



SR-710 Study

Alternatives Analysis Report

Appendix L

Park, Recreational and Community Facilities

Technical Memorandum





TECHNICAL MEMORANDUM

Parks, Recreational and Community Facilities

PREPARED FOR: Michelle Smith/Metro
COPY TO: Caltrans
Study Team
PREPARED BY: CH2M HILL Team
DATE: December 2012
PROJECT NUMBER: 428908

This memorandum describes the potential impacts to parks and recreational facilities under each Level I and Level II Alternative evaluated for the State Route 710 (SR-710) Project Study. The potential impacts to Community Facilities were only reviewed under the Level II Alternatives. The Level I screening analysis evaluated 42 alternatives including 1 advanced technologies, 1 spot/local improvement, 7 bus rapid transit, 8 commuter and light rail, 11 freeway, and 13 highway alternatives along with the No Build alternative. The Level II screening analysis evaluated 12 alternatives (with 3 variations) including a TSM/TDM improvement, 3 bus rapid transit, 4 light rail transit, 4 freeway, and 2 highway alternatives along with the No Build alternative conditions. All alternatives are discussed below in detail.

Methodology

For the Level I and II Screening process, the methodology used to provide the parks and recreational facilities analysis was the review of each Level I and Level II Alternative using Geographical Information System (GIS) analysis, specifically using the ArcGIS viewer software. This viewer allows for the collection of data from an aerial map of the project Study Area, with overlays of each alternative. Approximately 70 parks and recreational facilities are located with the SR-710 Study Area and the ArcGIS viewer shows the alternative alignments in relationship to the existing parks and recreational facilities. The analysis of the potential effects to parks and recreational facilities was focused within each alternative's potential disturbance limit lines (DLL) developed by the engineering team, and the physical location of the existing parks and recreational facilities, either adjacent to or within each alternative's DLL. The reference information for the parks layer was provided from GIS layer files from the following sources: Tele Atlas North America, 2007, Thomas Brothers, 2009, and California State Parks, October, 2009.

Potential effects to parks and recreational facilities can be direct and temporary and would include effects related to construction activities and the use of temporary construction easements (TCEs) on park or facility properties. Direct and permanent impacts would include the partial or full acquisition of park or facility property and indirect effects could include effects to access, construction noise, alternative operational noise, and air quality to park and facility properties and park users. A more detail explanation of the park and recreational facilities analyses is provided below under the section titled *Resources in the Study Area*.

The Level I Screening process and analysis for parks and recreational facilities was an initial review of the alternatives and their direct effects to existing parks and recreational facilities. A numbering system was

developed for the initial analysis that was based on the best likely outcome, a moderate outcome and a worst likely outcome. A best likely outcome was given the number 5, which represented that zero recreational sites would be potentially affected by the Level I Alternatives. A moderate outcome was given the number 3, which represented that 1 to 2 recreational sites would be potentially affected by the Level I Alternatives, and the worst likely outcome was given the number 1, which represented that 3 or more recreational sites would potentially be affected by the Level I Alternatives. No Level I Screening and analysis was conducted for potential effects to community facilities. The Level II Screening process identifies the specific parks impacted by the Level II alternatives. The primary impact noted at this time would be the acquisition of parkland. A list of the parks and recreation facilities affected by the Level II Alternatives is provided under the section titled *Summary of Potential Effects to Resources* and Table 2.

The Level II Screening process and analysis for potential impacts to community facilities was a similar process as described above for the Level II Screening of the potential effects to parks and recreational facilities. Hundreds of community facilities are located within the 89-square mile SR-710 Study Area. The methodology used to review the potential effects of the Level II Alternatives included using the ArcGIS viewer and the Google Internet aerial map in a side-by-side comparison along each of the Level II alternative alignments. Direct impacts to specific community facilities would be the partial or full acquisition of community facility land. A list of the community facilities affected by the Level II Alternatives is provided under the section titled *Summary of Potential Effects to Resources* and Table 2, provided below.

Regional Setting

The Resource Study Area (Study Area) for parks, recreational and community facilities, are the existing land uses adjacent to the Level I and Level II alternatives that have parks, recreational or community facilities. The alternatives are located within the north-central part of Los Angeles County, specifically in the San Gabriel Valley area.

