS 3-7p Ex. Sat & Sun	2/3	N	NSAT	45
Marilla St	Lassen St	2	Υ	NPR	2	Υ	NPR / NSAT	45
Lassen St	Dupont St	2	Υ	NPUT	2	Υ	NPUT / NPR	
Dupont St	Craggyview St	2	Y	NPUT / NS 3-7p Ex. Sat & Sun	2	Y	NS 6:30-9a Ex. Sat & Sun / NPUT / NS 6:30-9a Ex. Sat & Sun / NPUT /	
Craggyview St	Devonshire St	2	Y	NPUT / NS 3-7p Ex. Sat & Sun / 1hr 8a-3p Ex. Sun	2	Y	1hr 9:30a-6p	45
Devonshire St	Hiawatha St	2	Υ	NS 3-7p Ex. Sat & Sun / NP 9p-3a Wed S.C	2	Y	NS 6:30-9:30a / NP 9:30a-5p / NP 9p 3a Thurs S.C	
Hiawatha St	San Jose St	2	Υ	NS 3-7p Ex. Sat & Sun / NP 9p-3a Wed S.C	2	Υ	NS 6:30-9:30a / NP 9:30a-5p / NP 9p 3a Thurs S.C	45
San Jose St	Andora Ave	2	Y	NS 7-10a;3-7p Ex. Sun / 1hr 10a-3p / NP 9p-3a Wed S.C	2	Y	NS 7-10a;3-7p Ex. Sun / 1hr 10a-3p Ex. Sun / NP 9p-3a Thurs S.C	
		2	Y	NS 7-10a;3-7p Ex. Sun / 1hr 10a-3p /	2	N	NPAT	
Andora Ave	Chatsworth St	2	Y	NP 9p-3a Wed S.C NS 7-10a;3-7p Ex. Sun / 1hr 10a-3p /	2	Y	NS 7-10a;3-7p Ex. Sun / 1hr 10a-3p	
Chatsworth St	Tulsa St			NP 9p-3a Wed S.C			Ex. Sun / NP 9p-3a Thurs S.C	
Tulsa St	Old Santa Susana Pass Rd	2	N	NPAT	2	Υ	NP 9p-3a Thurs S.C	
Old Santa Susana Pass Rd	Santa Susana Pass Rd	2	N	NPAT / NP 10p-6a	2	Y	NP 10p-6a	45
Santa Susana Pass Rd		2	N	NPAT / NP 10p-6a	2	N	NSAT	45
Sioux Dr	118 EB Ramps	2	N	NSAT	2	N	NSAT	
118 EB Ramps	118 WB Ramps	3	N	NPR	2	N	NPR	
118 WB Ramps	Poema Pl	1	N	NSAT	1	N	NSAT	

Key:

NSAT- No Stopping Any Time

NS- No Stopping Ex- Except Sat- Saturday Sun-Sunday Wed- Wednesday

NPR- No Parking Restriction

NP- No Parking SC- Street Cleaning

NPUT- No Parking Unhitched Trailers NPAT- No Parking Any Time Handi- Handicap Sign SD- School Days

F- Friday



	<u> </u>		· ·	ent for Canoga Aver				
ROADW	AY SEGMENT			RTHBOUND			DUTHBOUND	
FROM	то	No. of Lanes	If Parking prohibited, adds a lane	Parking Restrictions	No. of Lanes	If Parking prohibited, adds a lane	Parking Restrictions	Speed limit
CANOGA AVE								
Victory Blvd	Vanowen St	3	N	NSAT	2	N	NSAT	35
Vanowen St	Bassett St	2	N	NSAT	1/2	Υ	NSAT / NPAT	
Bassett St	Hart St	2	N	NSAT	1	Υ	NSAT	
Hart St	Gault St	2	N	NSAT	1	Υ	1hr 8a-6p Ex. Sat & Sun / NP 10a-12noon Mon S.C	
Gault St	Sherman Way	2	N	NSAT	2	Y	1hr 8a-6p Ex. Sat & Sun / NP 10a-12noon Mon S.C	35
Sherman Way	Wyandotte St	2	N	NSAT	2	Υ	1hr 8a-6p Ex. Sun	35
Wyandotte St	Valerio St	2	N	NSAT	2	Υ	NPR	
Valerio St	Cohasset St	2	N	NSAT	2	Υ	NPR	
Cohasset St	Saticoy St	2	N	NSAT	2	Υ	1hr 8a-6p Ex. Sun	
Saticoy St	Keswick St	2	N	NSAT	2	Υ	1hr 8a-6p Ex. Sun	
Keswick St	Ingomar St	2	N	NSAT	2	N	NPAT	
Ingomar St	Strathern St	2	N	NSAT	2	Υ	NPR	
Strathern St	Roscoe Blvd	2	N	NSAT	2	Υ	2hr 8a-6p / NPR / NPAT	
Roscoe Blvd	Schoenborn St	2	N	NSAT	2	Υ	NPR	35
Schoenborn St	Chase St	2	N	NPAT	2	Υ	NPR	
Chase St	Parthenia St	2	N	NSAT	2	Υ	NPR	
Parthenia St	Osborne St	2	N	NSAT	2	N	NSAT / NP 10p-6a	
Osborne St	Nordoff St	2	N	NSAT	2	Υ	NPR	
Nordoff St	Prairie St	2/1	N	NSAT	1	Υ	NP 10p-6a	
Prairie St	Gledhill St	1	N	NP 10p-6a	1	Υ	NP 10p-6a	
Gledhill St	Plummer St	1	N	NP 10p-6a	1	Υ	NP 10p-6a	35
Plummer St	Marilla St	1	Y	NPR	1	Υ	NPR / NPAT	
Lassen St	Mayall St	1	Υ	NPR	1	Υ	NPR	
Mayall St	Lemarsh St	1	Y	NPR	1	Y	NPR	
Lemarsh St	Devonshire St	1	Υ	1hr 8a-6p Ex. Sat & Sun	1	Υ	NPR	
Devonshire St	San Jose St	2	Υ	NP 8a-11a Fri S.C	2	Υ	NP 8a-11a Thurs S.C	35
San Jose St	Stanwell St	2	Y	NP 8a-11a Fri S.C	2	Υ	NP 8a-11a Thurs S.C	35
Stanwell St	Germain St	1	Y	NP 8a-11a Fri S.C	2	Y	NP 8a-11a Thurs S.C	35
Germain St	Chatsworth St	1	Υ	NP 8a-11a Fri S.C	1	Y	NP 8a-11a Thurs S.C / NP on Pavement	35
Chatsworth St	Bermuda St	1	Y	NPR	1	Y	NPR	35
Bermuda St	Bermuda St	1	Y	NPR	1	Υ	NPR	
Bermuda St	Tulsa St	1	Y	NPR	1	Y	NPR	35
Tulsa St	Nashville St	1	Y	NPR	1	Υ	NPR	
Nashville St	Rinaldi St	1/2	Y	NPR	1	Y	NPR	
Rinaldi St	Celtic	1	N	NSAT	1	N	NSAT	
Celtic	Candice PI	1	N	NSAT	1	N	NSAT	
Candice PI	Mayan Dr	1	N	NSAT	1	N	NSAT	

Key:

NSAT- No Stopping Any Time

NS- No Stopping

Ex- Except Sat- Saturday

Sun- Sunday Wed- Wednesday

NPR- No Parking Restriction

NP- No Parking SC- Street Cleaning

NPUT- No Parking Unhitched Trailers

NPAT- No Parking Any Time Handi- Handicap Sign

SD- School Days

F- Friday



Table 2-4 R	oadway Charact	eristi	cs by Se	gment for De Soto Avent	ıe			
ROADW	AY SEGMENT	1		NORTHBOUND		S	OUTHBOUND	
FROM	то	No. of Lanes If Parking prohibited, adds a lane		Parking Restrictions	No. of Lanes	If Parking prohibited, adds a lane	Parking Restrictions	Speed limit
DE SOTO AVE								
Victory Blvd	Deering Circle	2	Υ	NS 3:30p-7p Ex. Sat & Sun	2		NS 7a-9:30a Ex. Sat & Sun / NP 8a-10a Thurs S.C	35
Deering Circle	Kittridge St	2	Υ	NS 3:30p-7p Ex. Sat & Sun	2		NS 7a-9:30a Ex. Sat & Sun / NP 8a-10a Thurs S.C	
Kittridge St	Vanowen St	2	Υ	NS 3:30p-7p Ex. Sat & Sun	2	Υ	NS 7a-9:30a Ex. Sat & Sun	35
Vanowen St	Bassett St	2	Υ	NS 3:30p-7p Ex. Sat & Sun / NP 10a- 12noon Wed S.C	2	Y	NS 7a-9:30a Ex. Sat & Sun / NP 10a-12noon Thurs S.C	
Bassett St	Hart St	2	Υ	NS 3:30p-7p Ex. Sat & Sun / NP 10a- 12noon Wed S.C	2	Y	NS 7a-9:30a Ex. Sat & Sun / NP 10a-12noon Thurs S.C	
Hart St	Vose St	2	Υ	NS 3:30p-7p Ex. Sat & Sun / NP 10a- 12noon Wed S.C	2	Y	NS 7a-9:30a Ex. Sat & Sun / NP 10a-12noon Thurs S.C	35
Vose St	Gault St	2	Υ	NS 3:30p-7p Ex. Sat & Sun / NP 10a- 12noon Wed S.C	2	Υ	NS 7a-9:30a Ex. Sat & Sun / NP 10a-12noon Thurs S.C	
Gault St	Sherman Way	2	Υ	NS 3:30p-7p Ex. Sat & Sun / NP 10a- 12noon Wed S.C	2	Y	NS 7a-9:30a Ex. Sat & Sun / NP 10a-12noon Thurs S.C	
Sherman Way	Wyandotte St	2	Υ	2hr 8-3:30p Ex. Sun / NS 3:30p-7p Ex. Sat & Sun / NP 8a-10a Wed S.C	2	Y	NS 7a-9:30a Ex. Sat & Sun / NP 8a-10a Thurs S.C	
Wyandotte St	Valerio St	2	Y	NS 3:30p-7p Ex. Sat & Sun	2	Y	NS 7a-9:30a Ex. Sat & Sun	35
Valerio St	Cohasset St	2	Y	NS 3:30p-7p Ex. Sat & Sun	2	Υ	NS 7a-9:30a Ex. Sat & Sun	
Cohasset St	Saticoy St	2	Y	NS 3:30p-7p Ex. Sat & Sun	2	Υ	NS 7a-9:30a Ex. Sat & Sun	35
Saticoy St	Ingomar St	2	Υ	NS 3:30p-7p Ex. Sat & Sun	2	Υ	NS 7a-9:30a Ex. Sat & Sun	35
Ingomar St	Strathern St	2	Υ	NS 3:30p-7p Ex. Sat & Sun	2	Υ	NS 7a-9:30a Ex. Sat & Sun	35
Strathern St	Fairchild Ave	2	Y	NS 3:30p-7p Ex. Sat & Sun	2	Υ	NS 7a-9:30a Ex. Sat & Sun	35
Fairchild Ave	Roscoe Blvd	2	Y	NS 3:30p-7p Ex. Sat & Sun / NSAT	3	N	NSAT	
Roscoe Blvd	Community St	2	Y	NS 3:30p-7p Ex. Sat & Sun	2	Υ	INO 74-9.304 EX. SAL & SUIT	40
Community St	Chase St	2	Υ	NS 3:30p-7p Ex. Sat & Sun	2	Υ	NS 7a-9:30a Ex. Sat & Sun	
Chase St	Bryant St	2	Y	NS 3:30p-7p Ex. Sat & Sun / NP 8a-11a Wed S.C	2	Y	NS 7a-9:30a Ex. Sat & Sun / NP 8a-10a Thurs S.C	
Bryant St	Parthenia St	2	Υ	NS 3:30p-7p Ex. Sat & Sun / NP 8a-11a Wed S.C	2	Υ	NS 7a-9:30a Ex. Sat & Sun / NP 8a-10a Thurs S.C	
Parthenia St	Gresham St	2	Υ	NS 3:30p-7p Ex. Sat & Sun / NP 8a-11a Wed S.C	2	Υ	NS 7a-9:30a Ex. Sat & Sun / NP 8a-11a Fri S.C	40
Gresham St	Osborne St	2	Υ	NSAT	2	Y	NS 7a-9:30a Ex. Sat & Sun / NP 8a-11a Fri S.C	
Osborne St	Nordoff St	2	Y	NSAT	3	N	NSAT	
Nordoff St	Dearborn St	2	Y	NS 3p-7p Ex. Sat & Sun	2	Y	NS 6a-7p Ex. Sat & Sun	40
Dearborn St	Knapp St	2	Y	NS 3p-7p Ex. Sat & Sun	2	Y	NS 6a-7p Ex. Sat & Sun	
Knapp St	Prairie St	2	Y	NS 3p-7p Ex. Sat & Sun	2	Y	NS 6a-7p Ex. Sat & Sun / NSAT	
Prairie St	Plummer St	2	Y	NS 3p-7p Ex. Sat & Sun	2	Y	NS 6a-7p Ex. Sat & Sun	
Plummer St	Itasca St	2	Y	NS 3p-7p Ex. Sat & Sun	2	Y	NS 6a-7p Ex. Sat & Sun	
Itasca St	Superior St	2	Y	NS 3p-7p Ex. Sat & Sun	2	Y	NS 6a-7p Ex. Sat & Sun	
Superior St	Lassen St	2	Y	NS 3p-7p Ex. Sat & Sun	2	Y	NS 6a-7p Ex. Sat & Sun	
Lassen St	Vintage St	2	Υ	NS 3p-7p Ex. Sat & Sun / NP 8a-11a Thurs S.C	2	Y	NS 6a-9:30a Ex. Sat & Sun / NP 8a-11a Fri S.C	
Vintage St	Lemarsh St	2	Υ	NS 3p-7p Ex. Sat & Sun / NP 8a-11a Thurs S.C	2	Y	NS 6a-9:30a Ex. Sat & Sun / NP 8a-11a Fri S.C	
Lemarsh St	Devonshire St	2	Υ	NS 3p-7p Ex. Sat & Sun / NP 8a-11a Thurs S.C	2	Υ	NS 6a-9:30a Ex. Sat & Sun / NP 8a-11a Fri S.C	
Devonshire St	San Jose St	3	N	NSAT	2	N	NSAT	40
San Jose St	Chatsworth St	3	N	NSAT	2	N	NSAT / NPR	40
Chatsworth St	Tulsa St	3/2	N	NSAT	2	Y	NSAT / NPR / NPUT	45
Tulsa St	Rinaldi St	2	Y	NS 3p-7p Ex. Sat & Sun / NPUT	2	N N	NSAT / NPUT	T
Rinaldi St	118 EB Ramps	2	N	NSAT	2	N	NSAT	45
118 EB Ramps	118 WB Ramps	2	N	NSAT	2	Y	NSAT	T
118 WB Ramps	Browns Canyon Rd							

Key:

NSAT- No Stopping Any Time NS- No Stopping

Ex- Except Sat- Saturday Sun-Sunday Wed- Wednesday

NPR- No Parking Restriction

NP- No Parking

SC- Street Cleaning NPUT- No Parking Unhitched Trailers

NPAT- No Parking Any Time Handi- Handicap Sign SD- School Days

F- Friday



Canoga Avenue, the primary secondary arterial in the Study Area, does not have access ramps to the SR-118 Freeway, but does have ramps to/from the east at the US-101 Freeway.

Segments of De Soto Avenue and Topanga Canyon Boulevard have an additional peak-hour travel lane during peak hours, and these lanes are provided in the southbound direction between 7:00 am and 9:30 am and in the northbound direction between 3:30 pm and 7:00 pm. The additional peak-hour travel lanes are continuous along De Soto Avenue between Devonshire Street and Victory Boulevard. The additional lanes are discontinuous along Topanga Canyon Boulevard. The predominant traffic flow on the study area arterials is in the southbound direction in the morning and in the northbound direction in the afternoon/evening.

2.6.2 Locations Of Significant Congestion

There are two primary traffic generators within the north-south corridor Study Area:

- Warner Center generally bounded by Vanowen Street, Topanga Canyon Boulevard, the Ventura (US-101) Freeway, and De Soto Avenue
- Chatsworth industrial area generally bounded by Lassen Street/Plummer Street, Topanga Canyon Boulevard, Parthenia Street, and Corbin Avenue

Currently, the most critical recurring peak-hour areas of traffic congestion within the Study Area include the following:

- Topanga Canyon Boulevard in Warner Center, from Ventura Boulevard to Sherman Way
- Topanga Canyon Boulevard in the vicinity of Roscoe Boulevard
- Topanga Canyon Boulevard north of Lassen Street to the SR-118 Freeway
- De Soto Avenue in Warner Center between Ventura Boulevard and Vanowen Street
- De Soto Avenue north of Lassen Street to the SR-118 Freeway
- Canoga Avenue between Victory Boulevard and Sherman Way

2.6.3 Future Travel Demand

2.6.3.1 North-South Corridors

Traffic in the Study Area and in the rest of the San Fernando Valley is expected to grow as the population and employment grow. Table 2-5 provides a comparison of existing (2000) and forecasted (2030) travel demand for north-south travel in the Study Area corridor presented in Average Daily Traffic (ADT) volumes, as projected by the Southern California Association of Governments (SCAG) Regional Travel Demand Model. Forecasted volumes for Topanga Canyon Boulevard, Owensmouth Avenue, Canoga Avenue and De Soto Avenue were aggregated to assess the overall increase in north-south travel demand at seven different locations along the study corridor. As seen in Table 2-5, travel demand along the key north-south arterials in the Study Area is expected to increase significantly by 2030. The heaviest north-south volumes will be carried south of the 118 Freeway and south of Oxnard Street (nearing the Ventura Freeway), where the aggregate daily north-south traffic volumes along the corridor's arterials will reach nearly 109,000 trips. The north-south corridors will see, on average, a 13 percent increase in daily traffic demand, which will also result in worsening of congestion along the segments described in the above section. North-south traffic volumes in some locations (e.g. south of SR-118 and south of Sherman Way) are projected to increase by up to 15 percent.



2.6.3.2 East-West Freeways

Travel along the San Fernando Valley's freeways will continue to degrade also. As summarized in Table 2-6, The Ronald Reagan Freeway's (SR-118) traffic volumes are expected to increase by up to 28 percent in some locations. The Ventura Freeway's (U.S. 101) traffic volumes are also expected to increase by up to 46 percent in some locations.

Table 2-5 N/S Corridors Forecasted ADT Volumes										
	SB	NB	Total	% Growth						
s/o 118										
2000	46,000	48,000	94,000							
2030	54,200	54,200	108,400	15%						
s/o Devonshire										
2000	27,200	28,000	55,200							
2030	30,800	31,500	62,300	13%						
s/o Nordhoff										
2000	38,500	39,700	78,200							
2030	43,200	44,300	87,500	12%						
s/o Roscoe										
2000	36,700	37,200	73,900							
2030	40,400	42,300	82,700	12%						
s/o Sherman Way	24.000	24.000								
2000	36,000	36,000	72,000	150/						
2030	40,100	42,600	82,700	15%						
s/o Victory 2000	33,100	22,000	66 000							
2000	,	32,900 37,700	66,000 74.100	12%						
	36,400	3/,/00	/4,100	12%						
s/o Oxnard 2000	51,600	48,600	100,200							
2030	54,500	55,200	109,700	9%						

Source: SCAG RTP Model



	118 Ronald Rea	igan FWY	101 Ventura	a FWY
	EB	WB	EB	WB
w/o Topanga Canyon Blvd				
2000	97,400	94,800	130,000	146,000
2030	124,000	122,000	199,000	203,000
Growth		28%		46%
w/o Winnetka Ave				
2000	108,000	104,000	172,000	173,00
2030	132,000	128,000	229,000	228,000
Growth		23%		32%
w/o Tampa Ave				
2000	126,000	122,000	185,000	191,000
2030	157,000	156,000	241,000	248,000
Growth		26%		30%
w/o Reseda Blvd				
w/o Reseda Bivu 2000	129,000	123,000	195,000	189,000
2030	160,000	159,000	246,000	244,000
Growth	100,000	27%	240,000	244,000 28%
Glowth		2770		2070
w/o Balboa Blvd				
2000	139,000	136,000	189,000	204,000
2030	174,000	172,000	250,000	257,000
Growth		26%		29%
w/o Woodley Ave				
2000	153,000	146,000		
2030	183,000	177,000		
Growth		20%		
w/o Haskell Ave				
2000			203,000	216,000
2030			261,000	268,000
Growth				26%
w/o I-405 San Diego FWY				
2000	149,000	141,000	200,000	221,000
2030	177,000	170,000	258,000	275,000
Growth	1,7,000	20%	230,000	27%

Source: SCAG RTP Model



2.7 POTENTIAL TRAVEL MARKETS

Major employment centers located throughout the San Fernando Valley draw workers from the Study Area. On the other hand, employment opportunities within the Study Area attract residents from other areas of the Valley. These are potential future travel demand markets for the project that could be served by the Metro Orange Line and its extension. Within the Study Area, the Chatsworth industrial area and Warner Center are the two major work trip attractors. Outside of the area, but within the San Fernando Valley, the Van Nuys Government Center and office cluster, and North Hollywood are also two major employment centers that could potentially be connected to the Study Area via the extension of the Metro Orange Line. Figure 2-12 illustrates the number of daily trips with origins and destinations, within the portion of the Study Area currently not being served by high-capacity transit service, that are forecasted to comprise the daily intra-valley travel demand by 2030. As shown on Figure 2-12, the portion of the Study Area not currently served by high-capacity transit service represents a potential market of 83,000 daily trips by 2030. Some of these trips however, are less likely to be made by transit because of their short distance (e.g. trips from areas along the middle portion of the Study Area to Warner Center). In addition, the portion of the Study Area currently not being served by high-capacity transit service represents a potential 4,000 daily trips market with origins/destinations that are within ¼ mile from a Metro Red Line station by 2030 and could benefit from connections between the Metro Orange Line and the Metro Red Line.

