SECTION 5.4
TRAFFIC

5.4 TRAFFIC

This section evaluates the potential for traffic impacts associated with implementation of the proposed project. Mitigation measures to reduce the significance of impacts are recommended, as necessary. Information in this section is based on the *San Bernardino General Plan* Circulation Element and the *San Bernardino Final General Plan Update and Associated Specific Plans Environmental Impact Report*. The impact analysis is supplemented by analysis prepared by RBF Consulting, May 2010. Appendices F1 and F2 support this analysis.

5.4.1 REGULATORY SETTING

STANDARDS AND DEFINITIONS

Level of Service and V/C Ratio

An important "standard" referred to throughout this section relates to the ability of a roadway and/or intersection to accommodate traffic. This level of service standard may be used to describe both existing and future traffic conditions. Level of service (LOS) is a qualitative ranking that characterizes traffic congestion on a scale of A to F with LOS A being a free-flow condition and LOS F representing extreme congestion.

In addition to the LOS definition, a volume to capacity ratio or V/C ratio is used to provide a more quantified description of traffic conditions at intersections. The V/C ratio is the ratio of existing or projected traffic volumes to an intersection's design capacity. A V/C ratio of 0.90 for an intersection means that the traffic volumes at the intersection represent 90 percent of its design capacity. The V/C ratio can also be related to the above LOS definitions. For example, an intersection with a V/C ratio exceeding 0.95 is handling traffic volumes that approach design capacity. The V/C ratio of 0.95 corresponds to LOS E, which indicates an unacceptable level of service at that particular intersection.

The thresholds corresponding to each level of service and V/C ratios for unsignalized and signalized intersections are shown in *Table 5.4-1*, *Level of Service and V/C Standards*.

Table 5.4-1
Level of Service and V/C Standards

Level of Service	V/C Ratio (Volume to Capacity)	Two-Way or All-Way Stop Controlled Intersection Average Delay per Vehicle (sec)	Signalized Intersection Average Delay per Vehicle (sec)
A	0.0-0.60	0-10	≤ 10
B	0.61-0.70	> 10-15	> 10-20
C	0.71-0.80	> 15-25	> 20-35
D	0.81-0.90	> 25-35	> 35-55
E	0.91-1.00	> 35-50	> 55-80
F	> 1.00	> 50	> 80 or a V/C ratio equal or greater than 1.0

Source: City of San Bernardino General Plan Update: 2004, Circulation Impact & Mitigation Measures; Transtech Engineers

LOS D is the minimum acceptable threshold at all key intersections in the City of San Bernardino. However, for roadways, the City's minimum threshold is LOS C. The traffic study guidelines require that traffic mitigation measures be identified to provide for operations at the minimum threshold levels.

Roadway Capacity Standards and Passenger Car Equivalents

The following is a list of roadway capacity standards for various types of facilities, used in the roadway capacity analysis for the General Plan:

- 4-lane Major Arterial: 40,000 vehicles per day
- 2-lane Major Arterial: 15,000 vehicles per day
- 4-lane Secondary Arterial: 30,000 vehicles per day
- 2-lane Secondary Arterial: 12,000 vehicles per day
- 4-lane Collector Street: 25,000 vehicles per day
- 2-lane Collector Street: 10,000 vehicles per day

Also, in determining passenger car equivalent (PCE) factors for various trucks, the following factors were used:

- 2-axle Trucks: Equivalent to 2.0 passenger cars
- 3-axle Trucks: Equivalent to 2.5 passenger cars
- 4- or more axle Trucks: Equivalent to 3.0 passenger cars

San Bernardino County Congestion Management Program (CMP)

Proposition 111, passed in June 1990, provided additional transportation funding through a $.09 per gallon increase in the state gas tax. This equates to an estimated annual return of more than $6.25 per person for cities within San Bernardino County, and $7.1 million for the County. Included with the provision for additional transportation funding was a requirement to undertake a Congestion Management Program within each county with an urbanized area of more than 50,000 population, to be developed and adopted by a designated Congestion Management Agency (CMA). Within San Bernardino County, SANBAG was designated the CMA by the County Board of Supervisors and a majority of the cities representing a majority of the incorporated population. CMP Roadways and Intersections in the City are identified throughout this analysis with the "CMP" identifier.

5.4.2 ENVIRONMENTAL SETTING

SAN BERNARDINO GENERAL PLAN

Roadways

The City of San Bernardino has a circulation system consisting of major and secondary arterial roadways, collector roadways, and local streets.

Major Arterials accommodate six or eight travel lanes and may have raised medians. These facilities carry high traffic volumes and are the primary thoroughfares linking San Bernardino with adjacent cities and the regional highway system. Driveway access to these roadways is typically limited to provide efficient high volume traffic flow. Major Arterials within the Project Area include Waterman Avenue, Tippecanoe Avenue, Hospitality Lane, E Street, and 2nd Street.

Secondary Arterials are typically four-lane streets, providing two lanes in each direction. These roadways carry traffic along the perimeters of major developments, provide support to the major arterials, and are also through streets enabling traffic to travel uninterrupted for longer distances through the City. Secondary Arterials within the Project Area include Rialto Avenue, G Street, Arrowhead Avenue (North of 5th Street), and Sierra Way.

Collector Streets are typically two-lane streets that connect the local streets with the secondary arterials allowing local traffic to access the regional transportation facilities. Collector Streets within the Project Area include Mountain View Avenue, D Street, South H Street, 3rd Street, and Stirling Avenue.

Local Streets are typically two-lane streets that are designed to serve neighborhoods within residential areas. There are several variations on local streets depending on location, length of the street, and type of land use.

Freeways and Highways

Freeways/Highways are controlled-access, separated roadways that provide for high volumes of vehicular traffic at high speeds. There are three freeways within the City of San Bernardino and one State highway:

The San Bernardino Freeway (I-10) is the major east-west freeway providing access west to Los Angeles and east to the desert communities and beyond.

Interstate 215 provides north-south freeway access to Riverside and San Diego counties to the south and the high desert communities to the north. Since 2007, both the San Bernardino Association of Governments (SANBAG) and Caltrans have taken the lead in different phases of the I-215 Freeway Widening Project. This project begins at Orange Show Road and ends at University Parkway. Improvements include:

- Construction/widening of on-ramps and off-ramps
- Construction/widening of new and existing bridges over Warm and Lytle Creeks
- Widening of the Freeway
- Construction of new center medians
- Construction of new/widened bridges/ overpasses over the freeway
- New on- and off-ramps at Inland Center Drive
- Construction of High Occupancy Vehicle (HOV) lanes
- Widening/re-construction of roadways adjacent to the freeway

Construction is currently underway, and completion is anticipated to occur by Summer of 2013.

Interstate 210 provides local east-west service between I-215 and State Route 330 (SR-330).

State Route 18 (SR-18) provides a connection from I-210 to the mountain resorts/communities of Lake Gregory.

Rail

San Bernardino includes both major (main line) and minor (spurs) railroads that accommodate both freight and passenger rail services. Both Amtrak and Metrolink provide long-distance passenger train service from the Historic Depot in San Bernardino.

Amtrak trains operate west to Los Angeles; southeast to Palm Springs on to Florida; and northeast to Needles on to Illinois.