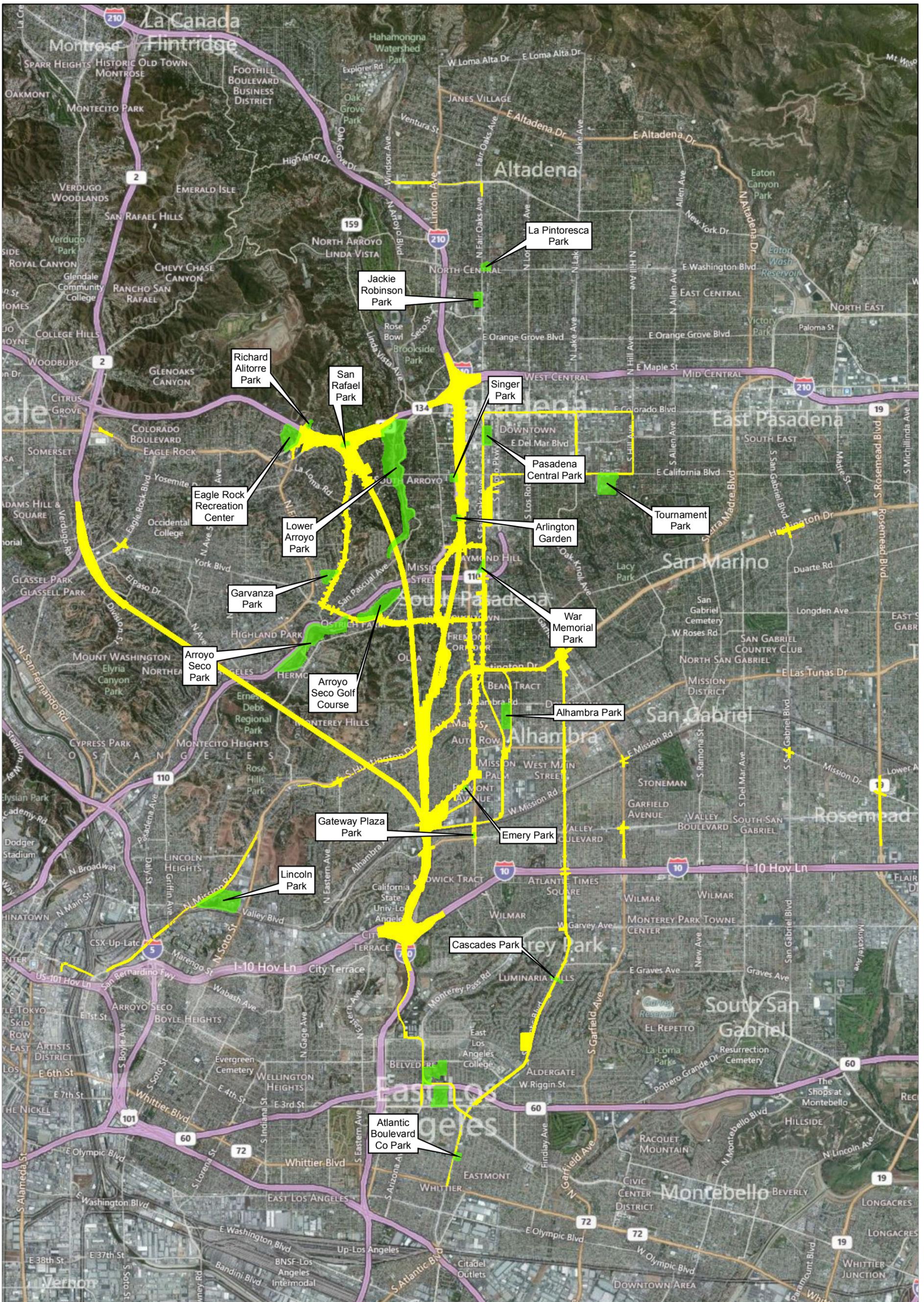
Local Setting

The alternatives proposed for the Level I and Level II Screening process include routes through several cities and communities located in north-central Los Angeles County. For the park, recreational and community facility analysis, the cities and communities that have parks and facilities that would be affected by the SR-710 Study alternatives include: Alhambra, East Los Angeles, El Sereno, La Canada Flintridge, Monterey Hills, Monterey Park, Pasadena, Rosemead, San Gabriel, San Marino, San Rafael, and South Pasadena. These cities and communities are typical of the dense urban/suburban character of the region.

Resources in Study Area

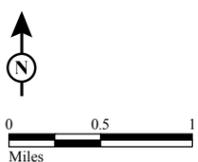
Within the Study Area, parks, recreational and community facilities that were adjacent to the alternatives were reviewed. The analysis for the effects to parks, recreational and community facilities focused on the potential for an alternative to have a direct or indirect effect or encroach upon the property by the Level I or Level II Alternative.

Figure 1 shows the location of parks and recreational facilities within the Study Area. Table 1 provides the initial analysis of the best likely, moderate and worst likely outcome for the Level I Screening process. The list of parks, recreational and community facilities that were affected by the Level II Alternatives is provided in Table 2 for the Level II Screening process. Table 3 provides the summary of the number of recreational/community facilities potentially affected by the Level II Alternatives.



LEGEND

- Parks and Recreational Facilities
- Level II Disturbance Limit Lines (DLL)



SOURCE: Bing (c. 2009)

I:\CHM1105\GIS\4F\Level2_Screening\Parks_N_Rec.mxd (8/23/2012)

FIGURE 1

SR-710 Study

Parks and Recreational Facilities
in the Study Area

Potential Effects to Resources

Level I Screening

No Build Alternative

The No Build Alternative would not affect any parks, recreational and/or community facilities in the Study Area. The No Build Alternative would not extend the I-710/SR-710 freeway and would not provide improvements to local and regional traffic circulation. As shown in Table 1, the No Build Alternative was determined to have a best likely outcome because no parks would be affected by this alternative. The No Build Alternative was rated a 5 for the best likely outcome.

Transportation System Management/Travel Demand Management (TSM/TDM) Alternative

The TSM/TDM Alternative would provide spot improvements, local street improvements, intelligent transportation systems (ITS) improvements, expanded transit service and add active transportation facilities (pedestrian and bicycle facilities).

A total of 42 local street and hot spot improvements (A1-EX through A41-EI and one unidentified alternative not labeled on the CAD files) were reviewed in the ArcGIS viewer.

For the Level I TSM/TDM Alternative analysis, a total of 12 parks and/or recreational facilities could be affected by these alternatives. This alternative was determined to have a worst likely outcome because three or more parks could potentially be affected by the alternative alignments. As shown in Table 1, the TSM/TDM Alternative is rated a 1 for the worst likely outcome.

Of the parks affected by the TSM/TDM Alternatives, many of the alternatives may affect the same park or parks because of the physical location of the alternative alignment. The parks that could be potentially affected by the TSM/TDM Alternative include partial acquisitions of the following parks (Note: the number shown in the parentheses is the number of different alternatives that could potentially affect the same park): Pasadena Central Park, Pasadena Memorial Park, Pasadena Central Park, War Memorial Park (3), Lincoln Park, Belvedere Park, Alamansor Park, Alhambra Municipal Golf Course, Tournament Park, and the La Canada Flintridge County Club.