2.8 EXISTING TRANSIT SERVICES

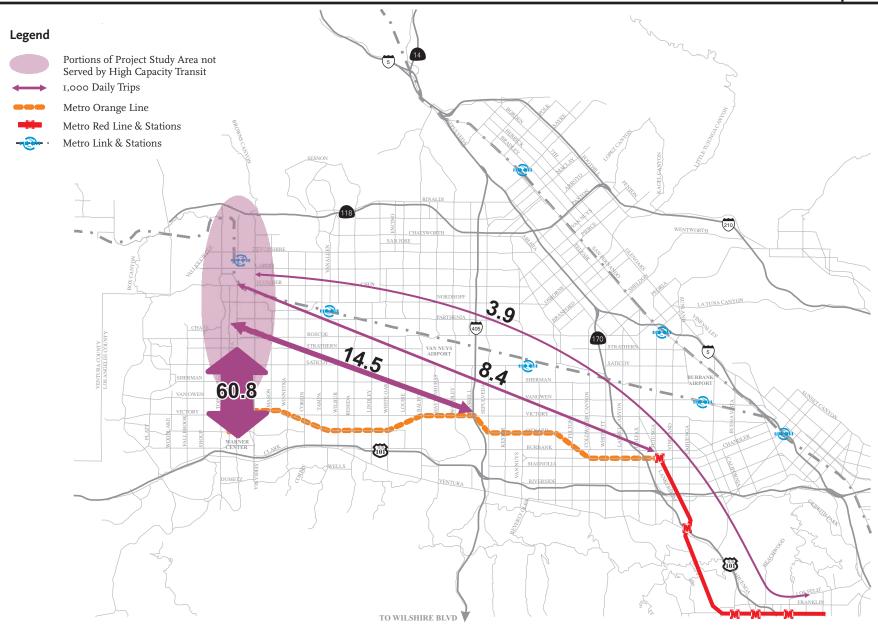
Metro transit service throughout the western San Fernando Valley is primarily comprised of local bus routes, 12 of these being east-west alignments and the other three being north-south alignments, with one local circulator (Route 645) also operating in the area. In addition, three of the east-west locals have a limited-stop service (lines 353, 363 and 364 on Roscoe Boulevard, Sherman Way and Nordhoff Street respectively). A Metro Rapid Bus line operates along Ventura Boulevard between Warner Center and Universal City while the Metro Orange Line Bus Rapid Transit service operates on its own right-of-way between North Hollywood and Warner Center.

Other public transit operators serving western San Fernando with bus service include:

- o Antelope Valley Transit Authority (AVTA) with one commuter express route 787 linking Lancaster/Palmdale with the western San Fernando Valley
- o Santa Clarita Transit with two Commuter Express services (Routes 791 and 796)
- o Simi Valley Transit Local Route C
- o LADOT DASH with two routes serving Warner Center and one linking Northridge and Chatsworth
- o LADOT Commuter Express buses to/from Thousand Oaks and Simi Valley and downtown LA/USC serving the western San Fernando Valley.

A Metrolink commuter rail line crosses the western San Fernando Valley on its way to/from Ventura County and Union Station in downtown Los Angeles with a stop at Chatsworth Transportation Center. The Metro bus service network has been established in a grid pattern with most of the routes focused on east-west alignments, with a smaller number of north-south lines in the western San Fernando Valley (see Existing Transit Network Figure 2-13). Despite the fact that the bus network covers all major arterials, bus service is not provided evenly throughout the western San Fernando Valley (see Table 2-7).

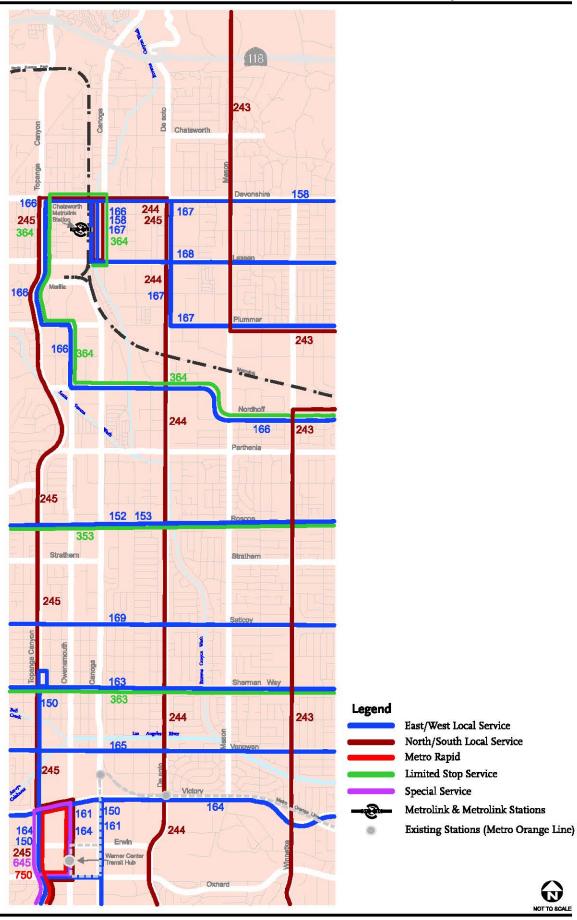












Metro

Source: Metro

			Span o	f Service (in	hours)	App		Trunk Headw iinutes)	ay (in
	Route	Route	Route			Weekday		Saturday	Sunday
	Number		Weekday	Saturday	Sunday/ Holiday	Peak	Off- peak	Base	Holida Base
	150	Warner Center - Ventura Bl. - Universal City Local	24	24	24	8 - 20	30	20	15
10 Minutes or Better	750	Warner Center - Ventura Bl. - Universal City Metro Rapid	17	17	17	6 - 10	20	15	12
	901	Orange Line	20	20	20	5 - 6	10	11	11
	161	Thousand Oaks - Warner Center	14	13	13	10 - 30	55 - 60	30	60
	163	Sherman Way	19	18	17	8 - 10	10 - 15	12	20
	164	Victory Bl.	18	17	16	6 - 10	20	25	30
	165	Vanowen St.	17	16	15	6 - 10	20	25	30
	166	Nordhoff St. Local	17	15	14	5 - 12	12 -	15	30
	364	Nordhoff St. Limited	6	_	-	8 - 10	24	-	<u> </u>
	167	Plummer St.	18	18	18	8 - 35	50	60	60
	244	De Soto Av.	16	13	-	5 - 20	50	50	<u> </u>
	LADOT Commuter Express 422	LA Downtown - Thousand Oaks Reverse Commute	8	-	-	6 - 30	-	-	-
	LADOT DASH	Warner Center North	12	9	-	10	20	20	-
	LADOT DASH	Warner Center South	12	9	-	8	15	15	-
	152	Fallbrook - Roscoe - Glenoaks - Vineland	19	18	17	12 - 25	25	30	30
	153	Fallbrook - Roscoe - Sun Valley - Vineland	9	-	-	15 - 40	-	-	-
	158	Devonshire St.	15	14	13	12	20	13	20
	243	Winnetka Av.	14	13	-	20 - 30	50	45	-
	245	Topanga Canyon Blvd.	20	19	18	15 - 30	50	50	60
	353	Roscoe Bl. Limited	6	-	-	20 - 30	-	-	-
	363	Sherman Way Limited	7	-	-	25 - 30	-	-	-
11 to 30 Minutes	645	Mulholland Dr Valley Circle Bl.	13	-	-	20 - 40	60	-	-
	LADOT Commuter Express 419	Chatsworth - LA Downtown	7	-	-	15 - 90	-	-	-
	LADOT Commuter Express 423	Thousand Oaks - LA Downtown	4	-	-	14 - 60	-	-	-
	Antelope Valley Transit Authority 787	Lancaster/Palmdale - West San Fernando Valley	6	-	-	15 - 30	-	-	-
	Santa Clarita Transit 791	West San Fernando Valley - Santa Clarita	5	-	-	22 - 82	-	-	-
	Santa Clarita Transit 796	Santa Clarita - West San Fernando Valley	5	-	-	25 - 80	,	-	-
	LADOT DASH	Northridge - Chatsworth	7	-	-	31 - 58	-	-	-
31 to 60 Minutes	LADOT Commuter Express 575	Simi Valley - Chatsworth - Warner Center	3.5	-	-	35 - 70	-	-	-
	168	Chatsworth - Lassen St.	7	-	-	60	-	-	-
	169	Saticoy St.	15	-	-	60	60	-	-
61 and above Minutes	Simi Valley Transit	Simi Valley - Chatsworth	13	13	-	70	70	14	-

Source: Operator schedules as at August 2007



2.8.1 Headways

As summarized in Table 2-7, local routes have varying service hours and varying service frequencies. The table also shows that routes providing more service (5-10 minute headways) are those along Sherman Way, Victory Boulevard, Vanowen Street, Nordhoff Street, De Soto Avenue and Plummer Street as well as the Metro Orange Line Bus Rapid Transit and Metro Rapid and Local service on Ventura Boulevard. The Warner Center DASH routes and reverse Commuter Express Route 422 operated by LADOT also have high service levels.

The second-best service frequency (11 - 30 minutes) comprises bus routes that provide service throughout the Western San Fernando Valley, with service in both north-south (Winnetka, Topanga Canyon Boulevard) and east-west (Fallbrook-Roscoe, Devonshire). LADOT commuter expresses from Chatsworth (Route 419) and Thousand Oaks (Route 423) and Antelope Valley Transit Authority and Santa Clarita Commuter Express Routes 787, 791 and 796 respectively all fall within this category, as does the Metro Mulholland Drive – Valley Center circulator route 645 on the western edge of the Study Area.

The lowest frequency service (more than 30 minute headways) is found on the Metro Lassen and Saticoy Local services as well as the LADOT Northridge – Chatsworth DASH and Route 573 Commuter Express from Simi Valley, as well as the Local Simi Valley – Chatsworth service (route D).

An analysis of the Service Frequency of Existing Transit Service in AM Peak, Midday, PM Peak periods (see Figure 2-14, Figure 2-15, and Figure 2-16 respectively) shows greatest service levels on the Metro Orange Line, Ventura Metro Rapid and Local services on east-west alignments of Victory Boulevard, Vanowen Street, Sherman Way, Roscoe Boulevard and Nordhoff Street. Highest service frequencies on the north-south alignment are on Fallbrook Avenue (extension of Roscoe) and De Soto Avenue. Midday frequency in general has lower service levels across all corridors.

An extension of the Metro Orange Line would provide a blending of a new key north-south linkage with the existing east-west corridor. High frequency service throughout the day would then be available throughout the Study Area. At present, the service structure is based on a grid pattern, requiring transfers. The Metro Orange Line extension will provide direct service from the Chatsworth area to key points east along the Metro Orange Line such as Van Nuys and North Hollywood and beyond.

2.8.2 Ridership

The Existing Transit Ridership in the Study Area, illustrated Figure 2-17, shows that ridership is highest around intercepts between major lines such as the Ventura Metro Rapid and the Metro Orange Line as well as key east-west Local services on Victory Boulevard, Vanowen Street, Sherman Way, Roscoe Boulevard and Nordhoff Street and north-south lines on Topanga Canyon Boulevard, De Soto Avenue, Winnetka Avenue, Tampa Avenue and Reseda Boulevard.

Ridership is noticeably less on lines north of Nordhoff Street. An extension of the Metro Orange Line would significantly improve access to Chatsworth area and could be expected to increase transit ridership to/from this area, both for local area access as well as journeys further east along the Metro Orange Line.

These observations are based on ridership data that has been updated with 4th Quarter 2007 data from the Metro Automated Passenger Counting (APC) system.







Source: TMD

Legend

(Z)

Metrolink

Metro Bus System Freeway Major Street

Metro Orange Line

Station

Metrolink Line Metrolink Station AM Peak

10 minutes or less

11 - 15 minutes

16 - 30 minutes

31 minutes and above

Purpose and Need





Source: TMD

Legend

(Z)

Metrolink

Metro Bus System Freeway Major Street

Metro Orange Line

Station

Metrolink Line

Metrolink Station

Canoga Transportation Corridor Alternatives Screening Report

Midday

11 - 15 minutes

16 - 30 minutes

10 minutes or less

31 minutes and above

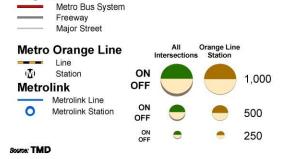
Route Does Not Operate

Purpose and Need











Legend

2.8.3 Transit Priority

The City of Los Angeles Department of Transportation (LADOT), in collaboration with Metro, has implemented an advanced Transit Priority System (TPS) as part of the Metro Rapid Bus and along the Metro Orange Line Busway. The TPS improves on-time performance of the buses by adjusting signal timing at intersections for buses as their approach is detected. It is also used to provide real-time next bus arrival information to passengers waiting at bus stops. Figure 2-18 illustrates the transit priority corridors in the western San Fernando Valley.

2.9 URBAN DESIGN CONSIDERATIONS

2.9.1 Neighborhood Character and Land Use

Numerous diverse neighborhoods line the north-south corridors of the western San Fernando Valley. The character of a neighborhood can contribute to its compatibility with transit service. In areas where it's easy and pleasant to walk to transit, more people will ride transit. Although not generally, many neighborhoods in the western San Fernando Valley are less transit-supportive due to limited pedestrian access to major arterials, some gated communities, highly-separated land uses, and streets lacking pedestrian amenities such as sidewalks and street trees to shade those sidewalks.

2.9.2 Bus Stops/Shelters/Stations

With the exception of the Metro Orange Line and Metro Rapid stations and the Warner Center transit hub, bus stops in the western San Fernando Valley are indicated by a sign at the curb near the stop. More infrequently, bus shelters are installed, providing shade to patrons. Bus stops may have other amenities, such as informational signage, lighting, trash cans, telephones, trees and other landscaping. The provision of benches, shelters, and other amenities improves the environment for waiting transit users and increases the attractiveness of transit use if maintained.

Bus stops are visible elements of the transit system, both for patrons and passersby. Bench and shelter design, as well as landscaping and public art, can enhance the overall urban environment, creating a positive identity for the transit system and the surrounding community. Generally, shelter design and the amenities provided vary by location. The Metro Rapid Bus on Ventura Boulevard and the Metro Orange Line demonstrate how consistent shelter/station design, coupled with amenities such as improved signage, can create a recognizable identity or brand for transit service and increase its visibility, which may help attract new riders and make it easier to use transit.

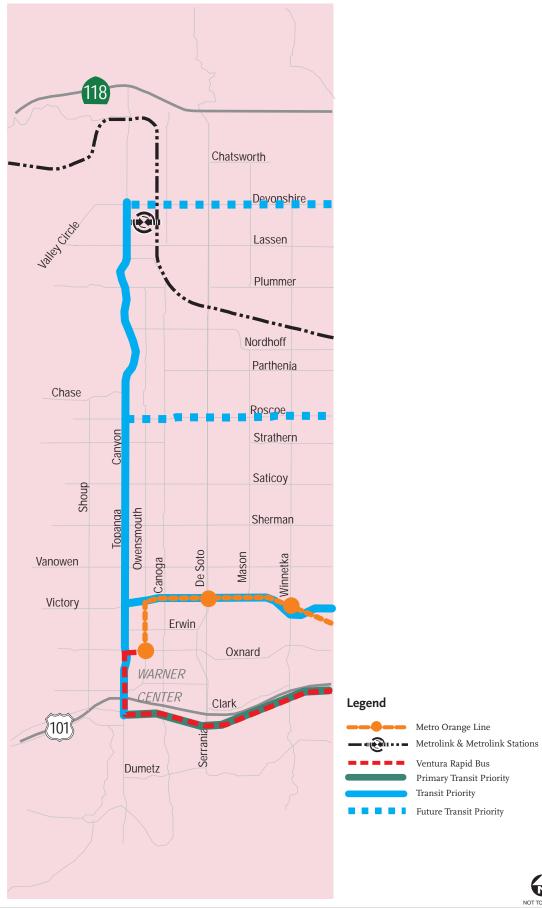
Another consideration is the location of enhanced bus stops/shelters near activity centers and near-higher density residential areas. Strategic placement of bus stop amenities in areas of high-pedestrian activity may also enhance transit ridership and contribute to the revitalization of adjacent areas.

2.9.3 Corridor Urban Design

Corridor urban design, often called "streetscape" along arterial streets, is affected by numerous elements, including:

- Sidewalk width / sidewalk condition
- Trees and other landscape
- Lighting







Source: ITERIS

- Crosswalks
- Transit shelters, benches, etc.
- Overhead wires
- Signage
- Driveways
- Bikeways, bike routes, and amenities such as lockers and racks
- Pattern, intensity and architectural character of adjacent buildings/development

The combined elements of the streetscape can make a street a more pleasant place to be, particularly for pedestrians and cyclists, who are unshielded from the environment by an enclosed vehicle. Because transit trips typically include some travel by foot or bicycle, a pleasant streetscape can improve the attractiveness of transit use along a given corridor.

The north-south arterial streets of the San Fernando Valley are varied in urban design detail and do not have a common streetscape quality. Most arterial streets have few trees, sidewalks are narrow and/or in poor condition, have few amenities for transit users, and signage is geared towards the motorist instead of the pedestrian or cyclist.

2.9.4 Urban Design Opportunities for Exclusive Rights-of-Way

The urban design vision for the Metro Orange Line was a "multi modal transportation facility in a greenway". The approximately 100 feet wide former rail right-of-way (ROW) provides adequate space to achieve this vision including the integration of the busway, its stations, a bikeway, pedestrian paths, intermodal transfer points, artwork, landscape enhancements, park and ride lots and pedestrian connections to surround local uses. The Metro Orange Line urban design vision also includes buffering elements to mitigate impacts including sound walls and landscaping plus the utilization of sustainable elements such as drought tolerant and native plants, and watershed/recharge areas.

The Canoga Avenue right-of-way owned by Metro between the Chatsworth Metrolink Station and Victory Boulevard offers the opportunity for a similar urban design vision to the Metro Orange Line which could be adapted to the unique conditions of and along this north/south running ROW. Some of the characteristics of the ROW to incorporate into an urban deign concept includes:

- A ROW width varying from 65 ft to 275 ft
- Views of the Santa Susanna Mountains
- Some existing mature trees
- Cross-streets' sidewalk character and landscaping
- Connections to a proposed L.A. River bike path and joint development
- Businesses on leased land within the ROW
- Varied adjoining land uses some which will require buffering
- Location of active railroad tracks near Lassen Street

Today, Canoga Avenue and the adjoining Metro ROW have limited urban design elements and amenities for potential transit uses. The ROW has minimal street trees and few sidewalks. However, several cross-streets have tree-lined sidewalks and some recent and proposed developments near Warner Center have transit-supportive uses.



2.9.5 Integration of Transportation Facilities With Land Use and Urban Design

Transit can serve as a catalyst for community facilities and joint development which focus on the new access provided by transit services. This project includes a transportation facility and amenities. Any adjoining joint development often called transit-oriented development will be accomplished by others and is not a part of this project. However, transit supportive uses located within walking distance of transit stations (typically ¼ to ½ mile distances) can increase ridership of adjoining transit facilities.