Commuter Rail service is provided by the Southern California Regional Rail Authority (SCRRA), which operates the Metrolink train service. The City of San Bernardino is served by the San Bernardino Line, which is Metrolink's busiest line, with a station located at the historic Santa Fe Depot. The San Bernardino Line connects rapidly growing San Bernardino County with the communities of the San Gabriel Valley and downtown Los Angeles. The San Bernardino Line is currently the only line with service seven days a week.

On weekdays, there are 15 round trips per day on the San Bernardino Line with about half of them during commute hours, but with close to hourly service in the mid-day.

Transit

Bus Service

Public transportation in the San Bernardino area is provided by Omnitrans, the regional Public Transit operator for San Bernardino County. Omnitrans operates 21 local-fixed routes, 14 of which serve the San Bernardino Planning Area. General service hours are between 6:00 AM and 8:00 PM, Monday through Saturday.

The Southern California Rapid Transit District provides express bus service between San Bernardino- Riverside and Los Angeles (Line 496) under contract with Omnitrans and the Riverside Transit Agency. Service is provided Sunday through Saturday.

Intercity bus service is provided to downtown San Bernardino by Greyhound and Continental Trailways that recently merged. The Greyhound bus depot is at 6th and G Streets.

Demand/Response System

Omnitrans provides San Bernardino residents that qualify for service under the Americans with Disabilities Act with a demand/response transportation system known as "Access." A resident may call and request a pick-up and delivery to a requested destination on a space-available basis with a reservation made 24 hours in advance.

E Street SBX

Omnitrans has been working since 2004 on the planning and design of a Bus Rapid Transit service known as the E-Street SBX. The E-Street SBX is intended as a transit corridor with 16

potential station locations along a 16.1-mile corridor that runs through the E Street Corridor within the City of San Bernardino. The line originates at Palm Avenue and Kendall Drive runs along Kendall to E Street where it heads south along E Street. At the southern end of the corridor the SBX line heads east on Hospitality Lane and then south along Anderson Street terminating at Loma Linda University.

The current route features 5.6 miles of exclusive (bus-only) lanes, separated from normal traffic. The remaining 10.5 miles of the route will be in mixed traffic, with transit priority signals at key intersections. The route proposes four stations with park-and-ride lots to encourage people to leave their cars and hop on the bus. Construction of this facility is anticipated to occur sometime in 2011 with passenger service starting in late 2013. Construction and operation of this transit corridor may affect traffic flow and patterns by preventing traffic movement across the dedicated right of ways and an increase in the amount of bus traffic along the E Street corridor throughout the City, including the Project Area.

EXISTING TRAFFIC CONDITIONS

This section summarizes the existing circulation conditions in the City of San Bernardino from the *General Plan EIR*. Eighty intersections, 23 roadway segments and 12 freeway segments were included in the study area for the General Plan analysis. The analysis is based on the existing amount of traffic volume on various street corridors and the capacity of the streets and intersections to carry traffic. The capacity measures the ability of the street system to meet and serve the demands from traffic. The capacity of a roadway is affected by a number of factors, e.g., the street width, the number of travel lanes, the number of crossing streets, the type of traffic control devices, the presence of on-street parking, the number of access driveways, the streets horizontal and vertical alignments, etc.

As shown in Table 5.14-2 of the *General Plan EIR*, the following intersections are currently operating at an unacceptable LOS, i.e., the LOS at these intersections is worse than LOS D (LOS E or F):

- Hunts Lane @ E Street (in Project Area)
- Meridian Avenue @ Rialto Avenue (not in Project Area)
- Mountain View Avenue @ San Bernardino Avenue (not in Project Area)
- Rancho Avenue @ 5th Street/Foothill Boulevard (not in Project Area)
- SR-30 WB Off-Ramp @ 30th Street (not in Project Area)
- Tippecanoe Avenue @ Rialto Avenue (not in Project Area)
- Waterman Avenue @ 36th Street (not in Project Area)
- Waterman Avenue @ 5th Street - CMP intersection (in Project Area)
- Waterman Avenue @ SR-30 EB Ramp - CMP intersection (not in Project Area)

As shown in Table 5.14-3 of the *General Plan EIR*, only the following roadway segments shows an unacceptable LOS (i.e., LOS D or worse) based on capacity analysis of 24-hour volumes:

- Tippecanoe Avenue South of Hospitality Lane (in Project Area)

The CMP standard for acceptable LOS at intersections and roadway segments is LOS E or better. No local roadway segment falls into this category. The City uses a higher Standard of LOS D as a minimum acceptable service level for intersections and LOS C for roadway segments.

As shown in Table 5.14-4 of the *General Plan EIR*, all freeway segments are currently operating at the CMP acceptable LOS of E or better.

GENERAL PLAN BUILDOUT

As shown on the Table 5.14-9 in the *General Plan EIR*, the following four roadway segments are expected to perform at an unacceptable level of service (LOS D or worse) at build-out of the General Plan according to standards established by the City:

- Baseline Street between Palm Avenue and Valencia Avenue (not in Project Area)
- E Street between 9th Street and Kendall Drive (not in Project Area)
- Pepper Avenue between I-10 and Foothill Boulevard (not in Project Area)
- Sierra Way between Waterman Avenue and 40th Street (not in Project Area)

As shown in Table 5.14-10 in the *General Plan EIR*, a number of freeway segments would be affected by the buildout of the General Plan Update.

GENERAL PLAN BUILDOUT FORECAST AND OPERATING CONDITIONS

Based on the traffic volume data obtained from future conditions model, the future traffic conditions at buildout of the General Plan were analyzed. The results of this analysis are contained in *General Plan* Appendix 14, Traffic Analysis Summary (Table 4 for intersections and Table 5 for roadway segments). The following illustrate the key observations from the analysis of projected traffic conditions for the buildout of the General Plan.

Table 4 of *General Plan* Appendix 14 shows that the following intersections are expected to perform at an unacceptable level of service and require mitigation:

- Northpark Boulevard @ University Parkway (not in Project Area)
- Hunts Lane @ E Street (in Project Area)
- Waterman Avenue @ 30th Street (not in Project Area)
- Waterman Avenue @ SR-30 EB Ramps (not in Project Area)
- SR-30 WB Off-ramp @ 30th Street (not in Project Area)
- Harrison Street @ 40th Street (not in Project Area)
- Waterman Avenue @ 36th Street (not in Project Area)
- Waterman Avenue @ 34th Street (not in Project Area)
- Valencia Avenue @ 40th Street (not in Project Area)
- Tippecanoe Avenue @ Rialto Avenue (not in Project Area)

- Rancho Avenue @ 5th Street/Foothill Boulevard (not in Project Area)
- Mountain View Avenue @ San Bernardino Avenue (not in Project Area)

Table 5 of *General Plan* Appendix 14 shows that the following roadway segments are projected to show unacceptable LOS:

- Base Line Street between Palm Avenue and Valencia Avenue (not in Project Area)
- E Street between 9th Street and Kendall Drive (not in Project Area)
- Sierra Way between I-10 Freeway and Foothill Boulevard (not in Project Area)
- Sierra Way between Waterman Avenue and 40th Street (not in Project Area)

Mitigation and improvement measures are required for the intersections and roadway segments that show unacceptable LOS. Typically, improvements at intersections result in improvement in traffic conditions on its approaches and thereby mitigate impacts on roadway segments.