Bus Rapid Transit Alternatives

BRT-1

Alternative BRT-1 would potentially affect 3 parks and/or recreational facilities along its alignment. This alternative was determined to have a worst likely outcome because three or more parks could potentially be affected by this alternative alignment. As shown in Table 1, the BRT-1 Alternative is rated a 1 for the worst likely outcome. Lincoln Park, War Memorial Park and Pasadena Central Park could potentially be affected due to construction activities, noise and access to the parks.

BRT-2

Alternative BRT-2 would potentially affect 4 parks and/or recreational facilities along its alignment. This alternative was determined to have a worst likely outcome because three or more parks could potentially be affected by this alternative alignment. As shown in Table 1, the BRT-2 Alternative is rated a 1 for the worst likely outcome. Lincoln Park, Michillinda County Park, Santa Anita Golf Course and Arcadia County Park could potentially be affected due to construction activities, noise and access to the parks.

BRT-3

Alternative BRT-3 would potentially affect 3 parks and/or recreational facilities along its alignment. This alternative was determined to have a worst likely outcome because three or more parks could potentially be affected by this alternative alignment. As shown in Table 1, the BRT-3 Alternative is rated a 1 for the worst likely outcome. Lincoln Park, San Gabriel Country Club and Golf Course and Temple City Park could potentially be affected due to construction activities, noise and access to the parks.

BRT-4

Alternative BRT-4 would potentially affect one park and/or recreational facility along its alignment. This alternative was determined to have a moderate outcome because one park could potentially be affected by this alternative alignment. As shown in Table 1, the BRT-4 Alternative is rated a 3 for the moderate outcome. The War Memorial Park could potentially be affected because of the partial acquisition required for the alignment of this alternative.

BRT-5

Alternative BRT-5 would potentially affect 2 parks and/or recreational facilities along its alignment. This alternative was determined to have a moderate outcome because two parks could potentially be affected by this alternative alignment. As shown in Table 1, the BRT-5 Alternative is rated a 3 for the moderate outcome. Belvedere Park and Arlington Garden could potentially be affected due to construction activities, noise and access to the parks.

BRT-6

Alternative BRT-6 would potentially affect 4 parks and/or recreational facilities along its alignment. This alternative was determined to have a worst likely outcome because three or more parks could potentially be affected by the alternative alignments. As shown in Table 1, the BRT-6 Alternative is rated a 1 for the worst likely outcome. Atlantic Boulevard Park, War Memorial Park and Tournament Park could potentially be affected due to construction activities, noise and access to the parks. Cascades Park could potentially be affected because of the partial acquisition required for the alignment of this alternative.

BRT-7

Alternative BRT-7 would potentially affect 9 parks and/or recreational facilities along its alignment. This alternative was determined to have a worst likely outcome because three or more parks could potentially be affected by the alternative alignments. As shown in Table 1, the BRT-7 Alternative is rated a 1 for the worst likely outcome. Pelanconi Park, Chess Park, Glendale Central Park, Carr Park, San Rafael Park, Lower Arroyo Park, Brookside Park, Defenders Park and Tournament Park could potentially be affected due to construction activities, noise and access to the parks.

Light Rail Transit Alternatives

LRT-1

Alternative LRT-1 would potentially affect 6 parks and/or recreational facilities along its alignment. This alternative was determined to have a worst likely outcome because three or more parks could potentially be affected by the alternative alignments. As shown in Table 1, the LRT-1 Alternative is rated a 1 for the worst likely outcome. The Los Angeles Historic Park, Elysian Park and Cypress Park could potentially be affected due to construction activities, noise and access to the parks. Rio de Los Angeles State Park Cerritos School Park and Gross Park could potentially be affected because of the partial acquisitions required for the alignment of this alternative.

LRT-2

Alternative LRT-2 would potentially affect 7 parks and/or recreational facilities along its alignment. This alternative was determined to have a worst likely outcome because three or more parks could potentially be affected by the alternative alignments. As shown in Table 1, the LRT-2 Alternative is rated a 1 for the worst likely outcome. Annandale Golf Course, Carr Park, Glendale Central Park and Eagle Rock Hillside Park could potentially be affected due to construction activities, noise and access to the parks. Pasadena Memorial Park, Brookside Park and Gross Park could potentially be affected because of the partial acquisitions required for the alignment of this alternative.

LRT-3

Alternative LRT-3 (four options combined) would potentially affect 2 parks and/or recreational facilities along its alignment. This alternative was determined to have a moderate outcome because two parks could potentially be affected by this alternative alignment. As shown in Table 1, the LRT-3 Alternative is rated a 3 for the moderate outcome. Lincoln Park could potentially be affected because of the partial acquisitions required for the alignment of this alternative. The aerial variation of this alternative could potentially affect and require a partial acquisition of the west side of Lincoln Park. The Option 2 aerial variation of this alternative could potentially require a partial acquisition of the south side of Lincoln Park. Michillinda County Park could potentially be affected due to construction activities, noise and access to the parks.

LRT-4

Alternative LRT-4 (all options combined) would potentially affect one park and/or recreational facility along its alignment. This alternative was determined to have a moderate outcome because one park could potentially be affected by this alternative alignment. As shown in Table 1, the LRT-4 Alternative is rated a 3 for the moderate outcome. Belvedere Park could potentially be affected because of the partial acquisition required for the alignment of this alternative.

LRT-5

Alternative LRT-5 would potentially affect 3 parks and/or recreational facilities along its alignment. This alternative was determined to have a worst likely outcome because three or more parks could potentially be affected by the alternative alignments. As shown in Table 1, the LRT-5 Alternative is rated a 1 for the worst likely outcome. Lincoln Park, Alamansor Park and the Alhambra Municipal Golf Course could potentially be affected due to construction activities, noise and access to the parks.