Some considerations in planning and designing future joint development or transit-oriented development include:

- More compact development with a mix of uses near stations
- Higher employment intensities and higher densities within walkable areas near stations
- Landscaped pedestrian pathways and bicycle access to and from transit and to and from adjacent development
- Potential conversion of adjoining land near stations to more transit-supportive uses
- Potential reductions in required parking for transit-supportive uses once transit and pedestrian linkages are complete

2.10 GOALS AND OBJECTIVES

The goals and objectives for the project articulated in this section, will guide the development and evaluation of the alternatives. They have been developed from the transportation and land use goals and objectives of the participating government agencies and are consistent with the other transit improvements being planned for Los Angeles County. Table 2-8 lists the goals and objectives for the Canoga Transportation Corridor. In Section 3 "Screening of Alternatives, the potential alternatives will be assessed in relation to these goals and objectives to see which best satisfy them.

Table 2-8 Goals and Objectives	
Goal	Objective
Enhance regional transit connections to/from the western San Fernando Valley	 a. Connect with other regional transportation facilities, including the Metro Orange Line, Ventura Metro Rapid Bus and Metrolink b. Capitalize on the success of the Metro Orange Line by providing an operational and physical interface with a north-south transit service c. Complete a "Transit Loop" in the San Fernando Valley, comprising Metrolink and the Metro Orange Line, and covering both east-west and north-south corridors d. Provide an alternative to the congested San Diego (I-405), Golden State (I-5), Ronald Reagan (SR-118) and Hollywood (SR- 170-US-101) freeways e. Promote intra-modal and inter-modal integration and connectivity to improve system-wide transportation efficiency f. Relieve congestion through the Cahuenga (U.S. 101) and Sepulveda (I-405), and Santa Susana (SR-118)



Table 2-8 Goals and Objectives	
Goal	Objective
	passes by providing connections to the Los Angeles Basin through the Metro Red Line and to the Wilshire Rapid Bus.
Improve north-south mobility in the western San Fernando Valley.	 a. Connect important activity centers, including educational, medical, cultural, commercial and business b. Enhance transit accessibility to residential land uses c. Support sustainable transportation development by increasing transit ridership d. Provide efficient, convenient and affordable transit alternatives to both choice riders and riders without easy access to other modes of transportation e. Minimize north-south travel times f. Provide enhanced bi-directional north-south transit service g. Provide opportunities to intercept traffic passing through the Valley h. Provide park-and-ride lots at transit stops where compatible with surrounding land uses i. Relieve congestion on North-South arterials
3. Support land use and development goals	 a. Provide high-capacity transit linkages between major activity centers b. Support the objectives/strategies of SCAG's Compass Growth Vision for focusing growth in existing and emerging centers and along major transportation corridors c. Achieve City of Los Angeles General Plan Framework Plan goals for increased transit use and concentration of growth in designated Targeted Growth Areas d. Coordinate with City of Los Angeles' Transportation Element policies for Transit Priority Arterial Streets such as Topanga Canyon Boulevard e. Enhance joint development opportunities f. Support and be compatible with the goals of the Los Angeles River Master Plan for ensuring safe access to and compatibility between the river and other activity centers g. Support the objective of the Warner Center Specific Plan to coordinate future land use development in Warner Center with the public transit and transportation system h. Support the Canoga Park- Winnetka – Woodland Hills – West Hills Community Plan policies for the development of a public transit system that improves mobility with convenient alternatives to automobile travel and the provision of safe, attractive and clearly identifiable transit stops with user friendly design



Table 2-8 Goals and Objectives	
Goal	Objective
	amenities i. Support the Chatsworth-Porter Ranch Community Plan policy for the increase in bus routes and bus frequency as the potential ridership increases in the Community with population growth
4. Maximize community input, i.e., define the project in a manner that is responsive to community and policy makers	 a. Provide opportunities for community input to the planning and environmental review process b. Seek new ways to share information and incorporate community views into planning (i.e. ensure a collaborative and interactive participation process) c. Provide alternative and multi-lingual methods for community input, including in-person, telephone, and web-based opportunities for information and feedback
5. Provide a transportation project that is compatible with and enhances the physical environment wherever possible	 a. Identify cost-effective improvements that minimize adverse effects on the environment b. Avoid impacts on parklands c. Minimize noise impacts d. Minimize impacts on cultural resources e. Minimize air pollution f. Reduce conflicts with trucks, autos and pedestrians to ensure safety g. Incorporate streetscape improvements in the transit improvements h. Incorporate improvements at transit stops that enhances the physical environment for waiting passengers i. Incorporate improvements that enhance bicycle and pedestrian accessibility to transit stops j. Incorporate improvements along the transit corridor that provide enhanced bicycle and pedestrian mobility to the surrounding neighborhoods k. Provide connections to planned landscaping and trail improvements along the Los Angeles River
5. Provide a transportation improvement project that minimizes impacts on the community	 a. Minimize business and residential dislocations, community disruption, and property damage b. Avoid creating physical barriers, destroying neighborhood cohesiveness, or in other ways lessening the quality of the human environment c. Minimize traffic and parking impacts d. Minimize impacts during construction
7. Provide a transportation project that is cost-effective and within the ability of Metro to fund, including capital and	 a. Identify cost-saving measures to reduce project costs b. Leverage existing transportation resources and explore new innovative financing opportunities



Table 2-8 Goals and Objectives	
Goal	Objective
operating costs	 c. Prioritize alternatives eligible for TCRP funding d. Maximize the benefits associated with the use of existing public rights-of-way. e. Ensure fiscal consistency with the Metro Long Range Plan f. Ensure integration with Metro Local services g. Identify, if appropriate, a phased implementation plan for alternatives to be implemented as funds are identified

2.11 COMMUNITY INPUT

2.11.1 Elected Official Input

Metro staff met with staff members of seven elected officials – local, state, and federal - representing the Study Area to gather their perspective on the possible extension of the Metro Orange Line. Input received from elected officials and their representatives was supportive and understanding of the need for the project. Elected officials staff expressed support for an extension of the Metro Orange Line through the Metro-owned right-of-way; however they also expressed concern for potential displacement of existing businesses along the Metro-owned right-of-way, if an alternative on the right-of-way selected for this project. Ongoing discussions with elected officials will continue throughout the study.

2.11.2 Public Input

Metro reached out to the communities along the Canoga Transportation Corridor to gather their input as a guide to the decision-making process. In order to reach a larger audience, 16 neighborhood organizations were provided with meeting announcements and information materials during the scoping process. In addition, two formal presentations were provided to two key organizations in the post-scoping phase.

An agency meeting was conducted at Metro headquarters in downtown Los Angeles. The format for this meeting consisted of an open-house format with boards where Metro staff provided information to participants. Meeting participants were also provided with hand-outs of the proposed alternatives, corridor map, and an agenda. This was followed by a PowerPoint presentation to guide agency participants through the project's goals and alternatives. An informal question and answer session followed where participants were encouraged to formally submit their comments on the provided comment sheets. Ongoing meetings with agency personnel are being conducted throughout the study process, particularly with City of Los Angeles and Southern California Regional Rail Authority staff.

Two public scoping meetings were conducted in the Chatsworth and Canoga Park communities. These meetings consisted of an open house format with boards where Metro staff provided information to meeting participants. Meeting participants were also provided with hand-outs of the proposed alternatives, corridor map, and an agenda. This was followed by a PowerPoint presentation



to guide community members through the project's goals and alternatives and explain the study process. A formal public comment period followed the presentation. Meeting participants were also provided with the option of submitting written public comment cards at the meeting, via e-mail, or U.S. mail no later than the close of the public comment period, 5 pm, August 13, 2007.

The first public scoping meeting was held on July 26, 2007 at Chatsworth High School. Approximately 96 community members attended the meeting. During the Public Comment period, 22 formal comments were made. Almost half of the comments consisted of support for an alignment on the Metro-owned right-of-way. The other half of the comments voiced opposition to an on-street extension of the Metro Orange Line further north from the Chatsworth Metrolink Station to State Route (SR)-118.

The second public scoping meeting was held on July 30, 2007 at New Academy of Canoga Park. Approximately 69 community members attended the meeting. Metro has a higher concentration of lease agreements on the southern portion of its right-of-way of which several of these tenants attended the meeting to voice concerns regarding the impact the project would have on them should Metro-owned right-of-way be utilized for this project. During the public comment session, 14 formal comments were made. Comments were split almost evenly between those voicing support for Alternative 5, the railroad right-of-way option, and opposition for such an alternative.

A total of 59 written public comments and 36 formal comments were received by the close of the public scoping period.



3.0 DESCRIPTION OF ALTERNATIVES

3.1 DEVELOPMENT OF ALTERNATIVES

The development of alternatives was guided by the goals and objectives for the project, previously outlined in Table 2-8. In order to develop a range of transportation improvements that would meet the needs for improved_regional connectivity and north-south mobility in the western San Fernando Valley, the project team considered a number of factors. These factors included: connections to regional transportation facilities, service to high-density population and employment centers and activity centers, feasibility of providing dedicated lanes for transit vehicles, and traffic conditions. All alternatives considered would connect the existing Metro Orange Line with the Chatsworth Metrolink Station.

The alternatives presented here have been developed in consultation with the City of Los Angeles, Metrolink, Metro Planning and Valley Sector staff, representatives of elected representatives of the Valley and the public. They have been refined based on this technical and policy input. Figure 3-1 illustrates the initial corridor alternatives.

3.2 DESCRIPTION OF ALTERNATIVES

3.2.1 No Build Alternative

The No Build Alternative serves as the Baseline against which the relative benefits, costs and performance of the other alternatives will be considered. The Baseline Alternative is consistent with the adopted Metro Long Range Plan and is identical to the No Build Alternative being used for all other on-going Metro corridor studies (i.e. Crenshaw-Prairie Transit Corridor, Westside Extension Transit Corridor, Metro Gold Line Eastside Extension Phase 2, and Regional Light Rail Transit Connector). It is also consistent with the No Build Alternative in the Expo Construction Authority's current environmental clearance of Expo Phase 2.

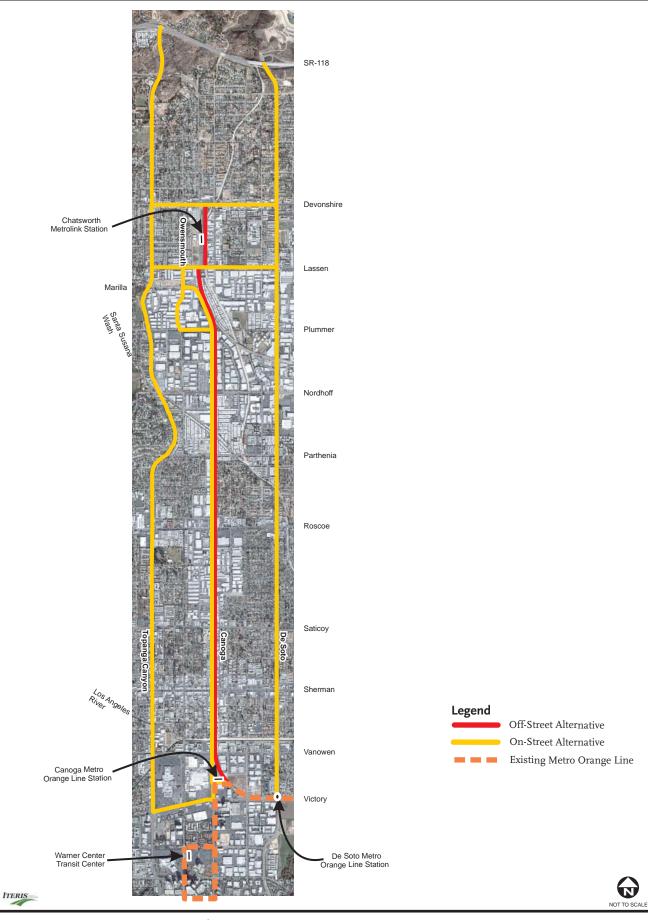
The following projects will be assumed to be included in the No Project Alternative:

<u>Lankershim-San Fernando Metro Rapid Bus</u> – Metro Rapid Bus service is scheduled for San Fernando Road and Lankershim Boulevard in 2008. It will run from the Sylmar/San Fernando Metrolink Station down San Fernando Road to Lankershim Boulevard and then down Lankershim to the North Hollywood Metro Red Line station.

<u>State Route 118</u> - Caltrans has recently (2007) secured funding to begin widening the Ronald Reagan Freeway in Simi Valley, from Tapo Canyon Road to Los Angeles County line. The improvements include: widening the freeway from 6 to 8 lanes, installation of sound walls and Intelligent Transportation System (ITS) features.

Table 3-1 summarizes the local roadway improvement projects that will also be assumed to be included in the No Build Alternative.







[iadiatian	Project	Date of Funding
Jurisdiction Calabasas	Transit hub, park-n-ride	2009
Metro	Pierce College pedestrian linkages with the Metro Orange Line	2007-2009
Metro	Enhance CSUN tram system	2007-2009
City of Los Angeles	Expansion of LAX Flyaway park-n-rides	2007-2009
City of Los Angeles	Sherman Way Median installation - Topanga Canyon Boulevard to De Soto Avenue	2007
City of Los Angeles	Balboa Boulevard at San Fernando Road - widen and realign Balboa Road connector	2007-2009
City of Los Angeles	Southwest San Fernando Valley miscellaneous road and safety projects - resurfacing, not capacity-enhancing	2007-2009
City of Los Angeles	Construct new traffic signal at Sherman Way and Independence Avenue	2009
City of Los Angeles	Realignment of Winnetka Avenue at Calvert Street intersection	2007-2009
City of Los Angeles	Non-capacity enhancing improvements at Burbank Boulevard and Woodley Avenue	2007-2009
City of Los Angeles	New roadway lighting on major transportation corridors in southwest San Fernando Valley	2007-2009
City of Los Angeles	Smart crosswalk installation at Mason Avenue and Arminta Street	2009
City of Los Angeles	Non-capacity enhancing improvements at Burbank Blvd. and Hayvenhurst Avenue	2007-2009
City of Los Angeles	Smart crosswalk installation at Topanga Canyon Boulevard and Gault Street	2009
City of Los Angeles	Traffic signal upgrades at 101 off-ramps from Winnetka Avenue to Van Nuys Boulevard	2007-2009
City of Los Angeles	Widen Haskell Ave. from 2 to 4 lanes between Chase St. and Roscoe Blvd.	2007-2009
City of Los Angeles	Install new traffic signal at Balboa Boulevard and Knollwood Shopping Center	2007-2009
City of Los Angeles	Install new traffic signal at Balboa Boulevard and Knollwood Shopping Center	2009
City of Los Angeles	Streetscape improvements to Wilbur Avenue to enhance pedestrian and traffic	2009
City of Los Angeles	Install new traffic signal at Vanowen Street and Oso Avenue	2009
City of Los Angeles	Add additional parking spaces at the Northridge Metrolink Station	2007
City of Los Angeles	101/Valley Circle Blvd. interchange improvements - adding lanes	2005
City of Los Angeles	Add additional 50 parking spaces at existing park-n-ride lots in the south San Fernando Valley	2006
City of Los Angeles	Widen Tampa Ave. bridge over the Los Angeles River	2007
City of Los Angeles	Install 2nd Southbound left-turn lane at Balboa Boulevard and Victory Boulevard	2007
City of Los Angeles	Widen Winnetka Avenue bridge over the Los Angeles River	2007
City of Los Angeles	ATSAC improvements to 105 intersections in Canoga Park	2008-2012
City of Los Angeles	ATSAC improvements to 107 intersections in Reseda	2008-2009



3.2.2 Alternative 2 Transportation Systems Management

A Transportation Systems Management (TSM) Alternative is designed to identify low-cost, easily implementable improvements as an alternative to construction of more-expensive alternatives. The TSM Alternative entails frequency improvements on existing Metro transit routes as well as providing a new local transit line for Canoga Avenue, though not including any transit priority measures (signal priority or dedicated lanes) for this corridor. Table 3-2 details the reductions in transit headways that would be implemented by the TSM Alternative in comparison to the No Build Alternative. It indicates the percentage reduction in headways and the absolute change in headways proposed. For example, a change in bus headway from 15 minutes to 10 minutes is a 33% reduction in headway.

In addition to the headway improvements summarized in Table 3-2, the TSM alternative includes the addition of a new Metro Local Route along Canoga Avenue. This route would extend from Warner Center to the Chatsworth Metrolink Station, utilizing Owensmouth Street, Oxnard Street, Erwin Street, Canoga Avenue, Marilla Street, Owensmouth Street, and Lassen Street. Figure 3-2 illustrates the distribution of the routes that would be improved and implemented by the TSM Alternative.



Tabl	e 3-2	TSM Serv	vice Impro	vements									
Metro Route		Earl	ly AM	AM	Peak	Mi	dday	PM	Peak	Early E	Evening	Late Evening	
<u>Local</u>		% Headway Reduction	Headways (Before/After)	% Headway Reduction	Headways (Before/After)	% Headway Reduction	Headways (Before/After)						
152	WB	33%	(15 to 10)	38%	(16 to 10)	42%	(26 to 15)	53%	(32 to 15)	56%	(34 to 15)	25%	(60 to 45)
	EB	0%		58%	(36 to 15)	52%	(31 to 15)	29%	(14 to 10)	56%	(34 to 15)	26%	(61 to 45)
153	WB	17%	(18 to 15)	12%	(17 to 15)	29%	(63 to 45)	50%	(30 to 15)	12%	(51 to 45)	12%	(51 to 45)
	EB	17%	(18 to 15)	63%	(40 to 15)	25%	(60 to 45)	29%	(21 to 15)	25%	(60 to 45)	26%	(61 to 45)
158	WB EB		(42.1 20)	42%	(26 to 15)	24% 22%	(59 to 45)	35% 23%	(46 to 30)	21% 22%	(57 to 45)		
	FB	30%	(43 to 30)	40%	(25 to 15)	22%	(58 to 45)	23%	(39 to 30)	22%	(58 to 45)		
163	WB	44%	(27 to 15)	44%	(9 to 5)	33%	(15 to 10)	50%	(10 to 5)	35%	(23 to 15)	25%	(60 to 45)
103	EB	32%	(22 to 15)	50%	(10 to 5)	33%	(15 to 10)	50%	(10 to 5)	32%	(22 to 15)	17%	(54 to 45)
			(== 15 15)		(12.22.2)	2277	(10 10 11)		(11111)		(== 15 15)		(0.110.10)
164	WB			50%	(10 to 5)	25%	(20 to 15)	29%	(14 to 10)	21%	(19 to 15)	12%	(51 to 45)
	EB	50%	(20 to 10)	50%	(20 to 10)	21%	(19 to 15)	55%	(11 to 5)	40%	(25 to 15)	25%	(60 to 45)
165	WB	32%	(22 to 15)	17%	(6 to 5)	21%	(19 to 15)	23%	(13 to 10)	42%	(26 to 15)	25%	(60 to 45)
	EB	50%	(20 to 10)	38%	(16 to 10)	50%	(20 to 10)	38%	(8 to 5)	44%	(27 to 15)		
166	WB	29%	(14 to 10)	17%	(12 to 10)	38%	(24 to 15)	58%	(12 to 5)	33%	(15 to 10)	50%	(30 to 15)
	EB	44%	(27 to 15)	23%	(13 to 10)	25%	(20 to 15)	50%	(10 to 5)	35%	(23 to 15)	24%	(59 to 45)
			()		(=)		((12 - 22)		((12)
167	WB EB	17% 38%	(18 to 15) (48 to 30)	29% 53%	(7 to 5) (32 to 15)	33% 29%	(45 to 30) (42 to 30)	29% 53%	(42 to 30) (32 to 15)	33% 25%	(45 to 30) (60 to 45)	25% 18%	(60 to 45) (55 to 45)
	ED	30%	(46 (0 30)	33%	(32 (0 13)	29%	(42 (0 30)	33%	(32 to 13)	23%	(60 to 43)	1070	(55 (0 45)
168	WB			26%	(61 to 45)			22%	(58 to 45)				
100	EB			25%	(60 to 45)		_	25%	(60 to 45)				
					,				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,				
169	WB	38%	(72 to 45)	21%	(57 to 45)	26%	(61 to 45)	31%	(65 to 45)	15%	(53 to 45)		
	EB	20%	(56 to 45)	26%	(61 to 45)	26%	(61 to 45)	20%	(56 to 45)	31%	(65 to 45)		
244	SB	46%	(28 to 15)	17%	(12 to 10)	27%	(41 to 30)	50%	(20 to 10)	27%	(41 to 30)	25%	(60 to 45)
	NB	38%	(24 to 15)	29%	(7 to 5)	29%	(42 to 30)	53%	(32 to 15)	29%	(42 to 30)	17%	(54 to 45)
245	SB	120/	 (52 t - 45)	32%	(22 to 15)	35%	(46 to 30)	53%	(32 to 15)	21%	(57 to 45)	20%	(56 to 45)
	NB	13%	(52 to 45)	52%	(31 to 15)	32%	(44 to 30)	32%	(22 to 15)	6%	(32 to 30)	8%	(49 to 45)
Limited													
353	WB			50%	(30 to 15)			50%	(30 to 15)				
333	EB			53%	(30 to 15)			52%	(31 to 15)				-
			1	-3/0	(== 10 10)		1	/-	(2 : 10 :0)		1		
363	WB			52%	(31 to 15)			50%	(30 to 15)				
	EB			52%	(31 to 15)			50%	(30 to 15)				
364	WB			50%	(10 to 5)	-	-						
	EB							50%	(10 to 5)				