Therefore, a number of mitigation measures have been identified for a total of 13 intersections where traffic analysis indicated circulation deficiencies. These mitigation/improvement measures would improve intersection performance to an acceptable LOS during peak hours. *General Plan* Appendix 9, Circulation Plan Changes, contains a list of these improvements, which are restated below.

Circulation Plan Changes from 1989 Circulation Plan

1) Mt. View Avenue: (joint jurisdiction with Redlands): I-10 Freeway to San Bernardino Avenue; Upgrade from Secondary to Major Arterial. This classification upgrade is consistent with the City of Redlands' General Plan Circulation Element and current intentions to construct the northbound lane portion of a proposed six-lane major arterial.

This proposed roadway will accommodate projected growth and provide convenient freeway access in the Redlands designated East Valley Corridor Specific Plan area. City Development Services staff held recent meetings with the City of Redlands consultants to discuss/determine the ultimate roadway street width and right-of-way for this roadway widening project per attached cross-section).

2) Mt. View Avenue: (joint jurisdiction with Redlands): Add a new Secondary Arterial; between San Bernardino Avenue and Central Avenue. This roadway request is a continuation from Item #1. The City of San Bernardino at the request of SANBAG, hopes to develop a secondary roadway to alleviate traffic demand on Tippecanoe Avenue enroute to the I-10 freeway from the proposed IVDA/Hillwood development of the former Norton AFB complex. The cooperative project with the City of Redlands will include a proposed four-lane arterial with a bridge over the Santa Ana River. Funding for this project is pending.

3) Central Avenue: Add Secondary Arterial between Mt. View Avenue and Tippecanoe Avenue. Also, add Secondary Arterial between Mt. View Avenue and Arrowhead Avenue. The intent of this request is to make the Central Avenue roadway segment between Arrowhead Avenue and the proposed Mt. View Avenue extension uniform and consistent with the General Plan update. This roadway is proposed to be the primary

access to the IVDA/Southgate Development and is an important east/west link between Tippecanoe Avenue and Waterman Avenue.

4) Richardson Street: Add Collector Arterial between Riverview Drive and the I-10 freeway. This roadway was previously designated as a local street, but should be upgraded to a local collector since it connects the Riverview Industrial Park to Redlands Boulevard with a bridge over the I-10 freeway. Richardson Elementary School is located on this street so this roadway is used as the primary route to/from school by students, parents, and school buses.

5) Harriman/Rosewood Alignment: Delete the easterly half of Harriman (Rosewood Drive) Orchid to Tippecanoe. Since Harriman Drive is presently being realigned to Laurelwood Drive, the existing roadway segment connection to Tippecanoe Avenue needs to be vacated/deleted to accommodate the proposed Hub development.

6) New Harriman/Laurelwood Dr. Alignment: Plot the new Laurelwood alignment from Harriman to Tippecanoe Avenue, designate as a Secondary Arterial. As indicated in Item #5, Harriman is being realigned to Laurelwood Drive to accommodate the Hub commercial development that is to be located south of the Harriman realignment between the I-10 freeway and Tippecanoe Avenue. The secondary arterial designation is compatible with the previous road way classification for the Tri-City Center Specific Plan.

7) Carnegie Drive: Upgrade easterly segment between Brier and Hospitality to Major Arterial designation. The requested classification upgrade will make the Carnegie Drive uniform and consistent with the Tri-City Center Specific Plan for the full built-out scenario.

8) Victoria Avenue: Add Secondary Arterial between Tippecanoe Avenue and Mt. View Avenue. This roadway was previously designated as a local street but has since gained importance due to the northerly realignment of Lugonia Street by the City of Redlands to intersect Victoria Avenue at Mt. View Avenue. Victoria Avenue has industrial/commercial development between Tippecanoe and Richardson and residential development between Richardson and Mt. View Avenue.

9) Coulston Street: Add Secondary Arterial between Tippecanoe Avenue and Mt. View Avenue. This proposed roadway will provide a convenient east/west access to patrons who frequent businesses on Hospitality Lane (Costco, Staples, etc) from the Redlands area via Mt. View Avenue. The proposed roadway classification is compatible with the major Arterial classification that is assigned to Hospitality Lane. Hospitality Lane becomes Coulston Street after it crosses Tippecanoe Avenue in an easterly direction.

10) Lena Road Extension: Delete roadway segment between Orange Show Road and Carnegie Drive. The Lena Road extension as presently proposed will terminate at Orange Show Road and will not cross the Santa Ana River. The City is proposing to extend Mt. View Avenue across the Santa Ana River to the east and is proposing to designate Mt. View Avenue as the secondary access to the IVDA/Hillwood Development of the airport.

11) Tippecanoe Avenue: Add Major Arterial between Central Avenue and 3rd Street. Tippecanoe Avenue was mistakenly designated as a local street between Rialto Avenue and Central Avenue in the General Plan. This roadway request will make Tippecanoe Avenue more

uniform between 3rd Street and the I-10 freeway and more compatible with the development proposed for the former air force base.

12) Mill Street: Confirm the upgrade of Mill Street between Lena Road and Tippecanoe Avenue as a Major Arterial. This request is similar to Item #12. This referenced segment of Mill Street was mistakenly depicted as a local street when in fact to be uniformly consistent with the General Plan classification, it needs to be shown as a Major Arterial.

13) Vanderbilt Way: Upgrade Vanderbilt Way between Waterman and Carnegie to a secondary arterial. This roadway was designated as a local street in the 1989 Circulation Element. To be consistent with the Tri-City Center Specific Plan, this roadway should be upgraded to a secondary arterial that connects Waterman Avenue to Carnegie Drive.

14) Riverview Drive: Add Collector Arterial between San Bernardino Avenue and Mt. View Avenue. This roadway was initially shown as a local street in the 1989 Circulation Element. However, since this roadway provides indirect secondary access to the I-10 freeway and direct access to Redlands Boulevard from the Riverview Industrial Park, staff would like the roadway to be upgraded to a secondary arterial.

15) Fairway Drive: Extend roadway easterly from Camino Real to intersect S. "E" Street, and designate as a Secondary Arterial. Similar to several previous items, this roadway was listed as a local street in the 1989 Circulation Element. However, since this roadway is a major southerly east/west link between our City and Colton, staff is requesting that the referenced street segment be upgraded to a Secondary Collector.

16) Commercenter Drive East, Commercenter Drive West, and Business Center Drive: Upgrade roadway segments off Hospitality Lane and designate all as Collector Arterials. Similar to several previous items, these roadways are listed as local streets in the 1989 Circulation Element.

17) Caroline Street, Club Way, Club Center Drive, Commercial Road, and Wier Road: Add roadway segments between Hunts Lane and Waterman Avenue and designate as Collector Arterials. Similar to several previous items, these roadways should be upgraded to Collector Arterials since the area has not fully reached its ultimate growth potential and the referenced roadways do function as collectors to adjacent local residential streets.

18) Harry Sheppard Boulevard: Add roadway segment between Tippecanoe Avenue and Del Rosa Avenue, and designate as a Secondary Arterial. This roadway is shown as a local street in the 1989 Circulation Element. To be consistent with the goals and infrastructure plan for the IVDA/ Hillwood Northgate Development of the former air force base property, this roadway should be upgraded to a Secondary Arterial.