Commuter Rail Alternatives

CR-1

Alternative CR-1 would potentially affect 3 parks and/or recreational facilities along its alignment. This alternative was determined to have a worst likely outcome because three or more parks could potentially be affected by the alternative alignments. As shown in Table 1, the CR-1 Alternative is rated a 1 for the worst likely outcome. Lincoln Park, Alamansor Park and the Alhambra Municipal Golf Course could potentially be affected due to construction activities, noise and access to the parks.

CR-2

Alternative CR-2 would potentially affect 2 parks and/or recreational facilities along its alignment. This alternative was determined to have a moderate outcome because two parks could potentially be affected by this alternative alignment. As shown in Table 1, the CR-2 Alternative is rated a 3 for the moderate outcome. Ramona Gardens Park and Pioneer Park could potentially be affected due to construction activities, noise and access to the parks.

CR-3

Alternative CR-3 would potentially affect one park and/or recreational facility along its alignment. This alternative was determined to have a moderate outcome because one park could potentially be affected by this alternative alignment. As shown in Table 1, the CR-3 Alternative is rated a 3 for the moderate outcome. The Little League baseball fields along Big Falls Drive could potentially be affected due to construction activities, noise and access to the parks.

Freeway Alternatives

Freeway-1

Alternative Freeway-1 would not potentially affect any park and/or recreational facility along its alignment. As shown in Table 1, the Freeway-1 Alternative was determined to have a best likely outcome because no parks would be affected by this alternative. The Freeway-1 Alternative was rated a 5 for the best likely outcome.

Freeway-2

Alternative Freeway-2 would not potentially affect any park and/or recreational facility along its alignment. As shown in Table 1, the Freeway-2 Alternative was determined to have a best likely outcome because no parks would be affected by this alternative. The Freeway-2 Alternative was rated a 5 for the best likely outcome.

Freeway-3

Alternative Freeway-3 would not potentially affect any park and/or recreational facility along its alignment. As shown in Table 1, the Freeway-3 Alternative was determined to have a best likely outcome because no parks would be affected by this alternative. The Freeway-3 Alternative was rated a 5 for the best likely outcome.

Freeway-4

Alternative Freeway-4 would not potentially affect any park and/or recreational facility along its alignment. As shown in Table 1, the Freeway-4 Alternative was determined to have a best likely outcome because no parks would be affected by this alternative. The Freeway-4 Alternative was rated a 5 for the best likely outcome.

Freeway-5

Alternative Freeway-5 would not potentially affect any park and/or recreational facility along its alignment. As shown in Table 1, the Freeway-5 Alternative was determined to have a best likely outcome because no parks would be affected by this alternative. The Freeway-5 Alternative was rated a 5 for the best likely outcome.

Freeway-6

Alternative Freeway-6 would potentially affect one park and/or recreational facility along its alignment. This alternative was determined to have a moderate outcome because one park could potentially be affected by this alternative alignment. As shown in Table 1, the Freeway-6 Alternative is rated a 3 for the moderate outcome. Baseball and football fields at South Pasadena Senior High School could potentially be affected due to construction activities, noise and access to the fields.

Freeway-7

Alternative Freeway-7 would potentially affect 5 parks and/or recreational facilities along its alignment. This alternative was determined to have a worst likely outcome because three or more parks could potentially be affected by the alternative alignments. As shown in Table 1, the Freeway-7 Alternative is rated a 1 for the worst likely outcome. Cal State University Los Angeles parking lot and field area, Singer Park, the football field at Marantha High School, the Ambassador Auditorium and the parking lot of the Norton Simon Museum could potentially be affected because of the partial acquisitions required for the alignment of this alternative.

Freeway-8

Alternative Freeway-8 would potentially affect one park and/or recreational facility along its alignment. This alternative was determined to have a moderate outcome because one park could potentially be affected by this alternative alignment. As shown in Table 1, the Freeway-8 Alternative is rated a 3 for the moderate outcome.

Alhambra Park could potentially be affected because of the partial acquisition required for the alignment of this alternative.

Freeway-9

Alternative Freeway-9 would potentially affect one park and/or recreational facility along its alignment. This alternative was determined to have a moderate outcome because one park could potentially be affected by this alternative alignment. As shown in Table 1, the Freeway-9 Alternative is rated a 3 for the moderate outcome. The football field at Gabriellno High School could potentially be affected because of the partial acquisition required for the alignment of this alternative.

Freeway-10

Alternative Freeway-10 would potentially affect 3 parks and/or recreational facilities along its alignment. This alternative was determined to have a worst likely outcome because three or more parks could potentially be affected by the alternative alignments. As shown in Table 1, the Freeway-10 Alternative is rated a 1 for the worst likely outcome. Hollenbeck Park, Griffith Park and Griffith Park Golf Course could potentially be affected because of the partial acquisitions required for the alignment of this alternative.

Freeway-11

Alternative Freeway-11 would not potentially affect any park and/or recreational facility along its alignment. As shown in Table 1, the Freeway-11 Alternative was determined to have a best likely outcome because no parks would be affected by this alternative. The Freeway-11 Alternative was rated a 5 for the best likely outcome.

Highway/Arterial Alternatives

Highway-1

Alternative Highway-1 would potentially affect 2 parks and/or recreational facilities along its alignment. This alternative was determined to have a moderate outcome because two parks could potentially be affected by this alternative alignment. As shown in Table 1, the Highway-1 Alternative is rated a 3 for the moderate outcome. The Arroyo Seco Golf Course and Eagle Rock Recreation Center could potentially be affected because of the partial acquisitions required for the alignment of this alternative

.Highway-2

Alternative Highway-2 would potentially affect 2 parks and/or recreational facilities along its alignment. This alternative was determined to have a moderate outcome because two parks could potentially be affected by this alternative alignment. As shown in Table 1, the Highway-2 Alternative is rated a 3 for the moderate outcome. The Arroyo Seco Golf Course and San Rafael Park could potentially be affected because of the partial acquisitions required for the alignment of this alternative.