Alternative 2 **Transportation System Management**

- New Local Route 246 Canoga: Warner Center Chatsworth Transportation Center
- · Existing Metro Routes Frequency Improvements of up half the headway time during the peak hours for the following routes:

N/S Routes

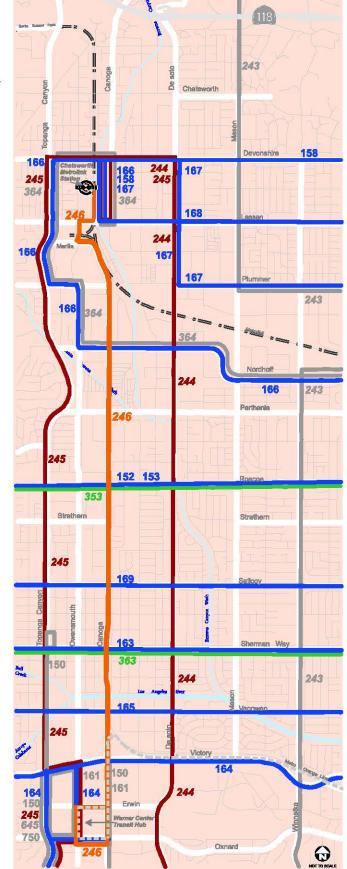
De Soto Avenue: Local 244 Topanga Canyon Boulevard: Local 245

E/W Routes

Devonshire/Nordhoff: Locals 158/166 Lassen/Plummer: Locals 167/168 Vanowen/Victory: Locals 164/165 Roscoe: Local 152/153 and Limited 353

Saticoy: Local 169

Sherman Way: Local 163 and Limited 363



Legend

New Local Route 246 (Warner Center -Chatsworth Transportation Center) East/West Local Service North/South Local Service

Limited Stop Service

Metrolink & Metrolink Stations

Existing Stations (Metro Orange Line)

ource: TMD

3.2.3 Alternatives On Canoga Avenue

3.2.3.1 Alternative 3 Canoga Metro Rapid Bus

<u>Description of Proposed Route</u> – This route would be located primarily on Canoga Avenue extending from Warner Center to the Chatsworth Metrolink Station. Departing Warner Center Transit Hub, the route would utilize Owensmouth Avenue, Erwin Street, and Canoga Avenue. Two options are considered for the final northern segment to connect to the Chatsworth Metrolink Station: (1) buses would use Plummer Street, Owensmouth Avenue, Lassen Street, to Old Depot Road; or (2) buses would use Marilla Street, Owensmouth Avenue and Lassen Street to Old Depot Road. Figure 3-3 illustrates Alternative 3.

Current Metro Lines – No current bus lines.

<u>Type of Service</u>— This route would operate as a typical Metro Rapid service on-street in mixed-flow traffic with Transit Priority Systems and Metro Rapid passenger station amenities for the entire length.

<u>Stops</u> – Stops are proposed at Warner Center, the Canoga Metro Orange Line Station, Sherman Way, Roscoe Boulevard, Nordhoff Street, and the Chatsworth Metrolink Station.

<u>Alternative Route Terminus</u> – The route could be extended to connect with: a future park-and-ride lot adjacent to State Route 118, either on Topanga Canyon Boulevard or on De Soto Avenue; or an existing park-and-ride lot along Porter Ranch Road, south of SR-118. The bus would run on-street in a mixed-flow lane and the following routing options are considered to provide this connection: (1) the buses would use Old Depot Plaza, Devonshire Street and Topanga Canyon Boulevard, for a Topanga Canyon Boulevard park-and-ride lot; (2) the buses would use Old Depot Plaza, Devonshire Street and De Soto Avenue, for a De Soto Avenue park-and-ride lot; or (3) the buses would use Old Depot Plaza, Devonshire Street, De Soto Avenue, Rinaldi Avenue and Porter Ranch Road for the existing park-and-ride lot at Porter Ranch Road.

<u>Intermodal Connections</u> – This route would provide connections to the Chatsworth Metrolink Station, the Warner Center Transit Hub, the Metro Orange Line, and the Ventura Metro Rapid Bus.

<u>Activity Centers</u> – This route provides service to Westfield Shoppingtown Topanga, The Promenade Mall, and the Warner Center office buildings.

<u>Other Comments</u> – Running a mixed-flow bus on Canoga Avenue during peak periods may result in congested operations, especially on the segment north of Nordhoff Street, where only one traffic lane is provided in each direction.

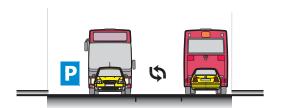
3.2.3.2 Alternative 4 Canoga Dedicated Lane – On Street

<u>Description of Proposed Route</u> – This route would be located primarily on Canoga Avenue extending from Warner Center to the Chatsworth Metrolink Station. Departing Warner Center Transit Hub, the route would utilize Owensmouth Avenue, Erwin Street, and Canoga Avenue. Two options are considered for the final northern segment to connect to the Chatsworth Metrolink Station: (1) buses would use Plummer Street, Owensmouth Avenue, Lassen Street, to Old Depot Road; or (2) buses would use Marilla Street, Owensmouth Avenue and Lassen Street to Old Depot Road. Figure 3-4 illustrates Alternative 4.

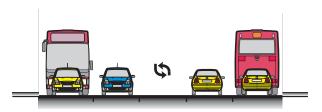


Alternative 3 Canoga Metro Rapid Bus

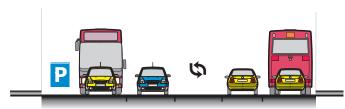
Metro Rapid service running on-street in mixed traffic and stopping at regular bus stops



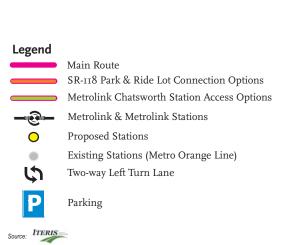
Canoga Avenue North of Nordhoff St



Canoga Avenue From Keswick St to Ignomar St & From Parthenia St to Obsorne St



Canoga Avenue Predominant Cross Section

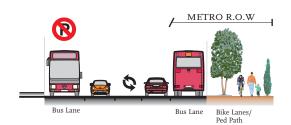




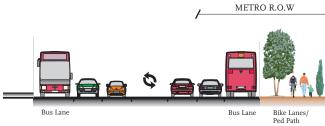


Alternative 4 Canoga Dedicated Lane - On Street

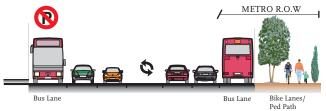
Metro Rapid service running on a Bus-Only lane and stopping at regular bus stops



Canoga Avenue North of Nordhoff St



Canoga Avenue From Keswick St to Ignomar St & From Parthenia St to Obsorne St



Canoga Avenue

Legend Main Route SR-118 Park & Ride Lot Connection Options Metrolink Chatsworth Station Access Options Metrolink & Metrolink Stations \circ **Proposed Stations** Existing Stations (Metro Orange Line) Two-way Left Turn Lane Convert Parking to Bus Only Lane



ITERIS __

Current Metro Lines – No current bus lines.

<u>Type of Service</u> – Same Metro Rapid service as Alternative 3 with a southbound Bus Lane along Canoga Avenue provided by prohibiting parking during peak periods; a northbound Bus Lane would be provided by encroaching into the Metro-owned right-of-way to widen Canoga Avenue. On all other segments of the route, the bus would run on-street in mixed-flow traffic with Transit Priority Systems for the entire length.

<u>Stations</u> – Stations are proposed at Warner Center, the Canoga Metro Orange Line Station, Sherman Way, Roscoe Boulevard, Nordhoff Street, and the Chatsworth Metrolink Station.

<u>Alternative Route Terminus</u> – The route could be extended to connect with: a future park-and-ride lot adjacent to State Route 118, either on Topanga Canyon Boulevard or on De Soto Avenue; or an existing park-and-ride lot along Porter Ranch Road., south of SR-118. The bus would run on-street on a mixed-flow lane and the following routing options are considered to provide this connection: (1) the buses would use Old Depot Plaza, Devonshire Street, and Topanga Canyon Boulevard, for a Topanga Canyon Boulevard park-and-ride Lot; (2) the buses would use Old Depot Plaza, Devonshire Street and De Soto Avenue, for a De Soto Avenue lot; or (3) the buses would use Old Depot Plaza, Devonshire Street, De Soto Avenue, Rinaldi Avenue and Porter Ranch Road for the existing park-and-ride lot at Porter Ranch Road.

<u>Intermodal Connections</u> – This route would provide connections to the Chatsworth Metrolink Station, the Warner Center Transit Hub, the Metro Orange Line, and the Ventura Metro Rapid Bus.

<u>Activity Centers</u> – This route provides service to Westfield Shoppingtown Topanga, The Promenade Mall, and the Warner Center office buildings.

<u>Other Comments</u> – This alternative could potentially provide a parallel off-street bike/pedestrian path. There are existing businesses in the right-of-way that lease the land from Metro and many would be displaced if the ROW is used for an extra lane and a bikeway. Additional widening of Canoga Avenue into the railroad ROW would also occur at stations to accommodate the 15'foot wide platforms similar to the existing Metro Orange Line stations.

3.2.3.3 Alternative 5 Canoga Off-Street Busway (MOL Extension)

<u>Description of Proposed Route</u> – The route would extend the existing Metro Orange Line north on the abandoned railroad right-of-way, paralleling Canoga Avenue, to the Chatsworth Metrolink Station.

Two options are considered for the operational interface of the route with the existing Metro Orange Line at the Canoga station:

- (1) Integrated operation with existing Metro Orange Line such that Chatsworth buses operate alternately directly to North Hollywood or Warner Center Transit Hub via the existing MOL alignment; or
- (2) Independent BRT route operating between Chatsworth and Warner Center, with service to North Hollywood provided with connections to the existing MOL at Canoga Station.

Four options are considered for the northern segment to connect to the Chatsworth Metrolink Station: (1) a grade-separated busway at the Metrolink rail alignment and possibly Lassen Street directly into the Chatsworth Metrolink Station; (2) the busway would end at Plummer Street and buses would use Plummer Street, Owensmouth Avenue, Lassen Street and Old Depot Road; (3) the



busway would end at Marilla Street and buses would use Marilla Street, Owensmouth Avenue, Lassen Street and Old Depot Road; or (4) the busway would continue north of Marilla Street, running parallel to the Metrolink tracks and connect to the Chatsworth Metrolink Station after crossing Lassen Street. Figure 3-5 illustrates Alternative 5.

Current Metro Lines – No current bus lines.

<u>Type of Service</u> – This route would run on a separated busway to be constructed along the abandoned railroad right-of-way, alongside Canoga Avenue. On all other optional segments of the route, the bus would run on-street in mixed-flow traffic with Transit Priority Systems for the entire length.

Stations – Stations are located at the Warner Center Transit Hub, Canoga Metro Orange Line Station, Sherman Way, Roscoe Boulevard, Nordhoff Street and the Chatsworth Metrolink Station.

<u>Alternative Route Terminus</u> – The route could be extended to connect with: a future park-and-ride lot adjacent to State Route 118, either on Topanga Canyon Boulevard or on De Soto Avenue; or an existing park-and-ride lot along Porter Ranch Road., south of SR-118. The bus would run on-street on a mixed-flow lane and the following routing options are considered to provide this connection: (1) the buses would use Old Depot Plaza, Devonshire Street and Topanga Canyon Boulevard, for a Topanga Canyon Boulevard park-and-ride lot; (2) the buses would use Old Depot Plaza, Devonshire Street and De Soto Avenue, for a De Soto Avenue park-and-ride lot; or (3) the buses would use Old Depot Plaza, Devonshire Street, De Soto Avenue, Rinaldi Avenue and Porter Ranch Road for the existing park-and-ride lot at Porter Ranch Road.

<u>Intermodal Connections</u> – This route would provide connections to the Chatsworth Metrolink Station, the Warner Center Transit Hub, the Metro Orange Line, and the Ventura Metro Rapid Bus.

<u>Activity Centers</u> – This route provides service to Westfield Shoppingtown Topanga, The Promenade Mall, and the Warner Center office buildings.

<u>Other Comments</u>— This route would provide a separate exclusive busway and parallel off-street bikeway. It connects to the end of the Metro Orange Line Busway and the Ventura County Metrolink Line. There is also the potential for park-and-ride lots at several locations along this Metro-owned right-of-way. There are existing businesses in the right-of-way that lease the land from Metro and many would be displaced if the ROW is used for a busway.

3.2.4 Alternatives On De Soto Avenue

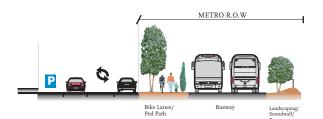
3.2.4.1 Alternative 6 De Soto Metro Rapid Bus

<u>Description of Proposed Route</u> – This route would operate primarily on De Soto Avenue between Chatsworth and the De Soto Metro Orange Line station. Two options are considered for the final northern segment to connect to the Chatsworth Metrolink Station: (1) buses would use Lassen Street, to Old Depot Road; or (2) buses would use Devonshire Street to Old Depot Road. Figure 3-6 illustrates Alternative 6.

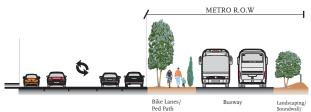


Alternative 5 Canoga Ave Off - Street Busway **Metro Orange Line Extension**

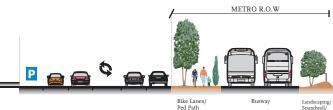
Northern extension of the existing Metro Orange Line to the Metrolink Chatsworth Station through an off-street Metro-owned right-of-way



Canoga Avenue



Canoga Avenue
From Keswick St to Ignomar St &
From Parthenia St to Obsorne St



Canoga Avenue

Legend

0

Main Route

SR-118 Park & Ride Lot Connection Options

Metrolink Chatsworth Station Access Options

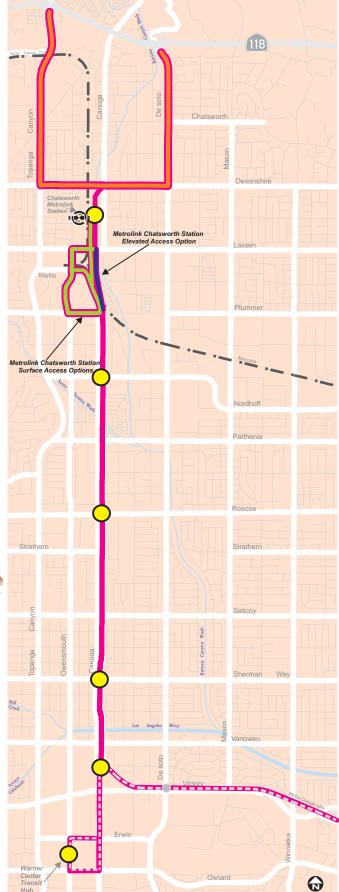
Metrolink & Metrolink Stations Proposed Stations

Existing Stations (Metro Orange Line)

Two-way Left Turn Lane

Parking





Alternative 6 De Soto Metro Rapid Bus

Metro Rapid service running on-street in mixed traffic and stopping at regular bus stops



De Soto Avenue

From Fairchild Ave to Roscoe Blvd & From Osborne St to Nordhoff St



De Soto Avenue (Non-Peak Periods)

Predominant Cross Section



Legend

Main Route

SR-118 Park & Ride Lot Connection Options

Metrolink Chatsworth Station Access Options

Metrolink & Metrolink Stations

Proposed Stations

Existing Stations (Metro Orange Line)

Two-way Left Turn Lane

Parking

Source: ITERIS

<u>Current Metro Lines</u> – Metro Lines 167, 244, Santa Clarita Transit 796 and Antelope Valley Transit 787 operate along this route.

<u>Type of Service</u> – This Metro Rapid route would operate as an on-street bus on mixed-flow traffic with Transit Priority Systems and Metro Rapid passenger amenities for the entire length.

<u>Stations</u> – Stations would be located at the De Soto Metro Orange Line Station, Sherman Way, Roscoe Boulevard, Nordhoff Street and the Chatsworth Metrolink Station.

<u>Alternative Route Terminus</u> – The route could be extended to connect with: a future park-and-ride lot adjacent to State Route 118, either on Topanga Canyon Boulevard or on De Soto Avenue; or an existing park-and-ride lot along Porter Ranch Road., south of SR-118. The bus would run on-street on a mixed-flow lane and the following routing options are considered to provide this connection: (1) the buses would use Old Depot Plaza, Devonshire Street and Topanga Canyon Boulevard, for a Topanga Canyon Boulevard park-and-ride lot; (2) the buses would use Old Depot Plaza, Devonshire Street and De Soto Avenue, for a De Soto Avenue park-and-ride lot; or (3) the buses would use Old Depot Plaza, Devonshire Street, De Soto Avenue, Rinaldi Avenue and Porter Ranch Road for the existing park-and-ride lot at Porter Ranch Road.

<u>Intermodal Connections</u> – This route would provide connections to the Chatsworth Metrolink Station and the Metro Orange Line.

<u>Activity Centers</u> – This route provides service to Canoga Park Branch Library, Pierce College and Chatsworth and William Tell Aggeler Opportunity High Schools.

<u>Other Comments</u>—Connections between the Chatsworth Metrolink Station and Warner Center would require a transfer at the De Soto Metro Orange Line station.

3.2.4.2 Alternative 7 De Soto Dedicated Lane - On Street

<u>Description of Proposed Route</u> – This route would operate primarily on De Soto Avenue between Chatsworth and the De Soto Metro Orange Line station. Two options are considered for the final northern segment to connect to the Chatsworth Metrolink Station: (1) buses would use Lassen Street, to Old Depot Road; or (2) buses would use Devonshire Street to Old Depot Road. Figure 3-7 illustrates Alternative 7.

<u>Alternative Route Terminus</u> – The route could be extended to connect with: a future park-and-ride lot adjacent to State Route 118, either on Topanga Canyon Boulevard or on De Soto Avenue; or an existing park-and-ride lot along Porter Ranch Road, south of SR-118. The bus would run on-street in a mixed-flow lane and the following routing options are considered to provide this connection: (1) the buses would use Old Depot Plaza, Devonshire Street and Topanga Canyon Boulevard, for a Topanga Canyon Boulevard park-and-ride lot; (2) the buses would use Old Depot Plaza, Devonshire Street and De Soto Avenue, for a De Soto Avenue Park & Ride lot; or (3) the buses would use Old Depot Plaza, Devonshire Street, De Soto Avenue, Rinaldi Avenue and Porter Ranch Road for the existing park-and-ride lot at Porter Ranch Road.

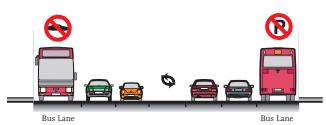
<u>Current Metro Lines</u> – Metro Lines 167, 244, Santa Clarita Transit 796 and Antelope Valley Transit 787 operate along this route.

<u>Type of Service</u> – A De Soto Avenue Bus Lane would be provided by prohibiting parking along the route and striping the existing parking lane as a dedicated bus-only lane (also allowing for use by right turning vehicles). In the Southbound direction only, a mixed-flow traffic lane would have to be



Alternative 7 De Soto Dedicated Lane On - Street

Metro Rapid service running on a Bus-Only lane and stopping at regular bus stops



De Soto Avenue From Fairchild Ave to Roscoe Blvd & From Osborne St to Nordhoff St



Predominant Cross Section



Legend

 \circ



SR-118 Park & Ride Lot Connection Options

Metrolink Chatsworth Station Access Options



Proposed Stations

Existing Stations (Metro Orange Line)

Two-way Left Turn Lane

No Parking

Convert Auto Lane to Bus Only Lane



converted to dedicated bus lane along the following segments: from Roscoe Boulevard to Fairchild Avenue and from Nordhoff Street to Osborne Street. On all other segments of the route, the bus would run on-street in mixed-flow traffic with Transit Priority Systems for the entire length.