19) Del Rosa Avenue: Show roadway to Harry Sheppard Boulevard and designate as a Major Arterial. Similar to Item # 18, this roadway was shown as a local street in the 1989 Circulation Element. Using the same rationale as Item #18 and to be uniformly consistent with the existing roadway classification of Del Rosa Avenue, staff is recommending that this roadway segment be upgraded to a Major Arterial.

20) Sierra Way: Downgrade roadway classification between 5th Street and Mill Street from Major to Secondary Arterial. Staff is requesting this downgrade for purposes of roadway classification consistency along the entire length of Sierra Way. Waterman Avenue, which is less than ¼ mile easterly of Sierra Way functions as a Major north/south Arterial through the center of our City.

21) "D" Street: Downgrade roadway classification between Rialto Avenue and Mill Street from Secondary to Collector Arterial. Staff is requesting this downgrade due to the significant decrease in traffic along "D" Street south of Rialto Avenue. There is also no direct access along "D" Street between Rialto Avenue and Mill Street since "D" Street is a "T" intersection at Valley Street and Oak Street with a missing segment in between.

22) "I" Street: Delete Secondary Arterial segment between 2nd and 3rd Streets. The reconfiguration of the I-215 freeway off ramps at 2nd Street will necessitate the need for a cul-de-sac for "I" Street at 3rd Street, therefore the need to delete the referenced street segment.

23) 3rd Street: Delete Secondary Arterial segment between Viaduct/"K" Street and Mt. Vernon Avenue. This segment of 3rd Street will become the access roadway for the parking lot area of the Santa Fe Depot/ Metrolink multi-modal complex.

24) 2nd Street: Delete the Major Arterial connection between Mt. Vernon Avenue and Rialto Avenue. 2nd Street west of Mt. Vernon Avenue is of no major significance and should be downgraded to a local street since it serves a few adjacent residences nearby and provides secondary access to Rialto Avenue.

25) 4th Street: Designate 4th Street as a collector arterial between Arrowhead Avenue and "G" Street. Staff has agreed to designate this segment of 4th Street as a collector arterial because of the limited linkage between the Santa Fe Depot, various governmental agencies, and the CBD.

26) Medical Center Drive: Delete this Secondary Arterial segment between Rialto Avenue and 5th Street. This roadway segment has never existed as other than a "paper street". The BNSF multi-modal facility complex will prevent this roadway from ever being constructed. Medical Center Drive was initially named Muscott Street and is known by that name, south of Rialto Avenue.

> ***26a) Eastbound 4th Street will be diverted to 5th Street due to new Mt. Vernon bridge alignment.*** Staff reached a consensus on this item at the last General Plan meeting. The northerly alignment is still pending.

27) Crestview Avenue: Delete this Collector segment between 21st Street and Highland Avenue. Crestview Avenue forms a "T" intersection at 21st Street. The expansion of the Saint Bernardine's Hospital complex would prevent any possible extension of Crestview Avenue to Highland Avenue.

28) Piedmont Drive: Delete this segment between Victoria Avenue and Arden Avenue. Piedmont Drive existed as a "paper street" for the past several decades. The development of the San Manuel casino complex will prevent the roadway from ever being constructed and street vacation proceedings are pending. Piedmont Drive is presently a cul-de-

sac on the east side of Victoria Avenue. Piedmont drive between Highland Avenue and the cul-de-sac easterly of Victoria Avenue shall be designated as a collector arterial.

29) Meridian Avenue: Show Collector roadway segment break between Mill Street and Rialto Avenue. Meridian Avenue is not a through street between Mill Street and Rialto Avenue. There are Metrolink railroad tracks that currently are a barrier to this roadway segment. The roadway will probably never be extended northerly due to the close proximity of Pepper Avenue which is a major north/south arterial.

30) 16th Street: Downgrade all roadway segments between Waterman and State Street from Secondary to Collector Arterial. 16th Street is basically an excellent east/west collector arterial being strategically located half way between the major arterials of Base Line and Highland Avenue. 16th Street also runs predominantly through residential neighborhoods.

31) Sepulveda Avenue: Downgrade roadway segment from 40th Street north to Collector Arterial. Sepulveda Avenue will function as an excellent residential neighborhood collector roadway that provides convenient north/south access to commercial development along 40th Street. Sierra Way, which is one block westerly of Sepulveda, is designated as a secondary arterial due to it 4-lane configuration and its access to highway 18 and the southerly limits of the City where it essentially terminates at Mill Street.

32) "H" Street Downgrade roadway segment between Kendall Dr. and Northpark Blvd. to a collector. "H" Street makes an excellent collector roadway that provides local neighborhood access to 40th Street/Kendall Drive commercial development. Nearby Mountain Street and Little Mountain Drive are both designated as north/south secondary arterial roadways. A major portion of this roadway is in unincorporated (County) areas.

> ***32a) show a break (cul-de-sac) between N. Arrowhead Avenue at N. "E" Street***. When "E" Street was widened to a four-lane roadway ten years ago, Arrowhead Avenue became a cul-de-sac for safety and access reasons. Hence there is no longer access to "E" Street off Arrowhead Avenue.

33) Marshall Boulevard: Show roadway break between Arden Avenue and Victoria Avenue. Marshall Boulevard has been vacated between Rockford Drive and Victoria Avenue to accommodate the San Manuel casino expansion program. Marshall Boulevard is scheduled to become a cul-de-sac at Rockford Drive.

34) 48th Street: Extend roadway segment to Kendall Drive with same classification (Secondary). 48th Street is a major east/west arterial roadway between 40th Street and Northpark Boulevard that connects Electric Avenue to Kendall Drive. The roadway runs partially through an unincorporated County neighborhood.

35) 30/210: Show freeway expansion to the west. The Rte 30/210 Freeway project appears to be under construction so it should be shown on the circulation element along its westerly right-of-way path. Completion of this major east/west freeway will probably alter nearby adjacent local street traffic patterns in the future.

36) Campus Way: Show perimeter roadway segment on north side of CSUSB campus, designate as a Secondary Arterial. A consensus was reached that this roadway segment should function as a collector roadway due to limited peripheral traffic demand. Future residential development (Paradise Hills) will not contribute significant volumes of traffic to warrant any additional upgrade to this proposed classification.

37) Irvington Avenue: Add Collector Arterial segment between Pine Avenue and Magnolia Avenue (extended). Residential development in the Verdemont community and the proposed construction of the Cesar Chavez Middle School on Belmont Avenue has created a need for this upgrade from a local street to collector roadway.

38) Magnolia Avenue: Add Collector Arterial segment between Ohio and Irvington Avenue. The proposed construction of the Cesar Chavez Middle School at the intersection of Belmont Avenue at Magnolia necessitates the upgrade of Magnolia to collector arterial status.

39) Little League Drive (?): delete this misidentified roadway segment as shown. This item is pending and is shown as Item #60.

40) Harrison Street: Add Collector Arterial segment between Lynwood Drive and 40th Street. Needs to be upgraded to a collector roadway since it carries unimpeded local residential traffic between Lynwood Drive and 40th Street.

41) 21st Street: Extend roadway segment between Waterman Avenue and "H Street, and designate as a Collector Arterial. After reconsideration, should remain a local street segment due to narrow street width and residential status, one block south of Highland Avenue, which is a major arterial.