Highway-3

Alternative Highway-3 would potentially affect 2 parks and/or recreational facilities along its alignment. This alternative was determined to have a moderate outcome because two parks could potentially be affected by this alternative alignment. As shown in Table 1, the Highway-3 Alternative is rated a 3 for the moderate outcome. Singer Park and Arlington Garden could potentially be affected because of the partial acquisitions required for the alignment of this alternative.

Highway-4

Alternative Highway-4 would potentially affect 2 parks and/or recreational facilities along its alignment. This alternative was determined to have a moderate outcome because two parks could potentially be affected by this alternative alignment. As shown in Table 1, the Highway-4 Alternative is rated a 3 for the moderate outcome. Singer Park and Arlington Garden could potentially be affected because of the partial acquisitions required for the alignment of this alternative.

Highway-5

Alternative Highway-5 would potentially affect one park and/or recreational facility along its alignment. This alternative was determined to have a moderate outcome because one park could potentially be affected by this alternative alignment. As shown in Table 1, the Highway-5 Alternative is rated a 3 for the moderate outcome. The War Memorial Park could potentially be affected because of the partial acquisition required for the alignment of this alternative.

Highway-6

Alternative Highway-6 would potentially affect 2 parks and/or recreational facilities along its alignment. This alternative was determined to have a moderate outcome because two parks could potentially be affected by this alternative alignment. As shown in Table 1, the Highway-6 Alternative is rated a 3 for the moderate outcome. The War Memorial Park and Singer Park could potentially be affected because of the partial acquisitions required for the alignment of this alternative.

Highway-7

Alternative Highway-7 would potentially affect 2 parks and/or recreational facilities along its alignment. This alternative was determined to have a moderate outcome because two parks could potentially be affected by this alternative alignment. As shown in Table 1, the Highway-7 Alternative is rated a 3 for the moderate outcome. Villa Park and La Pintesca Park could potentially be affected because of the partial acquisitions required for the alignment of this alternative.

Highway-8

Alternative Highway-8 would potentially affect 3 parks and/or recreational facilities along its alignment. This alternative was determined to have a worst likely outcome because three or more parks could potentially be affected by the alternative alignments. As shown in Table 1, the Highway-8 Alternative is rated a 1 for the worst likely outcome. Alhambra Park, Garfield Park and War Memorial Park could potentially be affected because of the partial acquisitions required for the alignment of this alternative.

Highway-9

Alternative Highway-9 would potentially affect 2 parks and/or recreational facilities along its alignment. This alternative was determined to have a moderate outcome because two parks could potentially be affected by this alternative alignment. As shown in Table 1, the Highway-9 Alternative is rated a 3 for the moderate outcome. The park/field at Madison Elementary School and the La Pintesca Park could potentially be affected because of the partial acquisition required for the alignment of this alternative.

Highway-10

Alternative Highway-10 would potentially affect 2 parks and/or recreational facilities along its alignment. This alternative was determined to have a moderate outcome because two parks could potentially be affected by this alternative alignment. As shown in Table 1, the Highway-10 Alternative is rated a 3 for the moderate outcome. Garfield Park and War Memorial Park could potentially be affected because of the partial acquisitions required for the alignment of this alternative.

Highway-11

Alternative Highway-11 would potentially affect one park and/or recreational facility along its alignment. This alternative was determined to have a moderate outcome because one park could potentially be affected by this alternative alignment. As shown in Table 1, the Highway-11 Alternative is rated a 3 for the moderate outcome. The San Gabriel County Club could potentially be affected because of the partial acquisition required for the alignment of this alternative.

Highway-12

Alternative Highway-12 would not potentially affect any park and/or recreational facility along its alignment. As shown in Table 1, the Highway-12 Alternative was determined to have a best likely outcome because no parks would be affected by this alternative. The Highway-12 Alternative was rated a 5 for the best likely outcome.

Highway-13

Alternative Highway-13 would potentially affect 3 parks and/or recreational facilities along its alignment. This alternative was determined to have a worst likely outcome because three or more parks could potentially be affected by the alternative alignments. As shown in Table 1, the Highway-13 Alternative is rated a 1 for the worst likely outcome. The Santa Fe Trail Historic Park, the Santa Anita Golf Course and Arcadia Park could potentially be affected because of the partial acquisitions required for the alignment of this alternative.

Summary of Potential Effects to Parks and Recreational Resources

Table 1: Summary of the Level I Potential Effects to Resources by Alternative

The following table provides the summary of the Level I analysis of potential effects to parks and/or recreational facilities in the SR-710 Project Study Area.

TABLE 1
Level I Screening of SR-710 Project Alternatives
Potential Effects to Recreational Resources
by Alternative

Resources	1) No Build	2) TSM/TDM	3) BRT-1	4) BRT-2	5) BRT-3	6) BRT-4	7) BRT-5	8) BRT-6	9) BRT-7	10) LRT-1	11) LRT-2	12) LRT-3	13) LRT-4	14) LRT-5	15) CR-1	16) CR-2	17) CR-3	18) F-1	19) F-2	20) F-3	21) F-4	22) F-5	23) F-6	24) F-7	25) F-8	26) F-9	27) F-10	28) F-11	29) H-1	30) H-2	31) H-3	32) H-4	33) H-5	34) H-6	35) H-7	36) H-8	37) H-9	38) H-10	39) H-11	40) H-12	41) H-13	42) Ad. Tech
Recreational sites within proximate distance	5	1	1	1	1	3	3	1	1	1	1	3	3	3	3	3	1	5	5	5	5	5	3	1	3	3	3	5	3	3	3	3	3	3	3	1	3	3	3	5	1	N/A

Notes:
 1= A worse likely outcome to recreational sites, 3 or more recreational sites affected
 3= A moderate outcome to recreational facilities, 1 to 2 recreational sites affected
 5= A best likely outcome to recreational sites, zero recreational sites affected
 N/A = not applicable for this analysis



Potential Effects to Resources

Level II Screening

No Build Alternative

Refer to the information on the No Build Alternative provided above under the Level I Screening analysis.