<u>Stations</u> – Stations would be located at the De Soto Metro Orange Line Station, Sherman Way, Roscoe Boulevard, Nordhoff Street and the Chatsworth Metrolink Station.

<u>Alternative Route Terminus</u> – the route could be extended to connect with: a future park-and-ride lot adjacent to State Route 118, either on Topanga Canyon Boulevard or on De Soto Avenue; or an existing park-and-ride lot along Porter Ranch Road., south of SR-118. The bus would run on-street on a mixed-flow lane and the following routing options are considered to provide this connection: (1) the buses would use Old Depot Plaza, Devonshire Street and Topanga Canyon Boulevard, for a Topanga Canyon Boulevard park-and-ride lot; (2) the buses would use Old Depot Plaza, Devonshire Street and De Soto Avenue, for a De Soto Avenue park-and-ride Lot; or (3) the buses would use Old Depot Plaza, Devonshire Street, De Soto Avenue, Rinaldi Avenue and Porter Ranch Road for the existing park-and-ride lot at Porter Ranch Road.

<u>Intermodal Connections</u> – This route would provide connections to the Chatsworth Metrolink Station and the Metro Orange Line.

<u>Activity Centers</u> – This route provides service to Canoga Park Branch Library, Pierce College and Chatsworth and William Tell Aggeler Opportunity High Schools.

<u>Other Comments</u>— Peak period parking prohibitions are already being implemented on De Soto Avenue, providing three lanes of travel in the peak direction. Restricting parking to provide a Bus Lane would amount to the elimination of a mixed-flow traffic lane during the peak period.

3.2.5 Alternatives On Topanga Canyon Boulevard

3.2.5.1 Alternative 8 Topanga Canyon Metro Rapid Bus

<u>Description of Proposed Route</u> – This route would connect the Metro Orange Line with the Chatsworth Metrolink Station primarily via Topanga Canyon Boulevard. The route would begin at the Warner Center Transit Hub and utilize Owensmouth Avenue, Oxnard Street (Erwin Street to Owensmouth Avenue for southbound), to Topanga Canyon Boulevard. Alternatively, the route would begin at the Metro Orange Line Canoga Station and use Vanowen Street to get to Topanga Canyon Boulevard. Two options are considered for the final northern segment to connect to the Chatsworth Metrolink Station: (1) buses would use Lassen Street, to Old Depot Road; or (2) buses would use Devonshire Street to Old Depot Road. Figure 3-8 illustrates Alternative 8.

<u>Current Metro Lines</u> – Metro Lines 150, 166, 245, 353, 354, 645, 750, Santa Clarita Transit 791 and LADOT Commuter Express 575 operate along this route.

<u>Type of Service</u> – This Metro Rapid route would operate as an on-street bus in mixed-flow traffic with Transit Priority Systems and Metro Rapid passenger amenities for the entire length.

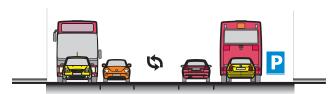
<u>Stations</u> – Stations would be located at the Warner Center Transit Hub, Victory Boulevard, Vanowen Street, Sherman Way, Roscoe Boulevard, Nordhoff Street and the Chatsworth Metrolink Station.

<u>Alternative Route Terminus</u> – The route could be extended to connect with: a future park-and-ride lot adjacent to State Route 118, either on Topanga Canyon Boulevard or on De Soto Avenue; or an



Alternative 8 Topanga Canyon-Metro Rapid Bus

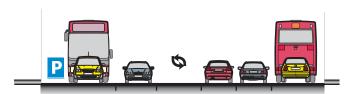
Metro Rapid service running on-street in mixed traffic and stopping at regular bus stops



Topanga Canyon Blvd From Strathern St to Roscoe Blvd, From Prairie St to Marilla St and From Andora Ave to Chatsworth St



Topanga Canyon Blvd Predominant Cross Section



Topanga Canyon Blvd Victory Blvd to Vanowen St



Main Route

SR

 ${\tt SR-118~Park~\&~Ride~Lot~Connection~Options}$

Metrolink Chatsworth Station Access Options



Metrolink & Metrolink Stations



Proposed Stations



Existing Stations (Metro Orange Line) Two-way Left Turn Lane





Parking





0

existing park-and-ride lot along Porter Ranch Road, south of SR-118. The bus would run on-street in a mixed-flow lane and the following routing options are considered to provide this connection: (1) the buses would use Old Depot Plaza, Devonshire Street and Topanga Canyon Boulevard, for a Topanga Canyon Boulevard park-and-ride lot; (2) the buses would use Old Depot Plaza, Devonshire Street and De Soto Avenue, for a De Soto Avenue Park & Ride lot; or (3) the buses would use Old Depot Plaza, Devonshire Street, De Soto Avenue, Rinaldi Avenue and Porter Ranch Road for the existing park-and-ride lot at Porter Ranch Road.

<u>Intermodal Connections</u> – This route would provide connections to the Chatsworth Metrolink Station, Warner Center Transit Hub, Metro Orange Line and Ventura Boulevard Metro Rapid Bus.

<u>Activity Centers</u> – This route provides service to Canoga Park High School, Westfield Shopping Town Topanga, The Promenade Mall, and the Warner Center office buildings.

<u>Other Comments</u>— This route is currently a state highway (Route 27) and obtaining parking prohibitions, additional ROW for stations, special signal timing to expedite bus flow would require coordination with and approval by Caltrans.

3.2.5.2 Alternative 9 Topanga Canyon Dedicated Lane – On Street

<u>Description of Proposed Route</u> – This route would connect the Metro Orange Line with the Chatsworth Metrolink Station primarily via Topanga Canyon Boulevard. The route would begin at the Warner Center Transit Hub and utilize Owensmouth Avenue, Oxnard Street (Erwin Street to Owensmouth Avenue for southbound), to Topanga Canyon Boulevard. Alternatively, the route would start at the Metro Orange Line Canoga Station and use Vanowen Street to get to Topanga Canyon Boulevard. Two options are considered for the final northern segment to connect to the Chatsworth Metrolink Station: (1) buses would use Lassen Street, to Old Depot Road; or (2) buses would use Devonshire Street to Old Depot Road. Figure 3-9 illustrates Alternative 9.

<u>Current Metro Lines</u> – Metro Lines 150, 166, 245, 353, 354, 645, 750, Santa Clarita Transit 791 and LADOT Commuter Express 575 operate along this route.

<u>Type of Busway and Limits</u> —Along Topanga Canyon Boulevard a bus lane would be provided by prohibiting parking on some segments and converting a mixed-flow traffic lane into a dedicated bus lane on others. In the Northbound direction, a mixed-flow traffic lane would have to be converted to a dedicated bus lane along the following segments: from Victory Boulevard to Vanowen Street; from Runnymede Street to Cohasset Street; and from Roscoe Boulevard to Eccles Street. In the Southbound direction, a mixed-flow traffic lane would have to be converted to a dedicated bus lane along the following segments: Marilla Street to Prairie Street and Eccles Street to Strathern Street. On all other segments of the route, the bus would run on-street in mixed-flow traffic with Transit Priority Systems for the entire length.

<u>Stations</u> – Stations would be located at the Warner Center Transit Hub, Victory Boulevard, Vanowen Street, Sherman Way, Roscoe Boulevard, Nordhoff Street and the Chatsworth Metrolink Station.

<u>Alternative Route Terminus</u> – The route could be extended to connect with: a future park-and-ride lot adjacent to State Route 118, either on Topanga Canyon Boulevard or on De Soto Avenue; or an existing park-and-ride lot along Porter Ranch Road., south of SR-118. The bus would run on-street in a mixed-flow lane and the following routing options are considered to provide this connection: (1) the buses would use Old Depot Plaza, Devonshire Street and Topanga Canyon Boulevard, for a Topanga Canyon Boulevard park-and-ride lot; (2) the buses would use Old Depot Plaza, Devonshire Street and



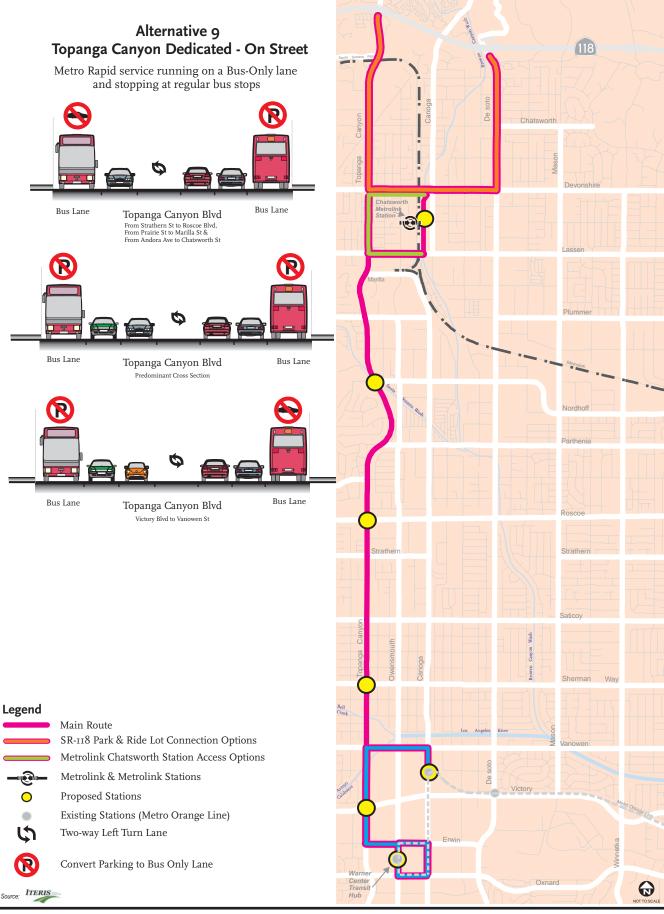
De Soto Avenue, for a De Soto Avenue park-and-ride lot; or (3) the buses would use Old Depot Plaza, Devonshire Street, De Soto Avenue, Rinaldi Avenue and Porter Ranch Road for the existing park-and-ride lot at Porter Ranch Road.

<u>Intermodal Connections</u> – This route would provide connections to the Chatsworth Metrolink Station, Warner Center Transit Hub, Metro Orange Line and Ventura Boulevard Metro Rapid Bus.

<u>Activity Centers</u> – This route provides service to Canoga Park High School, Westfield Shopping Town Topanga, The Promenade Mall, and the Warner Center office buildings.

<u>Other Comments</u>— This route is currently a state highway (Route 27) and obtaining parking prohibitions, additional ROW for stations, special signal timing to expedite bus flow would require coordination with and approval by Caltrans.





4.0 SCREENING OF ALTERNATIVES

4.1 OVERVIEW OF THE SCREENING PROCESS

As described in Section 3 "Description of Alternatives", eight alternatives along three different corridors and a TSM alternative were identified through the alternatives development process. In order to identify the alternatives that represented the highest opportunity for successful high-capacity transit service, a qualitative assessment of the three corridors and the TSM alternative was conducted. Based on a number of evaluation criteria, this screening process intended to identify which corridors, and thereby which alternatives, appeared to warrant a continuation of the analysis into the environmental review phase. It is a mandatory element of an Environmental Impact Report (EIR) to assess a No-Project Alternative, so this alternative was not subject to the screening process. Following this screening process, the remaining corridors/alternatives will be taken to the next step, in terms of developing more detailed plans for the improvements of each corridor alternative and evaluating each in greater detail in the EIR.

4.2 METHODOLOGY

Twenty four evaluation criteria were developed to allow the team to qualitatively assess how well the corridors would meet the goals and objectives of the project. The evaluation criteria included:

- Serves Population Density
- Serves Employment Density
- Serves Transit Dependent Population
- Serves Activity Centers
- Consistency with Regional Plans
- Consistency with Land Use Plans
- Redevelopment Project Potential
- Joint-Development Project Potential
- Utilizes Existing Transit Priority System
- Serves High Traffic Volume Corridor
- Has Opportunities for Dedicated Lanes
- Has potential for the development of park-and-ride lots
- Complements/Connects Existing Transit Routes
- Exhibits High Ridership Potential
- Meets Metro Rapid Bus Board approved Criteria
- Has potential for conversion into a Light Rail Transit corridor
- Enhances Network Connectivity
- Consistency with Long Range Transportation Plans
- Opportunities for Bicycle and Pedestrian Paths
- Serves Transit/Pedestrian Oriented Development
- Opportunities for Urban Design Enhancements
- Potential for Significant Environmental Impacts
- Cost-Effectiveness



- Input from Elected Officials
- Input from the Public

Given the preliminary nature of the evaluation process, no attempt is made to quantify the measures, but rather, the evaluation is based on engineering judgment and knowledge of the Study Area; the corridors were rated relative to one another on how they would best perform with respect to each evaluation criteria.

Table 4-1 provides a summary evaluation of the three corridors considered. The more "dots", the more that alternative satisfies the evaluation criteria. A description of the relative rankings of the corridors in each issue area follows.

Table 4-1 Corridor Evaluation				
EVALUATION CRITERIA	TSM	Canoga	De Soto	Topanga Canyon
Serves Population Density	•••	••	••	••
Serves Employment Density	•••	•••	•	••
Serves Transit Dependent Population	•••	••	•	••
Serves Activity Centers	•••	•••	•	••
Consistency with Regional Plans	••	•••	•	•
Consistency with Land Use Plans	••	•••	•	••
Redevelopment Project Potential	•	•••	•	•
Joint-Development Project Potential	•	•••	•	••
Utilizes Existing Transit Priority System	•	•	•	•••
Serves High Traffic Volume Corridor	••	•••	•	•
Has Opportunities for Dedicated Lanes	•	•••	•	•
Has potential for the development of park-and-ride lots	•	•••	•	•
Complements/Connects Existing Transit Routes	••	•••	••	••
Exhibits High Ridership Potential	••	•••	•	••
Meets Metro Rapid Bus Board approved Criteria	•	•	•	•
Has potential for conversion into a Light Rail Transit corridor	•	•••	•	•
Enhances Network Connectivity	••	•••	••	•••
Consistency with Long Range Transportation Plans	••	••	••	••
Opportunities for Bicycle and Pedestrian Paths	••	•••	•	•
Serves Transit/Pedestrian Oriented Development	••	••	•	••
Opportunities for Urban Design Enhancements	•	•••	••	••
Potential for Significant Environmental Impacts	•••	••	••	••
Cost-Effectiveness	•••	••	•••	•••
Input from Elected Officials	••	•••	•	•
Input from the Public	••	•••	•	•
Total Score	49	65	35	43

Key

High - ●●●
Medium - ●●
Low -



4.3 EVALUATION

4.3.1 Demographics

Demographic factors have a direct correlation to the success of a transit route, and must be considered when making a determination as to where to place new service. Using Geographic Information Systems technology, thematic maps were produced of the Study Area, and demographic factors were plotted on them. See Figure 2-2, Figure 2-3 and Figure 2-4.

4.3.1.1 Population Density

Population density, the number of people living on an acre of land, was visually examined for each of the candidate corridors. Figure 2-2 presented the population density of the Study Area at the census tract level in the following categories:

- 0-10 persons per acre
- 10-20 persons per acre
- 20-50 persons per acre
- 50 or greater persons per acre

The corridors were evaluated on how many of the high-density census tracts they would serve. Those sub-corridors serving areas of high population density ranked the highest. The De Soto corridor serves areas of lower density population and was rated "medium" relative to the other corridors. The Topanga Canyon and Canoga corridors both serve higher density census tracts and were ranked as "high". The TSM Alternative was also rated "high" because it serves many parts of the Study Area.

4.3.1.2 Employment Density

Employment density, the number of jobs per acre, is also an important predictor of transit ridership, as people need to get to and from work. For a given census tract, the employment density was determined to be:

- 0-10 jobs
- 10-20 jobs
- 20-50 jobs
- > 50 jobs

The corridors were evaluated on how many of the higher-density employment zones they would serve. Those corridors serving areas of higher employment density ranked most highly. The alternatives along the Topanga Canyon corridor would serve Warner Center and portions of the Chatsworth industrial area. The Canoga corridor would serve Warner Center, the Chatsworth industrial area and several high-employment concentration zones along Canoga Avenue. The alternatives along the De Soto corridor would serve mainly the Chatsworth Industrial Area. The TSM Alternative was rated "high" because it serves all the employment centers the other alternatives serve.



4.3.1.3 Transit Dependant Population

One of the primary goals of transit service is to provide for the mobility needs of those youth and seniors who do not drive an automobile. These demographic groups are termed "transit-dependent" population (those younger than 15 years old and those over 64 years old). Households without access to a car and those below the poverty line are also typically dependent on transit. A composite measure of these factors was created as a Transit Dependency Index (See Figure 2-4) using data derived from the 2000 census. The census tracts were rated from Far below Average, meaning little dependency on transit, to Far above Average, meaning many households were dependent upon transit.

Each of the candidate corridors was evaluated, and those corridors which passed through areas having a high concentration of transit-dependent populations were ranked the highest. The Canoga and Topanga Canyon corridors were rated highest. The alternatives along the De Soto corridor served the least number of transit dependent population and this corridor was therefore ranked "low". The TSM Alternative was also rated "high" because it serves many parts of the Study Area.

Table 4-2 summarizes the ratings of the corridors on demographic factors.

Table 4-2 Demographic Factors				
Criteria/Corridor	TSM	Canoga	De Soto	Topanga Canyon
,				
DEMOGRAPHIC FACTORS				
Population Density	•••	••	•	••
Employment Density	•••	•••	••	••
Transit Dependent Population	•••	••	•	••
Scoring Factors:				
High 3 - ●●●				
Medium 2 - ●●				
Low 1 - ●				



4.3.2 Land Use Plans And Policies

4.3.2.1 Activity Centers

The success of any transit service is strongly dependant on its ability to link origin points with destinations points. Those routes, which help to link the greatest number of origins and destinations, have the potential for higher ridership. Those that serve major activity centers may also require higher-capacity transit services, like Metro Rapid Bus, because of the concentration of activity and potential peaked ridership at such centers. Therefore, when evaluating the candidate corridors, it was important to take into consideration the number and type of activity centers along each corridor.

Activity centers and intermodal facilities served by each corridor are summarized in Table 4-3.

CORRIDOR/ALTERNATI	IVES MAJOR ACTIVITY CENTERS	INTERMODAL CONNECTIONS
ГSM	Serves all activity centers	Serves all intermodal facilities
	Westfield Shoppingtown Topanga	Chatsworth Metrolink Station
Canoga	The Promenade Mall	Metro Orange Line
	New Academy High School	Warner Center Transit Hub
	Warner Center office buildings	Ventura Blvd. Metro Rapid Bus
	Chatsworth High School	Metro Orange Line
De Soto	William Tell Aggeler Opportunity High School	Chatsworth Metrolink Station
	Canoga Park Branch Library	
	Pierce College	
	Canoga Park High School	Metro Orange Line
Topanga Canyon	Westfield Shopping Town Topanga	Warner Center Transit Hub
	The Promenade Mall	Ventura Blvd. Metro Rapid Bus
	Warner Center office buildings	Chatsworth Metrolink Station

Both the Canoga and Topanga Canyon corridors serve regionally-significant activity centers within the Warner Center area. The De Soto corridor serves mainly local activity centers (e.g. schools and a library), but also serves Pierce College, a regionally-significant community college. The TSM Alternative was ranked "high" because it serves all activity centers.

4.3.2.2 Regional Plans

Regional Plans address the comprehensive needs of entire regions. The Southern California Association of Governments (SCAG), as the designated Metropolitan Planning Organization (MPO) for the Los Angeles region, develops plans that provide a framework for local and regional development. Each corridor was evaluated for its consistency with the goals, policies and strategies contained in SCAG's regional plans (i.e. Regional Comprehensive Plan and Guide, Regional Transportation Plan, and Compass Blueprint 2% Strategy). The Canoga corridor was ranked "high" because it is specifically identified by SCAG's Compass Blueprint 2% Strategy as a 2% Opportunity



Area (this assumes high-capacity transit service would be provided along the Metro-owned right-of-way that parallels Canoga Avenue). The Topanga Canyon and De Soto corridors were ranked "low" because neither corridor has been prioritized in regional planning efforts. The TSM Alternative was assigned a "medium", neutral rating because increased transit service promotes the regional goal of increase transit usage.