42) Marshall Boulevard: Extend this roadway segment to Little Mountain Drive, and designate as a Collector Arterial. This roadway carries local neighborhood traffic north of 30th Street/Rte 30 between Little Mountain Drive and "E" Street.

43) 30th Street: Upgrade roadway segment designation between Little Mountain Drive and Valencia Avenue to a Secondary Arterial. The entire length of 30th Street/Lynwood Drive should be designated as a secondary arterial since it is the major east/west roadway north of the Rte. 30/210 freeway.

> ***43a) Downgrade Arrowhead Avenue to a collector between 30th Street and north terminus cul-de-sac***. Since there is no longer direct access to "E" Street from Arrowhead Avenue, this roadway north of 30th Street essentially serves local surrounding residences.

44) Valencia Drive: Designated to remain as a Secondary Arterial. No change required

45) 28th Street: The roadway segment between Valencia Avenue and Golden Avenue should be broken. An existing flood control channel prevents this roadway connection from becoming economically feasible.

46) Orange Street: Designate as a Collector Arterial segment between Piedmont Drive and Base Line. A portion of this roadway is in the City of Highland. The local street patterns are fragmented between Orange Street and Palm Avenue and Patton State Hospital is an obstacle to the west so most north/south residential traffic in that area travels along Orange Street.

47) Pumalo Street: Show roadway segment ending at Arden Avenue with no connection to Victoria Avenue. There is an existing substantial flood control area adjacent to the west side of Victoria Avenue between Lynwood Drive and Highland Avenue that would make this roadway extension economically unfeasible.

48) Date Street: Show roadway segment ending at Arden Avenue with no connection to Victoria Avenue. Same rationale as Item # 47.

49) H Street: Add Collector Arterial between Inland Center Drive to terminate as a cul-de-sac S/O Mill Street. The I-215 expansion project and off-ramp reconfiguration will alter local street traffic patterns in the area adjacent to the proposed Mill Street/I-215 ramps. Traffic on "H" Street will be diverted along Huff Street and Crescent Street.

50) Huff Street & Crescent Avenue: Add roadways as Local Collectors between "H" Street and Mill Street. See item # 49.

51) 10th Street: Downgrade roadway between I-215 freeway and Waterman Avenue to a local street. 9th Street is designated as a secondary east/west arterial and should relieve 10th Street of anything but local traffic.

52) Miramonte Drive: Add Collector Arterial between 27th Street and Marshall Boulevard. ***Reconsideration: Miramonte should remain a local street due to its close proximity to Little Mountain Drive, which is designated a secondary arterial.***

53) 6th Street: Downgrade roadway between Waterman Avenue and Victoria Avenue to a Collector Arterial. This item should be deleted based on further review, which suggests that most of this roadway segment runs through unincorporated County and City of Highland jurisdictions. Our City has only minor centerline segments of this roadway.

54) Arden Avenue: Leave roadway segment between Base Line and 3rd Street. This segment lies entirely within the City of Highland so this item is not pertinent to the General plan update.

55) Darby Street: Downgrade segment between Pepper Avenue and Cajon Blvd. to a Collector Arterial. This area is strictly residential (a major portion lies within unincorporated County jurisdiction) with insignificant traffic volumes, but with future development potential.

56) Meyers Road: Add roadway (loop) Between Little League Drive and freeway frontage road and designate as a Collector Arterial. The exact location of this roadway(s) is pending.

56a) Add Pennsylvania Avenue between Pine Avenue and Little League Drive and designate as a collector arterial. The westerly extension of Pennsylvania Avenue shall be designated (Cable Canyon Road?) and shall meander through the foothills to eventually intersect the north terminus of Paso Robles Road.

57) Central Avenue: Extend roadway segment southerly to 3rd Street and reclassify as a Collector Arterial (3rd Street to Highland Avenue - City portion is Highland Avenue to Pacific Street only). The City of Highland has also classified Central Avenue in their General Plan Circulation Element.

58) Golden Avenue: Downgrade roadway segment between Lynwood Drive and 40th Street from a secondary arterial to a Collector Arterial due to proximity to Harrison Street and Mountain Avenue which are also designated as collector arterials. Golden Avenue becomes a two-lane roadway, meanders through local residential neighborhoods between Marshall Boulevard and 40th Street, and is not suited as a secondary arterial.

59) Evans Street (future): Delete: Not practical due to Hub development.

60) Show new (collector arterial) frontage road from Little League Drive to Devore Road (pending).

61) 6th Street: Delete roadway segment west of "H" Street Future I-215 freeway ramp modifications will eliminate this roadway segment.

62) Sterling Avenue Extension: Designate (and plot) roadway extension (loop) as a collector arterial to connect all proposed residential cul-de-sacs that might comprise a residential development once known as Sterling Heights.

63) North Lake Project: Delete portions of "G" Street between 9th Street and Base Line; and 10th Street between "H" Street and "E" Street.

5.4.3 SIGNIFICANCE THRESHOLD CRITERIA

The environmental analysis in this section is patterned after the Initial Study Checklist recommended by the *CEQA Guidelines*, as amended, and used by the City of San Bernardino in its environmental review process, and is contained in Appendix A of the EIR. The Initial Study includes questions relating to traffic resources. The issues presented in the Initial Study Checklist have been utilized as thresholds of significance in this section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).

- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways.

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks (refer to Section 8.0, Effects Found Not To Be Significant).

- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) (refer to Section 8.0, Effects Found Not To Be Significant).

- Result in inadequate emergency access (refer to Section 8.0, Effects Found Not To Be Significant).

- Result in inadequate parking capacity (refer to Section 8.0, Effects Found Not To Be Significant).

- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks) (refer to Section 8.0, Effects Found Not To Be Significant)

A project's traffic impact is determined based upon whether or not traffic volume associated with the project deteriorates the level of service at an intersection location to an unacceptable LOS E or F and for roadway segments below LOS C.

According to the City of San Bernardino Traffic Impact Study Guidelines, traffic impacts at an intersection are to be considered "significant" when any of the following changes in the volume to capacity (V/C) ratios occur between the "without project" and the "with project" conditions:

LOS	**V/C with Project Increase**s
C	> 0.0400
D	> 0.0200
F	> 0.0100

The LOS and V/C ratios are based upon the delay methodology outlined in the Highway Capacity Manual.

Based on these significance standards, the effects of the proposed project have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.4.4 PROJECT IMPACTS AND MITIGATION MEASURES

◆ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD GENERATE TRIPS THAT COULD IMPACT LEVELS OF SERVICE FOR THE EXISTING AREA ROADWAY SYSTEM.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: As identified in the *General Plan*, forecast buildout conditions for the City allows for approximately 82,174 units of residential land use and approximately 189,934,304 square feet of non-residential land use. The proposed project plans for 1,833 units of residential land use and 6,200,590 square feet of non-residential land use, which is approximately 2.2 percent of the allowable residential dwelling units and approximately 3.3 percent of the allowable non-residential square footage in the *General Plan*. As identified in the *General Plan EIR*, implement of the circulation improvements proposed in the *General Plan* Circulation Element would mitigate traffic-related impacts associated with General Plan buildout. However, it was determined that the timing of these mitigation measures may not coincide with the occurrence of the impact.