TSM/TDM Alternative

The refined Level II TSM/TSM Alternative proposes expanded transit service, which includes bus service improvements, active transportation, which includes pedestrian and bicycle facilities, ITS improvements, which includes traffic signal synchronization, travel demand analysis, intersection hot spot improvements and local street improvements on the roadways within the Study Area. These improvements can potentially have direct and indirect effects to parks, recreational and community facilities in the SR-710 Study Area and are discussed below in detail.

Elements of the TSM/TDM Alternative with Potential Effects to Parks and Recreational Facilities. The TSM/TDM Alternative proposes to provide at-grade intersection and local street improvements in the Study Area. There are 27 improvements proposed in this TSM/TDM element. Of the 27 proposed improvements, 20 are improvements to intersections and 7 are local street improvements. The ArcGIS viewer was used to review the intersection and local street improvements and their potential effects to parks, recreational and community facilities. The potential impacts to the following parks and/or recreational and community facilities could include the partial acquisition of land.

Of the 20 at-grade intersection improvement projects, Alternative I-2 (Eagle Rock Blvd./York Blvd.) could potentially affect the Jehovah's Witness and Occidental United Presbyterian Churches, Alternative I-9 (Fremont St./Monterey Rd.) could potentially affect Saint James Episcopal and South Pasadena Christian Churches, Alternative I-12 (Fremont Ave./Valley Blvd.) could potentially affect the Gateway Plaza Park (Arch of Triumph), Alternative I-18 (San Gabriel Blvd./Huntington Dr.) could potentially affect the K.L. Carver School, St. Edmund's Episcopal Church and Saints Felicitas and Perpetua Church and School, and Alternative I-20 (Rosemead Blvd./Mission Rd.) could potentially affect Rosemead High School.

Of the 7 at-grade local street improvement projects, Alternative L-1 (Figueroa St. from SR-134 to Colorado Blvd.) could potentially affect the Eagle Rock Recreation Center, Alternative L-2c (Fremont Ave. from Mission Road to Valley Blvd.) could potentially affect the Gateway Plaza Park (Arch of Triumph) and Alternative L-5 (Rosemead Blvd from Lower Azusa Rd. to Marshall St.) could potentially affect Rosemead High School.

Bus Rapid Transit Alternatives

BRT-1

Alternative BRT-1 would potentially affect Lincoln Park, War Memorial Park, and Pasadena Central Park. The potential impacts associated with this alternative could include the partial acquisition of park land, impacts during construction activities such as access to the parks and increased noise levels.

BRT-6

Alternative BRT-6 would potentially affect War Memorial Park, Pasadena Central Park, Atlantic Boulevard County Park, (a Los Angeles County park), Cascades Park, and Tournament Park. The potential impacts associated with this alternative could include the partial acquisition of park land, impacts during construction activities such as access to the parks and increased noise levels.



BRT-6a

Alternative BRT-6a would potentially affect War Memorial Park, Pasadena Central Park, Atlantic Boulevard County Park, (a Los Angeles County park), Cascades Park, and Tournament Park. The potential impacts associated with this alternative could include the partial acquisition of park land, impacts during construction activities such as access to the parks and increased noise levels.

Light Rail Transit Alternatives

LRT-4a

Alternative LRT-4a would potentially affect Belvedere Community Regional Park (a Los Angeles County park), California State University, Los Angeles (potential effects to building and parking lot), South Pasadena Middle School and access to Casa Maravilla Senior Center. Partial acquisitions could be required for Belvedere Park, Cal State University Los Angeles and the South Pasadena Middle School for this alternative. Construction activities, noise increases and the ability to access parks and facilities could also potentially affect the Casa Maravilla Senior Center.

LRT-4b

Alternative LRT-4b would potentially affect Belvedere Community Regional Park (a Los Angeles County park), Alhambra Medical University, California State University, Los Angeles (potential effects to building and parking lot), Morris K. Hamasaki Elementary School, South Pasadena Middle School and access to Casa Maravilla Senior Center. Partial acquisitions could be required for Belvedere Park, Alhambra Medical University, Cal State University Los Angeles, Morris K. Hamasaki Elementary School (parking lot and field) and South Pasadena Middle School for this alternative. Construction activities, noise increases and the ability to access parks and facilities could also potentially affect the Casa Maravilla Senior Center.

LRT-4d

Alternative LRT-4d would potentially affect War Memorial Park, Belvedere Community Regional Park, (a Los Angeles County park), Alhambra Park, a parking lot adjacent to the baseball field at Park Elementary School, California State University, Los Angeles (potential effects to building and parking lot), Morris K. Hamasaki Elementary School, South Pasadena Middle School, GEM Transitional Care Center and access to Casa Maravilla Senior Center. Partial acquisitions could be required for War Memorial Park, Belvedere Community Regional Park, Cal State University Los Angeles, Morris K. Hamasaki Elementary School (parking lot and field), South Pasadena Middle School, and GEM Transitional Care Center. Construction activities, noise increases and the ability to access parks and facilities could also potentially affect the Casa Maravilla Senior Center.