4.3.2.3 Land Use Plans

City of Los Angeles General Plan

Through its goals, objectives and policies, the General Plan establishes the vision for the future of the City. The Los Angeles General Plan Framework (Framework) is a special purpose element of the General Plan that establishes development policy related to growth based on population and employment growth projections at a citywide level. The Framework identifies, and provides incentives for growth in commercial and mixed-use centers, along boulevards, industrial districts, and in proximity to transportation corridors and transit stations. Candidate corridors were ranked "low", "medium" or "high" as to how well they served mixed-use centers and boulevards identified in the Framework. The Framework identifies Warner Center as a "Regional Center"; Downtown Canoga Park as a "Community Center"; and Topanga Canyon Boulevard, between Vanowen Street and Saticoy Street as a "Mixed Use Boulevard". Both the Topanga Canyon and Canoga corridors serve Warner Center and Downtown Canoga Park. The TSM Alternative would serve all mixed-use centers and boulevards.

City of Los Angeles Community Plans

Community Plans help to guide the current and future planning efforts of a community. Many communities include a transit component to help channel growth and development. This would be reviewed to ensure consistency between transit planning and the plans of the city through which the service passed. The Canoga Transportation Corridor lies within two Community Plan areas in the City of Los Angeles: Chatsworth-Porter Ranch and Canoga-Park-Winnetka-Woodland Hills-West Hills. Candidate corridors were ranked "low", "medium" or "high" as to how well they helped to meet the goals as expressed in the community plans. The Canoga Avenue corridor was ranked "high" because both community plans recognize the importance of the Metro-owned right-of-way as an area of opportunity for the development of transit service that is supportive of the area's activity centers.

4.3.2.4 Redevelopment Project Areas/Joint Development

Provision of new or additional transit service in a redevelopment area can help to address some of the concerns underlying the redevelopment effort. This could include such concerns as desire for economic development (jobs creation), or to improve the mobility of the citizens living in that area. The southern portion of the Canoga Transportation Corridor lies within the Reseda/Canoga Park Redevelopment Project Area. Candidate corridors were evaluated on their ability to help contribute to the reduction of blight. Given the availability of Metro-owned land along the Canoga corridor, and the development opportunities this presents, Canoga Avenue corridor was ranked "high".

Transportation projects also bring the opportunity for joint development, Metro's real property asset development and management program designed to secure the most appropriate private and/or public sector development on Metro-owned property at and adjacent to transit stations and corridors. Metro has successfully developed several sites adjacent to or directly at Metro Rail stations. Candidate



corridors were evaluated on their potential for joint-development projects. Although the project does not include rezoning for development, the Canoga Avenue corridor was ranked "high" due to the availability of Metro-owned land for potential joint developments along the Metro-owned right-of-way. The De Soto corridor provides for limited development potential for surrounding land uses and it was therefore ranked "low". The Topanga Canyon corridor's direct connection to Warner Center could provide for potential development opportunities on surrounding land uses and it was therefore ranked "medium".

Table 4-4 summarizes the ratings of the corridors on land use factors.

Table 4-4 Land Use and Policies				
Criteria/Corridor	TSM	Canoga	De Soto	Topanga Canyon
LAND USE PLANS & POLICIES				
LAND USE I LANS & I OLICIES				
Activity Centers	•••	•••	••	•••
Regional Plans	••	•••	•	•
Land Use Plans	••	•••	•	••
Redevelopment Project Areas	•	•••	•	•
Joint Development	•	•••	•	••
Scoring Factors:				
High 3 - •••				
Medium 2 - ●●				
Low 1 - ●				

4.3.3 Transportation Features

4.3.3.1 Existing Transit Priority System

It is possible to provide transit service with priority signalization at intersections. Such priority signals can give a bus extra time to clear an intersection (and get to the stop on the opposite corner), or can give a bus an early green light so it gets a "head-start" over other traffic. Candidate corridors were evaluated to determine whether or not such priority signalization exists on that route. Topanga Canyon Boulevard is the only existing Transit Priority corridor in the Study Area. The Canoga Avenue and De Soto corridors were rated as "low" because they do not have transit signal priority (TSP) programmed. The TSM Alternative was assigned a "medium", neutral rating because is also serves Topanga Canyon Boulevard.

4.3.3.2 Existing Traffic Volumes

Existing traffic volumes were gauged to determine the potential impacts on traffic movement and levels of service should a new line be introduced. One of the benefits of Metro Rapid Bus service is its speed, which in a heavily developed area can rival that of a private automobile. But if the transit vehicle is unable to move through traffic efficiently, that benefit is lost. Candidate corridors' average annual daily total (ADT) volumes were reviewed. Those corridors with a high ADT reflected the potential for slower transit operations and were rated lower than low-volume streets. Furthermore, travel time studies were conducted on the three corridors to determine which corridor would represent the greatest opportunity for fastest north-south travel by bus.

Table 4-5 North-South Estimated Transit Travel Time							
		7-9	AM	11:30- MID-l		4-6 I	?М
Corridors	Segment Length	Travel Time (mins) ³	Average Speed (mi/hr)	Travel Time (mins) ³	Average Speed (mi/hr)	Travel Time (mins) ³	Average Speed (mi/hr)
De Soto Avenue 1							
From De Soto Metro Orange Line Station to Chatsworth Metrolink Station	5.6	19.25	17	19.78	17	18.56	18
From Chatsworth Metrolink Station to De Soto Metro Orange Line Station	5.6	19.74	17	20.57	16	18.34	18
From Chatsworth Metrolink Station to SR-118	2.1	8.69	14	7.71	16	9.52	13
From SR-118 to Chatsworth Metrolink Station	2.1	10.53	12	7.88	16	7.32	17
Canoga Avenue ²							
From Canoga Metro Orange Line Station to Chatsworth Metrolink Station	4.7	13.93	20	13.84	20	17.00	17
From Chatsworth Metrolink Station to Canoga Metro Orange Line Station	4.7	17.03	17	14.41	20	16.26	17
Topanga Canyon Boulevard ¹							
From Warner Center Metro Orange Line Station to Chatsworth Metrolink Station	6.4	19.51	20	18.35	21	21.76	18
From Chatsworth Metrolink Station to Warner Center Metro Orange Line Station	6.4	22.69	17	21.29	18	21.28	18
From Chatsworth Metrolink Station to SR-118	2.2	7.72	17	7.43	18	8.86	15
From SR-118 to Chatsworth Metrolink Station Notes: 1: Utilized Devonshire Street to access the Metrolink Station 2: Utilized Marilla and Lassen Street to access the Metrolink Station	2.2	7.72	17	7.62	17	7.73	17

The Topanga Canyon and De Soto corridors were ranked "low" given their relative higher level of congestion and the slower estimated travel time. On-street service alternatives along those corridors would be negatively impacted by the high levels of congestion. The TSM Alternative was assigned a "medium", neutral rating because it serves all three corridors.



^{2:} Utilized Marilla and Lassen Street to access the Metrolink Station

^{3:} Assumes 30-second dwell time at each station

4.3.3.3 Opportunities for Dedicated Lanes

Another way to help meet the need for transit vehicles to move through traffic quickly is by giving them a dedicated lane on which to operate. Since dedicated-lane service alternatives are being considered for all three corridors, the candidate corridors were analyzed to judge whether or not it would be physically possible (given the road width, medians, and setback or surrounding buildings and businesses) to provide such a dedicated lane, or whether the traffic volumes and level of service would be overly impacted by the dedication of a lane (in either or both directions) to transit. Canoga Avenue ranked "high" because of the availability of Metro-owned right-of-way for the creation of dedicated lanes. Dedicating bus lanes along Topanga Canyon Boulevard and De Soto Avenue would imply eliminating a parking lane or a general traffic lane. Therefore, these two corridors were ranked "low".

4.3.3.4 Opportunities for Park-and-Ride Lots

Park and Ride lots can help generate a greater ridership by allowing people to drive to and from a transit station/stop. The candidate corridors were analyzed to determine whether opportunities for park-and-ride lots existed along their lengths. Canoga Avenue was ranked "high" relative to the other two corridors because it is the only corridor with potential for park-and-ride lots along the route, given the availability of Metro-owned land. Table 4-6 indicates the ratings for the transportation features described above.

Table 4-6 Transportation Features				
Criteria/Corridor	TSM	Canoga	De Soto	Topanga Canyon
LAND USE PLANS & POLICIES				
Existing Transit Priority System	••	•	•	•••
Existing Traffic Volumes	••	•••	•	•
Opportunities for Dedicated Lane	•	•••	•	•
Opportunities for Park-And-Ride Lots	•	•••	•	•
Scoring Factors:				
High 3 - ●●●				
Medium 2 - ●●				
Low 1 - •				



4.3.4 Transit Service And Ridership

4.3.4.1 Existing Routes – Complementary of Competitive

When evaluating the potential benefits of a new transit line, care has to be taken not to grow ridership on the new line at the expense of an existing one. The candidate corridors were evaluated to note the presence of nearby service, and whether that service would be complementary (meaning both services would benefit because riders could transfer easily between them, and reach additional destinations more efficiently than would be otherwise possible), or competitive (meaning both serve the same population and activity centers/destinations) and a gain for one is a loss for the other. This inefficiency greatly increases costs of transit operation. The competitive analysis was geared toward competing express services, not local service. A competitive corridor is ranked low and a complementary corridor is ranked high. Both De Soto and Topanga Canyon corridors were ranked "medium" because they are both already served by local routes. Express service would become competitive and have a negative impact on the existing routes. Canoga Avenue was ranked "high" because no local routes currently serve the corridor and any new service would complement the existing service along De Soto Avenue and Topanga Canyon Boulevard. The TSM Alternative was assigned a "medium", neutral rating because it serves all three corridors.

4.3.4.2 Line-by-Line Ridership Potential

Given the demographic and headway (how frequently the bus operates at a particular stop) factors, an analysis is undertaken to make an estimate of the potential ridership that could exist (it includes both the transit dependent population and a percentage of those who might be induced to take transit rather than driving a private automobile). This qualitative assessment represented a combination of the scores for the population and employment density and transit dependent population factors. Corridors that scored highest in those factors were judged to have higher ridership potential. The greater the transit ridership potential, the higher the corridor is ranked. Detailed ridership forecasts will be conducted with the Metro travel demand model for the screened corridor alternatives. Both Canoga Avenue and Topanga Canyon Boulevard serve higher population and employment density zones. However, Canoga Avenue was ranked as "high" relative to Topanga Canyon Boulevard because a direct physical interface with the existing Metro Orange Line (i.e. an extension of the Metro Orange Line) and would increase the corridor's ridership potential significantly. The TSM Alternative was assigned a "medium", neutral rating because it serves all three corridors.

4.3.4.3 Metro Board Rapid Bus Criteria

Since none of the three corridors had been included in the 2002 Metro Rapid Expansion Program, each of them was evaluated based on Metro's Board thresholds for Metro Rapid consideration. In order to ensure that the necessary ridership levels and opportunities for significant travel time savings are met, minimum ridership thresholds were established by Metro's Board for Metro Rapid service. Those thresholds were set at 500 weekday passengers per mile of route with a minimum route length of 10 miles. The existing local route along Topanga Canyon Boulevard and De Soto Avenue, Route 245/244, is 16.9 miles long and carries 4,821 weekday riders, equaling 300 riders per mile. Both Topanga Canyon Boulevard and De Soto Avenue were ranked "low". There are no



existing routes along the Canoga Corridor and therefore, no base information is available against which to apply the Rapid Bus criteria. If operated as a direct route from Chatsworth to North Hollywood, the 17-mile route would exceed the minimum length requirement. Detailed ridership forecasts will be conducted for the alternatives that pass this screening.

Table 4-7 summarizes the ratings on the transit criteria.

Table 4-7 Transit Service and Ridersh	iip			
Criteria/Corridor	TSM	Canoga	De Soto	Topanga Canyon
TRANSIT SERVICE				
& RIDERSHIP PATTERNS				
Existing Routes - Complementary or Competitive	••	•••	••	••
Line-by-Line Ridership Potential	••	•••	•	••
Metro Rapid Criteria	•	•	•	•
Scoring Factors:				
High 3 - ●●●				
Medium 2 - ●●				
Low 1 - •				

4.3.5 Regional Context And Connectivity

4.3.5.1 Light Rail Conversion Potential

The ability to increase a route's capacity if warranted by demand is highly limited by the type of facility on which it operates. Routes operating on-street can only increase capacity by adding longer coaches or by increasing the frequency of service. Routes operating buses on a separate right-of-way (i.e. on a Busway) may also increase capacity by constructing a light rail line along the existing right-of-way. The Canoga Avenue corridor was ranked "high" because of the existence of the Metro-owned right-of-way. The Topanga Canyon and De Soto corridors were ranked "low" since converting an on-street bus service to a Light Rail line is a lot more difficult and costly than converting a Busway into a Light Rail line.



4.3.5.2 Regional Context/Connectivity

The ability of a route to provide passengers with easy connections to other transit routes and services is key to its success. Provision of intermodal connections along a route makes reaching more distant destinations easy and attractive because the connections (or transfers) are simple.

With the exception of the De Soto Avenue Corridor alternatives, all provide three major intermodal connections: to the Metrolink Commuter Rail (at Chatsworth Station); to the Metro Orange Line; and to the Ventura Metro Rapid. Furthermore, all alternatives provide connections to other transit routes that cross the corridors. The De Soto Avenue corridor was ranked as "medium" relative to the two other corridors because neither of its alternatives would directly connect to the Ventura Metro Rapid.

4.3.5.3 Consistency with Metro Long Range Plan

Provision of new transit service must be in keeping with Metro's own long-range goals and plans, and candidate corridors were examined to ensure that any alternatives proposed would be consistent with the Metro Long-Range Plan. A San Fernando Valley North-South Corridor transit investment is identified in the constrained plan recommendations of the Metro Long Range Plan. However, no specific route is mentioned, therefore, all corridors received a "medium" rating. The TSM alternative also received a "medium" rating because overall frequency improvements are consistent with the Long Range Plan. Table 4-8 summarizes the ratings related to regional context.

Table 4-8 Regional Context/ Connectivity				
Criteria/Corridor	TSM	Canoga	De Soto	Topanga
Circia/Corridor				
REGIONAL CONTEXT / CONNECTIVITY				
Light Rail Conversion Potential	•	•••	•	•
Network Connectivity	••	•••	••	•••
Consistency with Metro's Long Range Plan	••	••	••	••
Scoring Factors:				
High 3 - ●●●				
Medium 2 - ●●				
Low 1 - ●				

4.3.6 Accessibility And Urban Design



In general, the presence of existing urban design enhancements in a corridor should not determine whether it is selected for a transit investment. (An overlay of urban design improvements will be applied to any corridor selected.) However, two aspects of the existing urban design / built environment along a corridor would affect the future success of a transit investment:

- Opportunities for Bicycle and Pedestrian ways
- Transit- and Pedestrian-Oriented Neighborhoods
- Opportunities/Constraints for Transit Station / Urban Design Improvements

4.3.6.1 Opportunities For Bicycles and Pedestrian Paths

Parallel pedestrian and bicycle paths increase the attractiveness and accessibility of a transit route. Potential riders are more inclined to walk or bike to and from stations if there are available, and preferably separated, pathways. These pathways also represent recreational opportunities for the corridor's neighborhoods. Each corridor was ranked based on the suitability of its existing infrastructure to support pedestrian and bicycle paths. Table 4-9 summarizes the analysis of opportunities for bicycle and pedestrian paths.

Table 4-9 Opportunities for Bicycle and Pedestrian Paths				
Alternative	Characteristics	Rating		
TSM	Includes multiple, diverse corridors – assign medium, neutral rating.	••		
Canoga	Metro-owned Right-of-Way provides ample opportunities for bicycle and pedestrians paths. Corridor identified as a gap in the Metro Bicycle Transportation Strategic Plan	•••		
De Soto BRT	Opportunities for bikeways are limited by the existing number of lanes and prevailing traffic volumes.	•		
Topanga Rapid Bus	Opportunities for bikeways are limited by the existing number of lanes and prevailing traffic volumes.	•		

4.3.6.2 Transit and Pedestrian-Oriented Neighborhoods Along The Corridor

The attractiveness of transit investments to potential riders is affected by the urban character of their origin and destination neighborhoods. Specifically, a corridor neighborhood is more likely to be accessible and therefore attractive for transit riders and other pedestrians if it has:

- A recognizable "center" with high pedestrian activity along the corridor,
- Higher-density, mixed land usage around its center,
- An extensive network of through streets with sidewalks, and
- Buildings which front directly onto those sidewalks

Neighborhoods such as these are often called transit-oriented or pedestrian-oriented neighborhoods, and their defining characteristic is their "walkability."



Conversely, a corridor neighbor would be "less transit friendly" if it has:

- No discernable center.
- Segmented, low-density land use,
- Discontinuous streets and sidewalks (e.g. cul-de-sac), and
- Buildings which are isolated from sidewalks by large parking lots or other major setbacks.

These neighborhoods will be relatively inaccessible and unattractive for transit riders and other pedestrians. For the transit- and pedestrian-orientation of neighborhoods analysis, the ratings in Table 4-10 have been assigned as follows:

- **High** (●●●) Corridors with significant, observed transit- or pedestrian-oriented neighborhoods where potential transit stops could be located.
- **Medium** (●●) Corridors with a balance of transit-oriented and less transit friendly neighborhoods, or neighborhoods with a mixture of these characteristics, or no observable positive or negative characteristics.
- Low (•) Corridors with neighborhoods with observed less transit friendly characteristics.

Table 4-10 Transit and Pedestrian-0	Oriented Neighborhoods Along the Corridor	
Alternative	Characteristics	Rating
TSM	Includes multiple, diverse corridors – assign medium, neutral rating.	••
Canoga	Most of the corridor's neighborhoods are not pedestrian oriented. However, Downtown Canoga Park does exhibit some characteristics of a transit-oriented neighborhood with higher densities and a mix of multifamily residential and commercial uses. Furthermore, any alternative along this corridor would provide access to Warner Center, a major center with pedestrian amenities.	••
De Soto	Does not provide access to major pedestrian activity centers.	•
Topanga Canyon	Most of the corridor's neighborhoods are not pedestrian oriented. However, Downtown Canoga Park does exhibit some characteristics of a transit-oriented neighborhood with higher densities and a mix of multifamily residential and commercial uses. Furthermore, any alternative along this corridor would provide access to Warner Center, a major center with pedestrian amenities.	••

4.3.6.3 Opportunities/Constrains for BRT Stations/Accessibility Improvements Along the Corridor

While an overlay of new accessibility enhancements can generally be applied to most urban arterials, there are impediments that could prevent the installation of BRT stations and other urban design enhancements. This, in turn, would reduce the attractiveness and usefulness of the system to potential transit users.

The types of impediments to the installation of transit stations and other urban design improvements in the corridor include:



- Locations where no or extremely limited right-of-way for sidewalks exists between the street itself and private property. (e.g., locations where street widenings have been undertaken without full acquisition of adjacent property)
- Locations where a substantial amount of the sidewalk is occupied by physical barriers such as utility poles/wires, preventing the installation of amenities such as shelters, benches, etc.

Table 4-11 indicates where there are impediments to urban design enhancements on the corridors, following the ratings below.

- **High** (●●●) A clear opportunity with sufficiently wide, unobstructed sidewalks. A notable lack of impediments to urban design enhancement.
- **Medium** (●●) The norm. No major observed impediments to urban design enhancement, but no major opportunities either.
- **Low** (•) Observed impediments to urban design enhancement, such as narrow sidewalks, major utility poles in sidewalk or no opportunity for urban design improvements in the alternative.

Table 4-11 Opportunities/Constrains fo	or Urban Design Improvements Along The Corridor	
Alternative	Characteristics	Rating
TSM	With no "build" project, no urban design enhancements would be made.	•
Canoga	The Metro-owned right-of-way is mostly clear, and existing structures are on lease and can be removed. The open right-of-way is a clear opportunity for major urban design enhancements, similar to the ones along the existing Metro Orange Line. These improvements will, however, increase the basic cost of the transportation project.	•••
De Soto	No significant impediments for station / urban design improvements exist. Sidewalks are generally adequate.	••
Topanga Canyon	No significant impediments for station / urban design improvements exist. Sidewalks are generally adequate.	••

4.3.7 Potential For Significant Environmental Impacts

A preliminary evaluation of each corridor was conducted to determine its potential for significant environmental impacts. Corridors/alternatives with high potential for environmental impact were given a low score (less desirable). Since environmental impacts vary depending on the specific project components, the Canoga Busway alternative was evaluated separately from the other Canoga corridor alternatives. The following is a discussion of each corridor's potential for environmental impacts, based on preliminary evaluations. Table 4-12 summarizes the preliminary evaluation for potential significant environmental impacts for each corridor/alternative and compares the corridors in terms of overall potential for significant environmental impacts. The TSM alternative was rated the highest because the implementation of service frequency improvements does not have potential for significant environmental impacts.