PROPOSED PROJECT TRIP GENERATION

This section provides a forecast trip generation based on the proposed land uses. The proposed project includes the following mix of residential and commercial land uses:

- 1,833 Apartment Units;
- 518,916 square feet Light Industrial;
- 2,399,780 square feet General Office; and
- 3,281,894 square feet Shopping Center/Retail.

In summary, the proposed project plans for 1,833 units of residential land use and 6,200,590 square feet of non-residential land use. The proposed project trip generation is provided for the following development potential and identified redevelopment projects:

- Vacant Land Analysis;
- Carousel Mall Redevelopment Project;
- Heritage Square;
- Redevelopment of Former Military Facilities;
- Seccombe Lake Village;
- Arrowhead Credit Union Headquarters Campus;
- Theater District Implementation; and
- Intermodal Station and Transit-Oriented Development.

To calculate trips forecast to be generated by the proposed project land uses, *Institute of Transportation Engineers (ITE)* trip generation rates were utilized. *Table 5.4-2* summarizes the *ITE* trip generation rates used to calculate the number of trips forecast to be generated by the proposed project land uses. *ITE* trip rates are based on surveys of representative facilities throughout the United States.

Table 5.4-2
***ITE* Trip Rates for Proposed Project Site Land Uses**

Land Use (*ITE* Code)	Units	AM Peak Hour			PM Peak Hour			Daily Trip Rate
		In	Out	Total	In	Out	Total	
Light Industrial (110)	tsf	0.81	0.11	0.92	0.12	0.85	0.97	6.97
Apartment (220)	du	0.10	0.41	0.51	0.40	0.22	0.62	6.65
Hotel (310)	rooms	0.34	0.22	0.56	0.31	0.28	0.59	8.17
Shopping Center/Retail (820)	tsf	0.61	0.39	1.00	1.83	1.90	3.73	42.94
General Office Building (710)	tsf	1.36	0.19	1.55	0.25	1.24	1.49	11.01

Source: *2008 ITE Trip Generation Manual, 8th Edition*.
Note: tsf = thousand square feet.

Transit Usage Reduction

Studies have shown that transit oriented development (TOD) projects generate less traffic than is generated by conventional development projects. Accurate forecasting of trip generation for TOD projects can right-size road and intersection improvements to reflect the actual transportation performance of the project, resulting in less overall costs for the governing agency and the private sector developer. As indicated in the Transit Cooperative Research Program 128 (Transportation Research Board), transit-oriented apartments generate between 15 and 25 percent lower traffic in low-density suburban locations. Since enhanced transit services are planned in the vicinity of land uses associated with the Intermodal Station and Transit-Oriented Development project component, an appropriate transit usage reduction is included in the trip generation calculations. This analysis conservatively assumes a ten percent trip reduction related to transit usage.

Internal Trip Capture Reduction

As documented in *ITE's Trip Generation Handbook (Institute of Transportation Engineers, 2nd Edition, 2004),* an internal trip capture reduction is applicable when a project area has multiple destinations (such as the project components), in which a person visits more than one destination on-site during the same visit. For example, a person at the Carousel Mall Redevelopment Project component may first visit the office land uses then later visit a retail use in the same vehicle trip to the project site. An internal trip capture reduction under this example would reduce/eliminate both the trip exiting the office building as well as the trip to the retail use from the office building, since both these trips occurred within the Project Area. The only trips generated under this internal trip capture reduction example would be an inbound trip to the project site to the office building and a trip from the retail use exiting the Project Area. Hence, two trips are generated under this internal trip capture reduction example. Without the internal trip capture reduction, four trips would be generated: an inbound trip to the office building, an outbound trip exiting the office building, an inbound trip to the retail use, and an outbound trip exiting retail use.

Internal trip capture has been calculated for the proposed project land uses, on a per project component basis, as directed in *Trip Generation Handbook (Institute of Transportation Engineers, 2nd Edition, 2004)*. The *ITE* internal trip capture percentage varies based upon the mix of land uses in each project component and is calculated for PM peak hour and daily trip

generation. It should be noted, this analysis conservatively does not apply an internal trip capture reduction during the AM peak hour despite *ITE* data on mid-day traffic patterns. Additionally, this analysis conservatively does not apply internal trip capture reduction accounting for existing land uses, which may also provide compatibility with the proposed project land uses.

Pass-by Trip Reduction

As documented in *ITE's Trip Generation Handbook (Institute of Transportation Engineers, 2nd Edition, 2004),* a pass-by trip reduction is applicable to land uses located along busy arterial highways attracting vehicle trips already on the roadway; this is particularly the case when the roadway is experiencing peak operating conditions. For example, during the PM peak hour, a motorist already traveling along the arterial between work and home may stop at retail uses within the project components. A pass-by discount under this example would reduce/eliminate both the inbound trip and the outbound trip from the surrounding roadway circulation system since the vehicle was already traveling on the roadway. Without the pass-by trip discount, two trips would be generated: an inbound trip to the project component, and an outbound trip from the project component.

The following pass-by trip reductions applicable to the proposed shopping center land use is documented in the ITE *Trip Generation Handbook (Institute of Transportation Engineers, 2nd Edition, 2004):*

- Shopping Center: 34 percent weekday PM peak hour pass-by trip reduction.

Table 5.4-3 summarizes forecast trip generation of the proposed project, utilizing the trip generation rates shown in *Table 5.4-2*. Detailed trip generation calculation sheets are contained in Traffic Appendix A. Detailed internal trip capture calculation sheets are contained in Traffic Appendix B.

Table 5.4-3
Forecast Trip Generation of Proposed Project

Project Component	AM Peak Hour Trips			PM Peak Hour Trips			Daily Trips
	In	Out	Total	In	Out	Total	
Vacant Land Analysis							
- 518.916 tsf Light Industrial	420	57	477	62	441	503	3,617
- 788 du Apartments	79	323	402	315	173	488	5,240
ITE Internal Trip Capture Reduction (7% PM; 7% Daily)[1]	N/A	N/A	N/A	-22	-12	-34	-367
- 909.780 tsf General Office	1,237	173	1,410	227	1,128	1,355	10,017
ITE Internal Trip Capture Reduction (7% PM; 7% Daily)[1]	N/A	N/A	N/A	-16	-79	-95	-701
- 2,309.894 tsf Shopping Center	1,409	901	2,310	4,227	4,389	8,616	99,187
ITE Internal Trip Capture Reduction (7% PM; 7% Daily)[1]	N/A	N/A	N/A	-296	-307	-603	-6,943
ITE 34% PM Peak Hour Pass-By Reduction[1]	N/A	N/A	N/A	-1,337	-1,388	-2,725	-2,725
Carousel Mall Redevelopment Project							
- 750 du Apartments	75	308	383	300	165	465	4,988
ITE Internal Trip Capture Reduction (4% PM; 6% Daily)[1]	N/A	N/A	N/A	-36	-20	-56	-648
- 800.0 tsf General Office	1,088	152	1,240	200	992	1,192	8,808
ITE Internal Trip Capture Reduction (4% PM; 6% Daily)[1]	N/A	N/A	N/A	-24	-119	-143	-1145
- 677.0 tsf Shopping Center	413	264	677	1,239	1,286	2,525	29,070
ITE Internal Trip Capture Reduction (4% PM; 6% Daily)[1]	N/A	N/A	N/A	-149	-154	-303	-3,779
ITE 34% PM Peak Hour Pass-By Reduction[1]	N/A	N/A	N/A	-371	-385	-756	-756