LRT-6

Alternative LRT-6 would potentially affect War Memorial Park, Cascades Park, the American English College, South Pasadena Middle School, Church of Jesus Christ of Latter Day Saints, First Baptist Church, Grace Lutheran/Chinese Life Lutheran Church, Temple Beth Torah, Monterey Park Hospital and Atherton Baptist Homes. Partial acquisitions could be required for all of these parks and facilities. Construction activities, noise increases and the ability to access parks and facilities could also be potential impacts of this alternative.

Freeway Alternatives

F-2

Alternative F-2 would potentially affect a building and parking lot area, and recreational field located at California State University, Los Angeles and Eagle Rock Victory Outreach. Partial acquisition could be required for Cal State University and Eagle Rock Victory Outreach facility. Construction activities, noise increases and the ability to access parks and facilities could also be potential impacts of this alternative.

F-5

Alternative F-5 would potentially affect Eagle Rock Recreation Center, Lower Arroyo Park, San Rafael Park, the Annandale Golf Club, Richard Alatorre Park, California State University, Los Angeles (potential effects to building and parking lot), Fusion Academy, San Rafael Elementary School, Central Filipino Church of Seventh-day Adventists, and the San Rafael Library. Full acquisition of the San Rafael Elementary School, Fusion Academy Pasadena, and the Central Filipino Church could be potentially required for this alternative. Partial acquisition could be required for Eagle Rock Recreation Center, Lower Arroyo Park, San Rafael Park, the Annandale Golf Club, Richard Alatorre Park, Cal State University and the San Rafael Library. Construction activities, noise increases and the ability to access parks and facilities could also be potential impacts of this alternative.

F-6

Alternative F-6 would potentially affect a building and parking lot area, and recreational field located at California State University, Los Angeles, Arlington Garden, a football field and parking lot of Maranatha High School and a baseball field (corner of Del Mar Blvd. and St. John Ave), the Ambassador Auditorium (adjacent to St. John Avenue), the Sequoyah School, Chinese Seventh-day Adventist Church, and the El Sereno Community Garden. Full acquisition of the Sequoyah School and the El Sereno Community Garden could be required for this alternative. Partial acquisition of Cal State University, Arlington Garden, part of the Maranatha High School and baseball field, the Ambassador Auditorium and the Chinese Seventh-day Adventist Church could also be required by this alternative. Construction activities, noise increases and the ability to access parks and facilities could also be potential impacts of this alternative.

F-7

Alternative F-7 would potentially affect a building and parking lot area, and recreational field located at California State University, Los Angeles, a baseball field (corner of Del Mar Blvd. and St. John Ave), a football field and parking lot of Maranatha High School and the Ambassador Auditorium (adjacent to St. John Avenue) and parking lot of the Norton Simon Museum. Partial acquisition of Cal State University, baseball field, part of the Maranatha High School, the Ambassador Auditorium, and parking lot of the Norton Simon Museum could be required by this alternative. Construction activities, noise increases and the ability to access parks and facilities could also be potential impacts of this alternative.

Highway or Arterial Improvement Alternatives

H-2

Alternative H-2 would potentially affect Lower Arroyo Park, San Rafael Park, Emery Park, Arroyo Seco Golf Course, Arroyo Seco Park, Garzanza Park, (a Los Angeles County park), Almansor Center, South Pasadena Senior High School, Hillside Education Center, Church of the Angels, Garvanza Methodist Church/Hansammul Church, Garvanza Foursquare Church, Holy Family Catholic Church and Youth Ministry, Saint James Episcopal Church, South Pasadena Christian Church, South Pasadena United Methodist Church, San Rafael Library and South Pasadena Women's Club. Full acquisition of the South Pasadena Women's Club could be required by this alternative. Partial acquisition of Lower Arroyo Park, San Rafael Park, Emery Park, Arroyo Seco Golf Course, Arroyo Seco Park, Garzanza Park Almansor Center, South Pasadena Senior High School, Hillside Education Center, Church of the Angels, Garvanza Methodist Church/Hansammul Church, Garvanza Foursquare Church, Holy Family Catholic Church and Youth Ministry, Saint James Episcopal Church, South Pasadena Christian Church, South Pasadena United Methodist Church and the San Rafael Library could also be required by this alternative. Construction activities, noise increases and the ability to access parks and facilities could also be potential impacts of this alternative.

H-6

Alternative H-6 would potentially affect War Memorial Park, Arlington Garden, Singer Park, the Sequoyah School, Sierra Vista Elementary School, South Pasadena Middle School, Westmont Baptist Church, Pasadena Community Church and El Sereno Community Garden. Full acquisition of the Sequoyah School and El Sereno Community Garden could be required by this alternative. Partial acquisition of War Memorial Park, Arlington Garden, Singer Park, Sierra Vista Elementary School, South Pasadena Middle School, Westmont Baptist Church, and Pasadena Community Church could also be required by this alternative. Construction activities, noise increases and the ability to access parks and facilities could also be potential impacts of this alternative.

Summary of Potential Effects to Resources

Table 2: Summary of the Level II Potential Effects to Resources by Alternative

Table 2 provides the summary of the Level II analysis of potential effects to parks and/or recreational facilities in the SR-710 Project Study Area.

As shown in Table 2, the No Build Alternative would not affect any parks, recreational and community facilities in the Study Area.

The TSM/TDM Alternative would potentially affect a total of 12 parks, recreational and community facilities.

Alternatives BRT-1, BRT-6 and BRT-6a would potentially affect a total of 3, 5, and 5, parks, recreational and community facilities, respectively.

Alternatives LRT-4a, LRT-4b, LRT-4d and LRT-6 would potentially affect a total of 4, 6, 9, and 10, parks, recreational and community facilities, respectively.

Alternatives F-2, F-5, F-6, F-7 would potentially affect a total of 3, 10, 9, and 6, parks, recreational and community facilities, respectively and Alternatives H-2 and H-6 would potentially affect a total of 18 and 9 parks, recreational and community facilities, respectively.