			Canog	ga	
Environmental Issue	TSM	Topanga Canyon	Mixed Flow-	Busway	De Soto
A. Land Use	••	••	••	••	••
B. Community and Neighborhood Impacts	•••	••	••	••	••
C. Land Acquisition, Relocation & displacement of Existing Uses	•••	•••	•••/•	•	•••
D. Population, Housing and Environmental Justice	•••	•••	•••	•••	•••
E. Parklands and other Community Facilities	•••	•••	•••	•••	•••
F. Historic, Archeological and Paleontological Impacts	••	•	•	•	•
G. Visual and Aesthetic impacts	•••	••	••	••/•	••
H. Traffic, Circulation and Parking	••	••/•	••	••	••/•
I. Air Quality	•••	••	••	••	••
J. Noise	••	••	••	••	••
K.1 Geotechnical, Seismic	•••	••	••	••	••
K.2 Hazardous Materials	•••	•••	•••/•	•	•••
L. Water Resources	•••	•••	••	••	••
M. Biological resources and Ecosystems	•••	•••	•••	•••	•••
N. Energy	•••	•••	•••	•••	•••
O. Safety and Security	••	••/•	••	••	●●/●
Environmental Score	•••	••	•	•	••

High - ●●● (most environmentally sensitive – least impacts)

Medium - ●● (medium environmentally sensitive)
Low - ● (least environmentally sensitive)



4.3.7.1 Transportation Systems Management Alternative

Land Use. The sensitive land uses along the TSM Alternative include approximately 5,250 linear feet of mobile homes, 18,000 linear feet of single family, 17,530 linear feet of multi family residential uses and 41 community facilities. Although, the TSM Alternative would include bus service changes including service frequency or simplification of routes on the existing routes. Therefore, it would have a less than significant impact.

Community and Neighborhood Impacts: The TSM Alternative would not result in any community and neighborhood impacts.

Land Acquisition, Relocation and Displacement of Existing Uses: The TSM Alternative would not result in any land acquisition impacts.

Population, Housing and Environmental Justice: The TSM Alternative would not provide increased access to public transit to lower income, minority populations.

Parklands and Community Facilities: The TSM Alternative would not result in any impacts to parklands and community facilities.

Historic, Archeological and Paleontological Resources. The proposed TSM Alternative would add a local bus route on Canoga Avenue and increase the frequency of several existing Metro routes by up to half the headway time during peak hours. This alternative may include the construction of bus stops along Canoga to accommodate the new local bus route. According to preliminary research, there is at least one historical resource in the area, identified as Owensmouth Southern Pacific Railroad Station (Historic/Cultural Monument 488) and located at 21355 Sherman Way. The construction of bus stops and other infrastructure, as well as the location and design of the bus stops, may have a visual effect on this and other potential historical resources. However, construction impacts would be temporary, and it is expected that bus stops would be designed and placed in such a way as to minimize impacts to cultural resources. As such, the TSM Alternative would have a less than significant impact

Visual and Aesthetics: Headlights of the buses could result in light and glare impacts to adjacent residences. However, residences are already exposed to the glaring effect of the vehicles.

Traffic, Circulation and Parking: The TSM Alternative enhances service on existing transit routes and adds a new local route on Canoga Avenue. The addition of bus service would have a small incremental impact on safety by increasing opportunities for bus-auto interaction, but this would not be considered significant. The increased bus service proposed by the TSM would have a less than significant impact on traffic.

Air Quality: The TSM Alternative would reduce traffic congestion and incrementally improve air quality compared to existing conditions.

Noise and Vibration: The TSM Alternative would reduce traffic congestion and increase vehicle speeds incrementally increasing noise and vibration levels compared to existing conditions.



Geotechnical, Seismic and Hazardous Materials: No environmental impacts anticipated due to hazardous materials. No known active faults or landslides.

Water Resources: The TSM Alternative does not involve any construction of physical improvements, so it will not have any affect on water resources.

Biological Resources and Ecosystems: The proposed project area is an urban environment with few biological resources, which are limited to the open space areas located approximately 2.2 miles south and 0.6 miles west of the proposed Canoga Avenue local bus route. As such, the proposed TSM Alternative would not include construction activities in a biologically sensitive area that would result in significant impacts to biological resources.

Energy: The TSM Alternative would reduce traffic congestion decreasing fuel consumption and correspondingly lower energy consumption compared to existing conditions.

Safety and Security: The TSM Alternative enhances service on existing transit routes and adds a new local route on Canoga Avenue. The addition of bus service would have a small incremental impact on safety by increasing opportunities for bus-auto interaction, but this would not be considered significant. The addition of bus stops on Canoga Avenue would have minor safety and security issues, particularly on the east side of the street where there are no sidewalks and insufficient room to install benches or shelters.

4.3.7.2 Topanga Canyon Boulevard Corridor

Mixed Flow/Dedicated lanes

Land Use: Dominant uses along Topanga Canyon Boulevard are single and multi-family residential, with neighborhood supporting commercial located at the major street intersections. The sensitive land uses along Topanga Canyon Boulevard include approximately 10,000 linear feet of single family, 7,300 linear feet of multi family residential uses and sixteen community facilities.

The Transportation Element of the General Plan designates Topanga Canyon Boulevard between Ventura Boulevard and Devonshire Street as a Transit Priority Street that would be consistent with transit use.

Community and Neighborhood Impacts: Vehicle Hours Traveled (VHT) is expected to decrease under either design alternative on Topanga Canyon Boulevard. The Mixed Flow Alternative would result in more congestion compared to the Dedicated Lane Alternative. The Dedicated Lane Alternative would remove street parking adjacent to the community facilities located along Topanga Canyon Boulevard.

Land Acquisition, Relocation and Displacement of Existing Uses: The Mixed Flow Alternative would not result in any land acquisition impacts. The Dedicated Lane Alternative would not result in any land acquisition impacts.



Population, Housing and Environmental Justice: No housing units would be displaced under either design alternative on Topanga Canyon Boulevard. Similarly, the Mixed Flow and Dedicated Lane Alternatives on Canoga Avenue would provide increased access to public transit to lower income, minority populations.

Parklands and Community Facilities: There are sixteen community facilities located adjacent to Topanga Canyon Boulevard. These community facilities would benefit from improved transit access under either design alternative. The Mixed Flow Alternative would not result in any impacts to parklands and community facilities. The Dedicated Lane Alternative would remove street parking adjacent to the community facilities located along Topanga Canyon Boulevard.

Historic, Archeological and Paleontological Resources: According to preliminary information, there is at least one known historical resource along the Topanga Corridor, identified as Canoga Park Elementary School and located at 7428 Topanga Canyon Boulevard. It has been determined eligible for the National Register. Construction of infrastructure associated with the proposed dedicated lanes, such as bus stops and sidewalk improvements, may result in visual impacts to this and other unknown cultural resources located along the Topanga Corridor. These impacts may be significant depending on the extent of changes to the historic resources' visual settings. Based on very preliminary project information and lacking detailed information on proposed physical changes to the setting, it has been assumed for the purposes of this initial screening that the impacts could be potentially significant. In addition, the Topanga Corridor crosses watercourses, including Santa Susanna Wash and the Los Angeles River, which may have supported prehistoric human habitation, and possibly historic period development. However, assuming that the Mixed Flow alternative and the Dedicated Lanes alternative would involve only street running in the existing street with a changed traffic pattern or changed striping, but no ground-disturbing construction, there would be no effect on archaeological or Paleontological resources. Nonetheless, the proposed alternatives may result in potentially significant impacts to historical resources on the Topanga Corridor.

Visual and Aesthetics: Headlights of the buses could result in light and glare impacts to adjacent residences. However, residences are already exposed to the glaring effect of the vehicles. Elimination of parking lanes for bus-only lanes in both directions would result in misshapened street trees and could result in removal of trees along the sidewalk.

Traffic, Circulation and Parking: The Topanga Canyon corridor alternatives would have a generally negative impact on traffic flow along Topanga Canyon Boulevard and the cross streets along the corridor. The mixed flow alternative would have minor impacts on intersection delay due to the use of Transit Signal Priority (TSP) by the Metro Rapid buses. However, this impacts would likely be less than significant because the TSP system is designed to minimize delays to the cross streets.

The dedicated lane alternative would have additional impacts on traffic and parking. Traffic congestion would worsen because a mixed flow traffic lane would have to be converted to a dedicated bus lane. In the Northbound direction, one mixed flow lane would be lost along the following segments: from Victory Boulevard to Vanowen Street; from Runnymede Street to Cohasset Street; and from Roscoe Boulevard to Eccles Street. In the Southbound direction, one mixed-flow traffic lane would be lost along the following segments: Marilla Street to Prairie Street and Eccles Street to Strathern Street. On-street parking spaces would be lost because a parking lane would have to be converted to a dedicated bus lane. In the Northbound direction, on-street parking would be lost along the following segments: Vanowen Street to Runnymede Street; Cohasset Street to Roscoe Boulevard; and from Eccles Street to Devonshire Street. In the Southbound direction, on-street parking would



be lost along the following segments: from Devonshire Street to Marilla Street; from Prairie Street to Eccles Street; and from Strathern Street to Victory Boulevard. Because of the current levels of peak hour congestion on Topanga Canyon Boulevard, these traffic and parking impacts would likely be significant.

Air Quality: Vehicle exhaust fumes are the primary source of air quality degradation in the region. Vehicle Hours Traveled (VHT) is expected decrease under either design alternative on Topanga Canyon Boulevard. There is approximately 17,300 linear feet of residential uses and 16 community facilities located adjacent to Topanga Canyon Boulevard. These land uses are considered more sensitive to changes in air quality than others. There are more sensitive receptors along the Topanga Corridor than along the Canoga Corridor, but fewer sensitive receptors than along the De Soto Corridor. The Mixed Flow Alternative would result in more congestion compared to the Dedicated Lane Alternative. The Dedicated Lane Alternative would result in less traffic congestion compared to the Mixed Flow Alternative.

Noise and Vibration: There is approximately 17,300 linear feet of residential uses and 16 community facilities located adjacent to Topanga Canyon Boulevard. These land uses are considered more sensitive to changes in noise and vibration than others. There are more noise and vibration sensitive receptors along the Topanga Corridor than along the Canoga Corridor, but fewer noise and vibration sensitive receptors than along the De Soto Corridor. Buses would be closer to sensitive receptors under the Dedicated Lane Alternative compared to the Mixed Flow Alternative.

Geotechnical, Seismic and Hazardous Materials: No environmental impacts anticipated due to hazardous materials. No known active faults or landslides. The site has potential for liquefaction. Planned minor structures (canopies) have to be designed considering effects of liquefaction.

Water Resources: The Topanga Canyon Alternatives do not involve any construction of physical improvements, so it will not have any affect on water resources.

Biological Resources and Ecosystems: The proposed Topanga Corridor is located in an urban environment and is primarily built-out. The proposed corridor crosses the Los Angeles River just north of Vanowen Street. However, the river is lined with concrete walls and contains no natural habitat such as wetlands or marshes. According to a search conducted of the California Department of Fish and Game (CDFG) Natural Diversity Database (CNDDB) for the Canoga Park and Oat Mountain Quadrangles as well as the surrounding 10 quadrangles, several species exist in the project that are listed by the CDFG as species of concern and some plants that are rare, threatened, or endangered in California and elsewhere. These species are most likely in areas that are habitable by natural wildlife such as the open space areas located 2.2 miles south of the corridors and 900 feet west of the Topanga Canyon Corridor, in the vicinity of the Chatsworth Reservoir. However, assuming that the proposed project would not involve heavy construction in the vicinity of the Chatsworth Reservoir, the proposed project would have no impact on biological resources in the area.

Energy: Vehicle Hours Traveled (VHT) is expected decrease under either design alternative on Topanga Canyon Boulevard, thereby decreasing fuel consumption and correspondingly lower energy consumption compared to existing conditions. The Mixed Flow Alternative would result in more congestion on Topanga Canyon Boulevard increasing energy consumption compared to the Dedicated Lane Alternative. The Dedicated Lane Alternative would result in less traffic congestion decreasing energy consumption compared to the Mixed Flow Alternative.



Safety and Security. Rapid Bus service has been successfully implemented by Metro on numerous corridors without any impact on safety or security. The implementation of Rapid Bus service on Topanga Canyon Boulevard would similarly have a less than significant impact on safety or security. The removal of parking and conversion of a mixed-flow travel lane to a dedicated bus lane will increase congestion on Topanga Canyon Boulevard, which could have a negative effect on safety.

4.3.7.3 Canoga Avenue Corridor

Mixed Flow/Dedicated lanes

Land Use. Along Canoga Avenue, uses are primarily industrial with commercial uses concentrated near the major street intersections and some residential uses. The sensitive land uses along the corridor include approximately 5,250 linear feet of mobile homes, 2,300 linear feet of single family residential, and 230 linear feet of multi family residential uses located adjacent to the Metro right-of-way (ROW) in addition to six community facilities.

Community and Neighborhood Impacts: Vehicle Hours Traveled (VHT) is expected decrease under either design alternative on Canoga Avenue. The Mixed Flow Alternative would result in more congestion compared to the Dedicated Lane Alternative. The Dedicated Lane Alternative would remove street parking adjacent to the community facilities located along Canoga Avenue.

Land Acquisition, Relocation and Displacement of Existing Uses: The Mixed Flow Alternative would not result in any land acquisition impacts. The Dedicated Lane Alternative could result in a partial or full land acquisition of a few parcels with commercial uses adjoining Canoga Avenue. A total of 61 ground Metro leases and 25 Signboard leases would be affected.

Population, Housing and Environmental Justice: No housing units would be displaced under either design alternative on Canoga Avenue. Similarly, the Mixed Flow and Dedicated Lane Alternatives on Canoga Avenue would provide increased access to public transit to lower income, minority populations.

Parklands and Community Facilities: There are six community facilities located adjacent to Canoga Avenue. These community facilities would benefit from improved transit access under either design alternative on Canoga Avenue. The Mixed Flow Alternative would not result in any impacts to parklands and community facilities. The Dedicated Lane Alternative would remove street parking adjacent to the community facilities located adjacent to Canoga Avenue.

Historic, Archeological and Paleontological Resources: According to preliminary information, there is at least one known historical resource along the Canoga Corridor, identified as Owensmouth Southern Pacific Rail Road Station (Historic/Cultural Monument 488) and located at 21355 Sherman Way. It is considered a Los Angeles Landmark and construction of infrastructure associated with the proposed Mixed Flow Alternative and Dedicated Lanes Alternative, such as bus stops and sidewalk improvements, may result in visual impacts to this and other unknown cultural resources located on the Canoga Corridor. In addition, the Canoga Corridor crosses watercourses, which may have supported prehistoric human habitation, and possibly historic period development. Assuming that the mixed flow Alternative would involve only street running in the existing street with a changed traffic pattern or changed striping, but no ground disturbing construction, there would be no effect on archaeological or Paleontological resources. However, the dedicated lanes Alternative might involve some ground disturbances on the Metro right-of-way and as such may result in potential



significant impacts to archaeological resources, and both Alternatives may result in potentially significant visual impacts to historical resources along the Canoga Corridor.

Visual and Aesthetics: The mixed-flow alternative would not result in the installation or removal of any structure. Therefore, the visual impacts would be limited.

The dedicated lane alternative could result in the removal of existing trees and structures within the Metro ROW. However, this alternative would improve the visual environment by including the installation of numerous new trees and landscaping along the proposed dedicated lanes, park-and ride lots, and bike and pedestrian path similar to the Metro Orange Line.

Traffic, Circulation and Parking: The Canoga corridor mixed flow/dedicated lanes alternatives would have a generally negative impact on traffic flow along Canoga Avenue and the cross street along the corridor. Both alternatives would have minor impacts on intersection delay due to the use of TSP by the Metro Rapid buses. However, these impacts would likely be less than significant because the TSP system is designed to minimize delays to the cross streets.

Air Quality: Exhaust fumes from vehicles are the primary source of air quality degradation. Vehicle Hours Traveled (VHT) is expected decrease under either design alternative on Canoga Avenue. There is approximately 7,780 linear feet of residential uses and six community facilities located adjacent to Canoga Avenue. The Canoga Corridor has the fewest number of sensitive receptors compared to the Topanga and De Soto Corridors. The Mixed Flow Alternative would result in more congestion compared to the Dedicated Lane Alternative. The Dedicated Lane Alternative would result in less traffic congestion compared to the Mixed Flow Alternative.

Noise and Vibration: There are approximately 7,780 linear feet residential uses and six community facilities located adjacent to Canoga Avenue. The Canoga Corridor has the fewest number of noise and vibration sensitive receptors compared to the Topanga and De Soto Corridors. Buses would be closer to sensitive receptors under the Dedicated Lane Alternative compared to the Mixed Flow Alternative.

Geotechnical, Seismic and Hazardous Materials: for the mixed flow alternative, no environmental impacts are anticipated due to hazardous materials; there are no known active faults or landslides. The corridor, however, has potential for liquefaction. Planned minor structures (canopies) have to be designed considering effects of liquefaction.

The dedicated lane alternative does have a potential for hazardous materials impact. Elevated levels of arsenic and lead are typically encountered within existing/previous railroad right-of-way in Los Angeles County. Additional impacts may be encountered during the Environmental Site Assessment. There are no known active faults or landslides. The site has potential for liquefaction. Minor structures planned for dedicated lane option have to be designed considering effects of liquefaction.

Water Resources: Rapid Bus service on Canoga would not involve any construction of physical improvements other than Rapid Bus Stations along the sidewalks, so it will not have any affect on water resources. The widening of Canoga Avenue to provide dedicated bus-only lanes would require redesign of the storm drains along Canoga Avenue and the addition of a bicycle/pedestrian path on the railroad ROW would affect drainage on the Metro property. Appropriate design techniques could reduce the impacts on water resources to a less than significant level.



Biological Resources and Ecosystems: The proposed Canoga Corridor is located in an urban environment and is primarily built-out. The proposed corridor crosses the Los Angeles River and other waterways; however, these are lined with concrete walls and contain no natural habitat such as wetlands or marshes. A CNDDB search of the project area resulted in the discovery of several species that are listed by the CDFG as species of concern and some plants that are rare, threatened, or endangered in California and elsewhere. These species are most likely in areas that are habitable by natural wildlife such as the open space areas located 2.2 miles south of the corridors and 0.6 miles west of the Canoga Corridor, in the vicinity of the Chatsworth Reservoir. Therefore, the proposed alternatives would have no impact on biological resources.

Energy: Vehicle Hours Traveled (VHT) is expected decrease under either design alternative on Canoga Avenue, thereby decreasing fuel consumption and correspondingly lower energy consumption compared to existing conditions. The Mixed Flow Alternative would result in more congestion on Canoga Avenue increasing energy consumption compared to the Dedicated Lane Alternative. The Dedicated Lane Alternative would result in less traffic congestion, thereby decreasing energy consumption compared to the Mixed Flow Alternative.

Safety and Security: The lack of sidewalks and limited right-of-way in which to install bus shelters, would raise some safety concerns should Rapid Bus service be implemented on Canoga Avenue. The dedicated bus lane alternative on Canoga would include the installation of a parallel bicycle/pedestrian pathway, which would reduce safety concerns for transit riders accessing the stations. The stations themselves would include the amenities provided at existing Metro Orange Line stations, including lighting, shelters, video monitoring, so they would enhance security at the bus stops. The shared use of the bus-only lane with right-turning vehicles would have minor safety implications, but the use of right-turn arrows at the cross street intersections would allow right-turns to be made prior to pedestrian movements and clear the right-turning vehicles out of the path of buses. The incorporation of the bus-only lanes into the same signalized intersection as the automobile traffic would reduce safety issues associated with the parallel busway design.

Busway

Land Use: Adjacent sensitive land uses for the busway are the same as for the mixed flow/dedicated lanes for the Canoga corridor. The Canoga Park – Winnetka Hills – West Hills Community Plan recognizes the Metro right-of-way as an important development opportunity for a variety of public transportation improvements including light-rail or busways. Therefore, the busway would be consistent with this Plan.

Community and Neighborhood Impacts: Vehicle Hours Traveled (VHT) is expected to decrease under the Busway Alternative. The Busway Alternative would not result in any community and neighborhood impacts.