Table 5.4-3 (continued)
Forecast Trip Generation of Proposed Project

Project Component	AM Peak Hour Trips			PM Peak Hour Trips			Daily Trips
	In	Out	Total	In	Out	Total	
Heritage Square							
- 30.0 tsf Shopping Center	18	12	30	55	57	112	1,288
ITE 34% PM Peak Hour Pass-By Reduction[1]	N/A	N/A	N/A	-19	-19	-38	-38
Redevelopment of Former Military Facilities							
- 90.0 tsf Shopping Center	55	35	90	165	171	336	3,865
ITE 34% P.M. Peak Hour Pass-By Reduction[1]	N/A	N/A	N/A	-56	-58	-114	-114
Seccombe Lake Village							
- 125 du Apartments	13	51	64	50	28	78	831
ITE Internal Trip Capture Reduction (15% PM; 14% Daily)[1]	N/A	N/A	N/A	-8	-4	-12	-116
- 50.0 tsf Shopping Center	31	20	51	92	95	187	2,147
ITE Internal Trip Capture Reduction (15% PM; 14% Daily)[1]	N/A	N/A	N/A	-14	-14	-28	-301
ITE 34% PM Peak Hour Pass-By Reduction[1]	N/A	N/A	N/A	-27	-28	-55	-55
Arrowhead Credit Union Headquarters Campus							
- 190.0 tsf General Office	258	36	294	48	236	284	2,092
ITE Internal Trip Capture Reduction (1% PM; 2% Daily)[1]	N/A	N/A	N/A	-0	-2	-2	-42
- 25.0 tsf Shopping Center	15	10	25	46	48	94	1,074
ITE Internal Trip Capture Reduction (1% PM; 2% Daily)[1]	N/A	N/A	N/A	-0	-0	-0	-21
ITE 34% P.M. Peak Hour Pass-By Reduction[1]	N/A	N/A	N/A	-16	-16	-32	-32
Theater District Implementation							
- 25.0 tsf Shopping Center	15	10	25	46	48	94	1,074
ITE 34% PM Peak Hour Pass-By Reduction[1]	N/A	N/A	N/A	-16	-16	-32	-32
Intermodal Station and TOD							
- 170 du Apartments	17	70	87	68	37	105	1,131
ITE Internal Trip Capture Reduction (7% PM; 9% Daily)[1]	N/A	N/A	N/A	-5	-3	-8	-102
- 500.0 tsf General Office	680	95	775	125	620	745	5,505
ITE Internal Trip Capture Reduction (7% PM; 9% Daily)[1]	N/A	N/A	N/A	-9	-43	-52	-495
- 75.0 tsf Shopping Center	46	29	75	137	143	280	3,221
ITE Internal Trip Capture Reduction (7% PM; 9% Daily)[1]	N/A	N/A	N/A	-10	-10	-20	-290
ITE 34% PM Peak Hour Pass-By Reduction[1]	N/A	N/A	N/A	-43	-45	-88	-88
10 percent Transit Reduction	-74	-19	-93	-26	-70	-96	-888
Total Proposed Project Trip Generation	**5,795**	**2,527**	**8,321**	**4,902**	**7,265**	**12,167**	**163,477**

Note: tsf = thousand square feet; N/A = Not applicable.
1= ITE Trip Generation Handbook, 2nd Edition, 2004.

As shown in *Table 5.4-3*, the proposed project is forecast to generate approximately 163,477 daily trips, which include approximately 8,321 AM peak hour trips and approximately 12,167 PM peak hour trips.

Traffic-Related Development Impact Fees

To assist in implementing circulation improvements identified in the *General Plan* Circulation Element, the City established development impact fees for both local and regional circulation improvements. All future developments that occur within the City and the Project Area would be required to pay these fees.

Development Type	Local Circulation Fee	Regional Circulation Fee
Detached Dwelling Units	$225.06 per unit	$2,435.00 per unit
Attached Dwelling Units	$150.03 per unit	$1,626.00 per unit
Commercial/ Office	$0.243 per square foot	$2.625 per square foot
Industrial	$0.147 per square foot	$1.591 per square foot

Payment of these fees effectively mitigates the impacts associated with development projects in the City. However, since the circulation improvements may not be constructed until some time after the fees are paid, impacts remain significant . In addition, there may be instances where improvements are shared by other jurisdictions (i.e., Caltrans, City of Redlands, County of San Bernardino, etc.), which may affect the ability to construct the proposed improvements at the time the impact occurs.

The proposed project is consistent with the General Plan, and therefore, detailed traffic analysis for the proposed project was addressed during the adoption of the currently approved *General Plan*. Therefore, no additional traffic impacts or mitigation measures are anticipated beyond those identified in the *General Plan* and *General Plan EIR*, and no further traffic analysis is required for the proposed project. However, since the project-specific mitigation measures or improvements may not be constructed at the time impacts occur, it has been determined that traffic associated with the proposed project would result in a significant unavoidable impact in the Project Area. While these impacts are mitigable, it is the timing of when the mitigation would occur that provides the basis for this determination.

General Plan Goals and Policies:

LAND USE ELEMENT

General Plan policies related to the provision/accommodation of alternative transportation options.

Goal 2.2 **Promote development that integrates with and minimizes impacts on surrounding land uses.**

Policy 2.2.5 Establish and maintain an ongoing liaison with Caltrans, the railroads, and other agencies to help minimize impacts and improve aesthetics of their facilities and operations; including possible noise walls, berms, limitation on hours and types of operations, landscaped setbacks and decorative walls along its periphery.

General Plan policies related to general circulation issues.

Goal 2.3 **Create and enhance dynamic, recognizable places for San Bernardino's residents, employees, and visitors.**

Policy 2.3.6 Circulation system improvements shall continue to be pursued that facilitate connectivity across freeway and rail corridors.

Policy 2.3.7 Improvements shall be made to transportation corridors that promote physical connectivity and reflect consistently high aesthetic values.

Goal 2.7 Provide for the development and maintenance of public infrastructure and services to support existing and future residents, businesses, recreation, and other uses.

Policy 2.7.4 Reserve lands for the continuation and expansion of public streets and highways in accordance with the Master Plan of Highways.

CIRCULATION ELEMENT

General Plan policies related to design of roadways, safety, and the elimination/mitigation of Impacts.

Goal 6.3 Provide a safe circulation system.

Policy 6.3.3 Require that all City streets be constructed in accordance with the Circulation Plan (Figure C-2) and the standards established by the Development Services Director.

Policy 6.3.4 Require appropriate right-of-way dedications of all new developments to facilitate construction of roadways shown on the Circulation Plan.

Policy 6.3.5 Limit direct access from adjacent private properties to arterials to maintain an efficient and desirable quality of traffic flow.

Policy 6.3.6 Locate new development and their access points in such a way that traffic is not encouraged to utilize local residential streets and alleys.

Policy 6.3.7 Require that adequate access be provided to all developments in the City including secondary access to facilitate emergency access and egress

Proposed General Plan policies related to mass transit and rail.

Goal 6.6 Promote a network of multi-modal transportation facilities that are safe, efficient, and connected to various points of the City and the region.