Table 3 summarizes the evaluation of the Level II Screening of the potential effects to recreational resources and the total number of parks and facilities potentially affected by alternative.

TABLE 2
Level II Screening of SR-710 Project Alternatives
Affects to Parks, Recreational and Community Facilities by Alternative

Resources	No Build	TSM/TDM	BRT-1	BRT-6	BRT-6A	LRT-4a	LRT-4b	LRT-4d	LRT-6	F-2	F-5	F-6	F-7	H-2	H-6
Parks and Recreational Facilities															
Gateway Plaza Park		I-12 & L-2c													
Eagle Rock Recreation Center		L-1									X				
Lincoln Park			X												
War Memorial Park			X	X	X			X	X						X
Pasadena Central Park			X	X	X										
Atlantic Boulevard County Park				X	X										
Cascades Park				X	X				X						
Tournament Park				X	X										
Belvedere Community Regional Park						X	X	X							
Alhambra Park								X							
Park Elementary School baseball field parking lot								X							
California State University, Los Angeles Field (adjacent to Paseo Rancho Castilla)										X		X	X		
Lower Arroyo Park											X			X	
San Rafael Park											X			X	
Annandale Golf Club											X				



TABLE 2
Level II Screening of SR-710 Project Alternatives
Affects to Parks, Recreational and Community Facilities by Alternative

Resources	No Build	TSM/TDM	BRT-1	BRT-6	BRT-6A	LRT-4a	LRT-4b	LRT-4d	LRT-6	F-2	F-5	F-6	F-7	H-2	H-6
Richard Alatorre Park											X				
Arlington Garden												X			X
Maranatha High School football field and parking lot												X	X		
Ambassador Auditorium												X	X		
Norton Simon Museum parking lot													X		
Emery Park														X	
Arroyo Seco Golf Course														X	
Arroyo Seco Park														X	
Garzanza Park														X	
Singer Park															X
Community Facilities- Schools															
Alhambra Medical University							X								
Almanson Center														X	
American English College									X						
California State University, Los Angeles (building and parking lot)						X	X	X		X	X	X	X		

TABLE 2
Level II Screening of SR-710 Project Alternatives
Affects to Parks, Recreational and Community Facilities by
Alternative

Resources	No Build	TSM/TDM	BRT-1	BRT-6	BRT-6A	LRT-4a	LRT-4b	LRT-4d	LRT-6	F-2	F-5	F-6	F-7	H-2	H-6
Fusion Academy Pasadena											X				
Maranatha High School Baseball Field (corner of Del Mar Blvd/St. John Ave.)												X	X		
Morris K. Hamasaki Elementary School							X	X							
San Rafael Elementary School											X				
Sequoyah School												X			X
Sierra Vista Elementary School															X
South Pasadena Middle School						X	X	X	X						X
South Pasadena Senior High School														X	
Hillsides Education Center														X	
K.L. Carver Elementary School		I-18													
Rosemead High School		I-20 & L-5													
Community Facilities- Places of Worship															
Central Filipino Church Seventh-day Adventist											X				
Chinese Seventh-day Adventist												X			
Church of Jesus Christ of Latter Day Saints									X						
Church of the Angels														X	
First Baptist Church, Alhambra, CA									X						

TABLE 2
Level II Screening of SR-710 Project Alternatives
Affects to Parks, Recreational and Community Facilities by
Alternative

Resources	No Build	TSM/TDM	BRT-1	BRT-6	BRT-6A	LRT-4a	LRT-4b	LRT-4d	LRT-6	F-2	F-5	F-6	F-7	H-2	H-6
Garvanza Methodist Church/Hansammul Church														X	
Garvanza Foursquare Church														X	
Grace Lutheran Church/Chinese Life Lutheran									X						
Holy Family Catholic Church and Youth Ministry														X	
Eagle Rock Victory Outreach										X					
Jehovah's Witness Eagle Rock		I-2													
Temple Beth Torah									X						
Westmont Baptist Church															X
Occidental United Presbyterian		I-2													
Pasadena Community Church															X
Saint James Episcopal Church		I-9												X	
South Pasadena Christian Church		I-9												X	
South Pasadena United Methodist														X	
St. Edmund's Episcopal Church		I-18													

TABLE 2
Level II Screening of SR-710 Project Alternatives
Affects to Parks, Recreational and Community Facilities by
Alternative

Resources	No Build	TSM/TDM	BRT-1	BRT-6	BRT-6A	LRT-4a	LRT-4b	LRT-4d	LRT-6	F-2	F-5	F-6	F-7	H-2	H-6
Saints Felicitas and Perpetua Church and Elementary School		I-18													
Community Facilities- Hospitals, Convalescent Centers															
Monterey Park Hospital									X						
GEM Transitional Care Center								X							
Community Facilities- Libraries															
San Rafael Branch Pasadena Public Library											X			X	
Community Facilities- Miscellaneous Facilities															
Atherton Baptist Homes									X						
Casa Maravilla Senior Center						X	X	X							
El Sereno Community Garden												X			X
South Pasadena Women's Club														X	

Sources: Tele Atlas North America, 2007, Thomas Brothers, 2009, and California State Parks, October, 2009; Google Internet Map, accessed July and August 2012.

TABLE 3
Level II Screening of SR-710 Project Alternatives
Summary of Potential Effects to Recreational Resources by Alternative

Resources	No Build	TSM/TDM	BRT-1	BRT-6	BRT-6A	LRT-4a	LRT-4b	LRT-4d	LRT-6	F-2	F-5	F-6	F-7	H-2	H-6
Number of recreational/community facilities potentially affected by the Level II Alternatives	0	12	3	5	5	4	6	9	10	3	10	9	6	18	9

Source: LSA Associates, Inc. 2012