Land Acquisition, Relocation and Displacement of Existing Uses: No housing units would be displaced under the Busway Alternative. The Busway Alternative would require acquisition of property, in full or part, along the Metro-owned right-of-way (ROW). A total of 61 Metro ground leases and 25 Signboard leases would be affected.



Population, Housing and Environmental Justice: The Busway Alternative would provide increased access to public transit to lower income, minority populations.

Parklands and Community Facilities: There are six community facilities located adjacent to Canoga Avenue. These community facilities would benefit from improved transit access under the Busway Alternative or either of the design alternatives on Canoga Boulevard.

Historic, Archeological and Paleontological Resources: There is at least one known historical resource along the Canoga Corridor, identified as Owensmouth Southern Pacific Rail Road Station. In addition, the Canoga Corridor crosses watercourses, which may have supported prehistoric human habitation, and possibly historic period development. Due to the location of the proposed busway, the proposed Alternative may result in a potential visual impact to historical resources. In addition, the proposed Alternative may result in ground-disturbing activities that may expose prehistoric or historical archaeological sites, or Paleontological resources within the project area. As such, the proposed busway Alternative could result in a potential impact to cultural resources.

Visual and Aesthetics: A sub option of this alternative proposes a grade separation over the existing crossing of Metrolink tracks near Lassen Street which could partially block views of the mountains.

This alternative could result in the removal of existing trees within the Metro ROW. However, this alternative would include installation of numerous new trees along the proposed busway, park and ride lots, and bike and pedestrian path similar to the Metro Orange Line. Attractively designed stations with pedestrian amenities and linkages and removal of un-kept automotive and storage uses in the ROW could have a beneficial effect on the visual character of the area.

Each platform would be illuminated. However, as the platforms would be located close to major streets intersections, it is anticipated that the installation would not substantially increase ambient light levels. The residences close to the Metro ROW near the intersections could be affected by the headlights of buses where there is no landscaping or soundwalls.

Traffic, Circulation and Parking. The operation of buses along the Canoga Avenue Busway may impact traffic and circulation along the corridor due to the circulation issues resulting from cross traffic conflict with the at-grade operation. The Busway would cross a total of seven major and secondary arterials and a number of collector and local roadways. Special treatment and signal coordination will be required at each of these east-west cross streets. The Canoga Avenue Busway alternative proposes three new stations and the use of three existing stations. It is expected that the proposed stations would generate additional traffic created by transit patrons driving their vehicles to access the service, particularly if park-and-ride facilities are provided. The traffic and circulation impacts of this alternative are potentially significant.

Air Quality: Vehicle Hours Traveled (VHT) is expected decrease under the Busway Alternative. There is approximately 7,780 linear feet of residential uses and six community facilities located adjacent to Canoga Avenue. The Canoga Corridor has the fewest number of sensitive receptors in comparison to the Topanga and De Soto Corridor.



Noise and Vibration: There are approximately 7,780 linear feet residential uses and six community facilities located adjacent to Canoga Avenue. The Canoga Corridor has the fewest number of noise and vibration sensitive receptors in comparison to the Topanga and De Soto Corridors. Noise impacts resulting from the Busway Alternative are more easily mitigated than the Mixed Flow or Dedicated Lane Alternative.

Geotechnical, Seismic and Hazardous Materials: there is a potential for hazardous materials impact. Elevated levels of arsenic and lead are typically encountered within existing/previous railroad right-of-way in Los Angeles County. Additional impacts may be encountered during the Environmental Site Assessment. There are no known active faults or landslides. The site has potential for liquefaction. Grade separation structures planned for the busway option have to be designed to mitigate effects of liquefaction.

Water Resources: The development of the off-street busway and the addition of a bicycle/pedestrian path and landscaped areas on the railroad ROW would affect drainage on the Metro property. Modifications to cross streets and the addition of right turn lanes to intersections along Canoga Avenue could require modifications of the storm drains along Canoga Avenue which would affect drainage. Appropriate design techniques could reduce the impacts on water resources to a less than significant level.

Biological Resources and Ecosystems: The proposed Canoga Corridor is located in an urban environment and is primarily built-out. A CNDDB search of the project area resulted in the discovery of several species that are listed by the CDFG as species of concern and some plants that are rare, threatened, or endangered in California and elsewhere. These species are most likely in areas that are habitable by natural wildlife such as the open space areas located 2.2 miles south of the corridors and 0.6 miles west of the Canoga Corridor, in the vicinity of the Chatsworth Reservoir. Therefore, the proposed alternative would have no impact.

Energy: Vehicle Hours Traveled (VHT) is expected decrease under the Busway Alternative, thereby decreasing fuel consumption and correspondingly lower energy consumption compared to existing conditions.

Safety and Security: The existing Metro Orange Line has been in operation for almost two years and safety at the cross street intersections has improved significantly since the initial months of operation when drivers were unfamiliar with the busway design and several drove through red lights to collide with buses. Additional measures have been added to enhance safety for autos, pedestrians and the buses at arterial crossings of the busway. Similar measures will be implemented with the Metro Orange Line extension, so it is not expected to result in any significant safety impacts. Security measures similar to those installed along the existing Metro Orange Line would be installed with this alternative, so it would not be expected to have impacts related to security.

4.3.7.4 De Soto Avenue Corridor

Mixed Flow/Dedicated lanes

Land Use: De Soto Avenue is primarily a residential street. Sensitive land uses include approximately 15,700 linear feet of single family residential, 11,000 linear feet of multi family residential are present along De Soto Avenue and nine community facilities along De Soto Avenue.



The Mixed Flow Alternative would have less potential impacts on the existing land uses and pedestrian character of the area. The designated lane alternative would slightly reconfigure the area by designating parking lanes in each direction for bus-only lanes. This would place travel lanes closer to sensitive uses and increase the potential for proximity impacts.

Community and Neighborhood Impacts: Vehicle Hours Traveled (VHT) is expected to decrease under either design alternative on De Soto Avenue. The Mixed Flow Alternative would result in more congestion compared to the Dedicated Lane Alternative. The Dedicated Lane Alternative would remove street parking adjacent to the community facilities located along De Soto Avenue.

Land Acquisition, Relocation and Displacement of Existing Uses: The Mixed Flow Alternative would not result in any land acquisition impacts. The Dedicated Lane Alternative would not result in any land acquisition impacts.

Population, Housing and Environmental Justice: No housing units would be displaced under either design alternative on De Soto Avenue. Similarly, the Mixed Flow and Dedicated Lane Alternatives on De Soto Avenue would provide increased access to public transit to lower income, minority populations.

Parklands and Community Facilities: There are four community facilities located adjacent to De Soto Avenue. These community facilities would benefit from improved transit access under either design alternative on De Soto Avenue. The Mixed Flow Alternative would not result in any impacts to parklands and community facilities. The Dedicated Lane Alternative would remove street parking adjacent to the community facilities located adjacent to De Soto Avenue.

Historic, Archeological and Paleontological Resources: According to preliminary information, there is at least one known historical resource along the De Soto Corridor, identified as The Munch Box (City of Los Angeles Historic/Cultural Monument 750) located at 21532 W. Devonshire Street. It is considered a Los Angeles cultural monument and construction of infrastructure associated with the proposed mixed flow and dedicated lanes Alternatives, such as bus stops and sidewalk improvements, may result in visual impacts to this and other unknown cultural resources located along the De Soto Corridor. In addition, the De Soto Corridor crosses watercourses, which may have supported prehistoric human habitation and possibly historic period development. However, assuming that the Mixed Flow Alternative and the Dedicated Lanes Alternative would involve only street running in the existing street with a changed traffic pattern or changed striping, but no ground-disturbing construction, there would be no effect on archaeological or Paleontological resources. Nonetheless, the proposed alternatives may result in potentially significant impacts to historical resources along the De Soto Corridor.

Visual and Aesthetics: Headlights of the buses could result in light and glare impacts to adjacent residences. However, residences are already exposed to the glaring effect of the vehicles. Elimination of parking lanes for bus-only lanes in both directions would result in misshapened street trees and could result in removal of trees along the sidewalk.



Traffic, Circulation and Parking: The De Soto corridor alternatives would have a generally negative impact on traffic flow along De Soto Avenue and the cross streets along the corridor. The mixed flow alternative would have minor impacts on intersection delay due to the use of TSP by the Metro Rapid buses. However, this impacts would likely be less than significant because the TSP system is designed to minimize delays to the cross streets.

The dedicated lane alternative would have additional impacts on traffic and parking. Traffic congestion would worsen because a mixed flow traffic lane would have to be converted to a dedicated bus lane. In the Southbound direction only, a mixed-flow traffic lane would have to be converted to dedicated bus lane along the following segments: from Roscoe Boulevard to Fairchild Avenue and from Nordhoff Street to Osborne Street. A parking lane exists in both directions and along the entire length of the route on De Soto Avenue. On-street parking spaces would be lost because a parking lane would have to be converted to a dedicated bus lane. Because of the current levels of peak hour congestion on De Soto Avenue, these traffic and parking impacts would likely be significant.

Air Quality: Vehicle Hours Traveled (VHT) is expected decrease under either design alternative on De Soto Avenue. There is approximately 26,700 linear feet of residential uses and four community facilities located adjacent to De Soto Avenue. The De Soto Corridor has the most sensitive receptors in comparison to the Topanga and Canoga Corridors. The Mixed Flow Alternative would result in more congestion compared to the Dedicated Lane Alternative. The Dedicated Lane Alternative would result in less traffic congestion compared to the Mixed Flow Alternative.

Noise and Vibration: There is approximately 26,700 linear feet of residential uses and four community facilities located adjacent to De Soto Avenue. The De Soto Corridor has the most noise and vibration sensitive receptors in comparison to the Topanga and Canoga Corridors. Buses would be closer to sensitive receptors under the Dedicated Lane Alternative compared to the Mixed Flow Alternative.

Geotechnical, Seismic and Hazardous Materials: No environmental impacts are anticipated due to hazardous materials. No known active faults or landslides. The site has potential for liquefaction. Planned minor structures (canopies) have to be designed considering effects of liquefaction.

Water Resources: The De Soto Alternatives do not involve any construction of physical improvements, so it will not have any affect on water resources.

Biological Resources and Ecosystems: The proposed De Soto Corridor is located in an urban environment and is primarily built-out. A CNDDB search of the project area resulted in the discovery of several species that are listed by the CDFG as species of concern and some plants that are rare, threatened, or endangered in California and elsewhere. These species are most likely in areas that are habitable by natural wildlife such as the open space areas located 2.2 miles south of the corridor and 1.1 miles west of the De Soto Corridor, in the vicinity of the Chatsworth Reservoir. Therefore, the proposed alternatives would have no impact on biological resources.

Energy: Vehicle Hours Traveled (VHT) is expected decrease under either design alternative on De Soto Avenue, thereby decreasing fuel consumption and correspondingly lower energy consumption compared to existing conditions.

Safety and Security: Rapid Bus service has been successfully implemented by Metro on numerous corridors without any impact on safety or security. The implementation of Rapid Bus service on De



Soto Avenue would similarly have a less than significant impact on safety or security. The removal of parking and conversion of a mixed-flow travel lane to a dedicated bus lane will increase congestion on De Soto Avenue, which could have a negative effect on safety.

4.3.8 Cost Effectiveness

Detailed cost estimates will be developed for the alternatives carried into the EIR and a cost-effectiveness evaluation will be quantified following completion of ridership forecasts and calculation of a cost per new rider. In this preliminary evaluation, the alternatives along the Topanga Canyon and De Soto corridors are estimated to be more cost effective because they don't entail significant capital costs. However, the operating cost could be greater in the alternatives that operate in mixed-flow at slower speeds, compared to the off-street busway alternative. The TSM alternative is also deemed to be highly cost-effective. The Canoga corridor alternatives are the least cost effective relative to the others because of the capital costs related to building a Busway.

4.3.9 Community/Elected Official Input

Community input was assessed based on the comments received at the first set of public scoping meetings and at the briefings with the representatives of elected offices. Table 4-13 summarizes the ratings of the corridors based on community input.

Those corridors for which there were expressions of support from the public were rated high. For those where there was opposition expressed, a low score was assigned. Most elected officials supported the Canoga corridor strongly. The two scoping meetings held in the community revealed strong community support for the Canoga corridor alternatives over the other two corridors. The De Soto and Topanga Canyon Corridors were not favored mainly due to traffic impacts. Comments were also received regarding the impact to business on the Metro-owned right-of-way. Many people also felt that the northern terminus of the project should be the Chatsworth Metrolink Station. A few comments questioned the need for the project and implied a preference for the TSM alternative.

Table 4-13 Community Input				
Criteria/Corridor	TSM	Canoga	De Soto	Topanga
,				
REGIONAL CONTEXT / CONNECTIVITY				
Elected Officials Input	••	•••	•	•
Public Input	••	•••	•	•
Scoring Factors:				
High - ●●●				
Medium - ●●				
Low -				



4.4 RESULTS OF THE SCREENING PROCESS

Table 4-14 indicates those corridors that scored highly and were retained for further study and those that were dropped from further consideration based on the screening analysis. The score represents the sum of the ratings (high=3points, medium=2point, low=1point) on each of the evaluation criteria discussed above.

In addition to the No Project Alternative, the TSM and the Canoga Corridor Alternatives (except Alternative 3) were retained for further analysis. Alternative 3 Canoga Avenue Metro Rapid Bus was not retained for further study because the implementation of this alternative would not require environmental clearance under California's environmental laws. As shown in Table 4-14, the alternatives selected for further study had ratings of 49 and 65, whereas those corridors proposed for no further study had ratings of 43 and 35. The corridors eliminated from further study could be served by other types of transit, such as local bus service or express bus service.

Table 4-14 Alternatives Screening Results						
CORRIDOR ALTERNATIVES	SCORE	COMMENTS				
Retained for Further Study						
No Project (Baseline Alternative 1)		Mandatory inclusion; Necessary to compare Effects of Alternatives				
TSM (Alternative 2)	49	Low cost, wide service area benefits				
Canoga Corridor (Alternatives 4 and 5)	65	Metro-owned, off-street, 24-hour dedicated lanes, provides a possible extension of Metro Orange Line, has limited street parking and traffic impacts, incorporates bicycle and pedestrian paths, has strong community support				
Not Retained for Further Study		7 11				
De Soto Corridor (Alternatives 6 and 7)	35	Low density, dedicated lane issues, ridership, single family home impacts, existing traffic, limited ridership and limited opportunities for bikeway and pedestrian pathways. Has community opposition				
Topanga Canyon Corridor (Alternatives 8 and 9)	43	State Highway Caltrans operated (presents design standards challenges), dedicated lane issues, existing traffic, limited opportunities for bikeway and pedestrian pathways. Has community opposition.				
Canoga Corridor (Alternative 3)	65	Implementation of this alternative would not require environmental clearance under California's environmental laws.				



4.5 OPTIONAL SR-118 CONNECTION

4.5.1 Description

As described in Section 2 "Alternatives Considered", each of the eight build alternatives included an optional connection to a potential park-and-ride lot at SR-118. This connection would allow automobile commuters coming from both directions of SR-118 to park close to the freeway off-ramp and connect with destinations in the entire San Fernando Valley and beyond. Three options for extensions north from the Chatsworth Metrolink Station were examined: (1) via Topanga Canyon Boulevard to a potential park-and-ride lot in the vicinity of the SR-118 Topanga Canyon Boulevard ramps; (2) via De Soto Avenue to a potential park-and-ride lot in the vicinity of the SR-118 De Soto Avenue ramps; or (3) via De Soto Avenue, Rinaldi Avenue and Porter Ranch Road to an existing park-and-ride lot south of SR-118 along Porter Ranch Rd. The feasibility of this extension is limited primarily by the availability of suitable sites for a park-and-ride lot in the vicinity of the Topanga Canyon Boulevard or De Soto Avenue freeway ramps and/or the feasibility of having buses access the existing park-and-ride lot at Porter Ranch Road.

4.5.2 Analysis

A visual survey of potential sites for a new park-and-ride lot was conducted during the month of June 2007. Eight potential vacant sites were initially identified during this visual survey. However, most of the sites identified had a number of constraints for developing a park-and-ride lot. Appendix A "Park & Ride Memorandum" provides a detailed description of the survey sites and a suitability analysis for each site. The main constraints to developing a park-and-ride lot on these sites were topography and ownership/cost. An additional site, at the northern terminus of De Soto Avenue, was the only one deemed feasible for the development of a new park-and-ride lot because it could be developed within existing public right-of-way. The parking stalls would be located on the west side of De Soto Avenue where informal park-and-ride activity already occurs. Buses would turn around at the terminus of De Soto Avenue and pick-up passengers at a station located adjacent to the stalls. Figure 4-1 illustrates the preliminary park-and-ride concept at the terminus of De Soto Avenue. During the two public scoping sessions held for this project, several comments were made on the feasibility of the optional SR-118 connections. Besides opposing the extension of any proposed service beyond the Chatsworth Metrolink Station, many people felt that there were really no feasible sites to build a new park-and-ride lot and that the only reasonable option was utilizing the existing lot at Porter Ranch Road.

4.5.3 Evaluation

Topanga Canyon Boulevard – No suitable sites are available for the development of a park-and-ride lot in the vicinity of the Topanga Canyon SR-118 off-ramps. Most of the property around that interchange is dedicated as park land. It would also be difficult for articulated buses to turn around in the vicinity of the Topanga Canyon interchange to make a return trip south.

De Soto Avenue – One potentially suitable site was identified at the terminus of De Soto Avenue. Buses would be able to make a u-turn at the terminus of De Soto north of the SR-118 freeway with a limited redesign of the intersection. Buses traveling along De Soto Avenue would take approximately 6-8 minutes to connect to the SR-118 from the Chatsworth Metrolink Station during the peak hours. This would have operational and cost implications. Utilizing this concept it is conceivable that approximately 15 to 20 cars could park at the terminus of De Soto Avenue. Further analysis

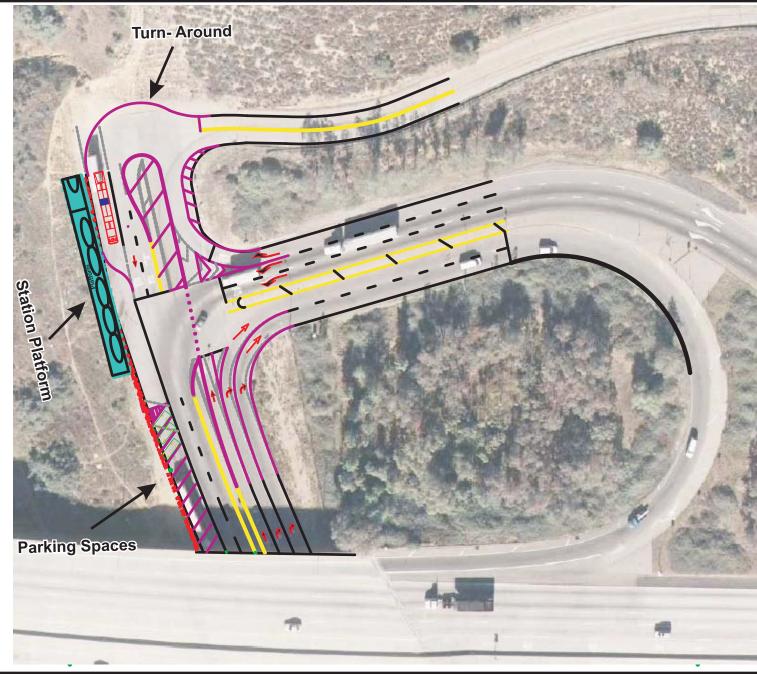


(ridership forecasting and costing) is needed to determine whether the added service would make sense from an operational and financial standpoint.

Porter Ranch Road – Even though the existing park-and-ride lot on Porter Ranch Road south of the SR-118 freeway has enough capacity to accommodate new riders, it would take buses up to 8-10 minutes to travel the 3.2-mile stretch from the Chatsworth Metrolink Station, given the levels of congestion on De Soto Avenue. This would have operational and cost implications. Further analysis (ridership forecasting and costing) is needed to determine whether the added service would make sense from an operational and financial standpoint. Figure 4-2 depicts the existing park-and-ride facility at Porter Ranch Road.

Given, the relatively small amount of parking spaces available at both the potential De Soto lot and the existing Porter Ranch lot, scheduling every bus to reach these locations would be difficult to justify. Instead, service to either of these park-and-ride lots would probably be limited to two buses in each of the peak hours.







Source: ITERIS





NOT TO SCALE

Source: Microsoft Live Local