Policy 6.6.1 Support the efforts of regional, state, and federal agencies to provide additional local and express bus service in the City.

Policy 6.6.2 Create a partnership with Omnitrans to identify public transportation infrastructure needs that improve mobility.

Policy 6.6.3 In cooperation with Omnitrans, require new development to provide transit facilities, such as bus shelters and turnouts, as necessary and warranted by the scale of the development.

Policy 6.6.4 Ensure accessibility to public transportation for seniors and persons with disabilities.

Policy 6.6.5 In cooperation with Omnitrans, explore methods to improve the use, speed, and efficiency for transit services. These methods might include dedicated or priority lanes/signals, reduced parking standards for selected core areas, and incorporating Intelligent Transportation System architecture.

Policy 6.6.6 Support and encourage the provision of a range of paratransit opportunities to complement bus and rail service for specialized transit needs.

Policy 6.6.7 Encourage measures that will reduce the number of vehicle-miles traveled during peak periods, including the following examples of these types of measures:

- Incentives for car-pooling and vanpooling.
- Preferential parking for car-pools and vanpools.
- Conveniently located bus stops with shelters.
- An adequate, safe, and interconnected system of pedestrian and bicycle paths

Policy 6.6.8 Promote the use of car-pools and vanpools by providing safe, convenient park-and-ride facilities.

Goal 6.7 Work with the railroads and other public agencies to develop and maintain railway facilities that minimize the impacts on adjacent land uses.

Policy 6.7.1 Accommodate railroad services that allow for the movement of people and goods while minimizing their impact on adjacent land uses.

Policy 6.7.2 Coordinate with SANBAG, SCAG, the County and other regional, state or federal agencies and the railroads regarding plans for the provision of passenger, commuter, and high-speed rail service.

Policy 6.7.3 Encourage the provision of a buffer between residential land uses and railway facilities and encourage the construction of sound walls or other mitigating noise barriers between railway facilities and adjacent land uses.

Policy 6.7.4 Identify existing and future high volume at-grade railroad crossings and pursue available sources of funding (e.g., California Public Utilities Commission) to implement grade separations where appropriate.

General Plan policies relating to parking.

Goal 6.9 Achieve a balance between parking supply and demand.

Policy 6.9.1 Ensure that developments provide an adequate supply of parking to meet the needs, on-site or within close proximity to the developments generating the demand for parking.

Policy 6.9.2 Study the parking standards in the Development Code to determine if they accurately reflect demand and if adequate flexibility is available to accommodate certain situations, such as shared parking, senior housing, or transit oriented developments.

Policy 6.9.3 Require that all new developments provide adequate parking to meet their parking demands on-site or in consolidated parking facilities within close proximity to their site, except for developments within the Central City Parking District.

Policy 6.9.4 Continue to expand the supply of public parking in off-street parking facilities in downtown San Bernardino.

Policy 6.9.5 Continue to provide an in-lieu parking fee option for developments in the downtown area to satisfy all or part of their parking requirement through the payment of an in-lieu fee which will be utilized to provide parking in consolidated public parking facilities.

Policy 6.9.6 Require that new developments submit a parking demand analysis to the City Engineer for review and approval whenever a proposal is made to provide less than the full code requirement of parking for each individual land use on-site at the proposed development.

Policy 6.9.7 Consider all concepts relating to joint use, shared parking, and off-peak demand to maximize the utilization of existing and proposed parking in the Central Business District.

Policy 6.9.8 Develop parking and traffic control plans for those neighborhoods adversely impacted by spillover parking and traffic.

Mitigation Measures: Implementation of the circulation improvements identified in the General Plan Circulation Element and General Plan EIR are required to ensure that impacts to traffic generation within the Project Area are reduced. No additional mitigation measures are required.

Level of Significance After Mitigation: Significant Unavoidable Impact.

5.4.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

- **IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN CUMULATIVELY CONSIDERABLE TRIPS THAT COULD IMPACT LEVELS OF SERVICE FOR THE EXISTING AREA ROADWAY SYSTEM.**

Level of Significance Before Mitigation: Potentially Significant Impact.

Impact Analysis: For this topic, the cumulative impacts are analyzed in terms of impacts within the City. Future development in the City of San Bernardino could result in additional trips on the circulation system. The City of San Bernardino is an urbanized city surrounded by other urban cities. The proposed project, which includes the consolidation of seven Project Areas into one Project Area, is located in the central portion of the City of San Bernardino.

Implementation of the proposed project would result in the addition of 1,833 dwelling units, 6,123 persons, 6,195,718 square feet of non-residential development, and 16,591 jobs beyond existing conditions. Future development associated with implementation of the proposed project would result in increased traffic generation within the Project Area. However, this anticipated growth has been planned for within the *General Plan*. To accommodate this anticipated growth, the *General Plan* Circulation Element identifies the roadway improvements necessary to accommodate the anticipated traffic associated with General Plan buildout. However, these improvements may not be implemented at the time actual circulation impacts occur. For this reason some intersections or roadways may operate at a deficient LOS.

The proposed project identifies several projects and programs to eliminate blight that may occur if the proposed merger and amendments project is approved. Future projects within the City, including those in Merged Area A would be required to mitigate traffic impacts on a project-by-project basis. Therefore, the incremental impact of the proposed project, when considered in combination with development within the City, would not result in cumulatively considerable traffic impacts. Nor would the cumulative traffic impacts generate any new impacts that have not already been identified for the General Plan buildout in the *General Plan EIR*. Relevant policies from the *General Plan* Land Use and Circulation Elements have been identified in the analysis above. Future projects would be reviewed for consistency with the *General Plan* Circulation Element in place at the time.

Although the amount of development associated with the proposed project is consistent with the General Plan, cumulative traffic impacts are considered significant and unavoidable based on the potential for traffic impacts to occur prior to construction of the improvements designed to alleviate those conditions. Although payment of the City's Development Impact Fees provides the funding for these improvements, there is a potential that the improvements may be delayed. Therefore, cumulative traffic impacts are considered significant and unavoidable in this regard.

General Plan Goals and Policies: Refer to the goals and policies identified above.

Mitigation Measures: Implementation of the circulation improvements identified in the General Plan Circulation Element and General Plan EIR are required to ensure that impacts to traffic generation within the Project Area are reduced. No additional mitigation measures are required.

Level of Significance After Mitigation: Significant Unavoidable Impact.

5.4.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Traffic impacts, both project and cumulative, associated with implementation of the proposed project would be significant and unavoidable, even with compliance with the *General Plan* goals and policies, and the recommended circulation improvements identified in the *General Plan* Circulation Element and *General Plan EIR*. If the Redevelopment Agency approves the proposed project, the Redevelopment Agency shall be required to cite their findings in accordance with *CEQA Guidelines* Section 15091 and prepare a Statement of Overriding Considerations in accordance with *CEQA Guidelines* Section 15093.

5.4.7 SOURCES CITED

City of San Bernardino General Plan, Chapter 2, Land Use Element, prepared by The Planning Center, dated November 1, 2005.

City of San Bernardino General Plan, Chapter 6, Circulation Element, prepared by The Planning Center, dated November 1, 2005.

Final San Bernardino General Plan Update and Associated Specific Plans Environmental Impact Report, prepared by The Planning Center, dated September 30, 2005.

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