

I-215/Barton Road Interchange Improvement Project Community Impact Assessment

City of Grand Terrace and City of Colton
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Chapter 1 Introduction

San Bernardino Associated Governments (SANBAG), in cooperation with the California Department of Transportation (Caltrans), the City of Grand Terrace, and the City of Colton, proposes to improve the Interstate 215 (I-215)/Barton Road interchange. The proposed I-215/Barton Road Interchange Improvement Project (Project) is located in the City of Grand Terrace and partially in the City of Colton in San Bernardino County. On Barton Road, the Project limits extend from approximately 0.3 mile (mi) west of I-215 to 0.4 mi east of I-215. The Project limits on I-215 extend from approximately 0.8 mi south of Barton Road to 0.4 mi north of Barton Road. Figure 1 shows Project location and vicinity maps.

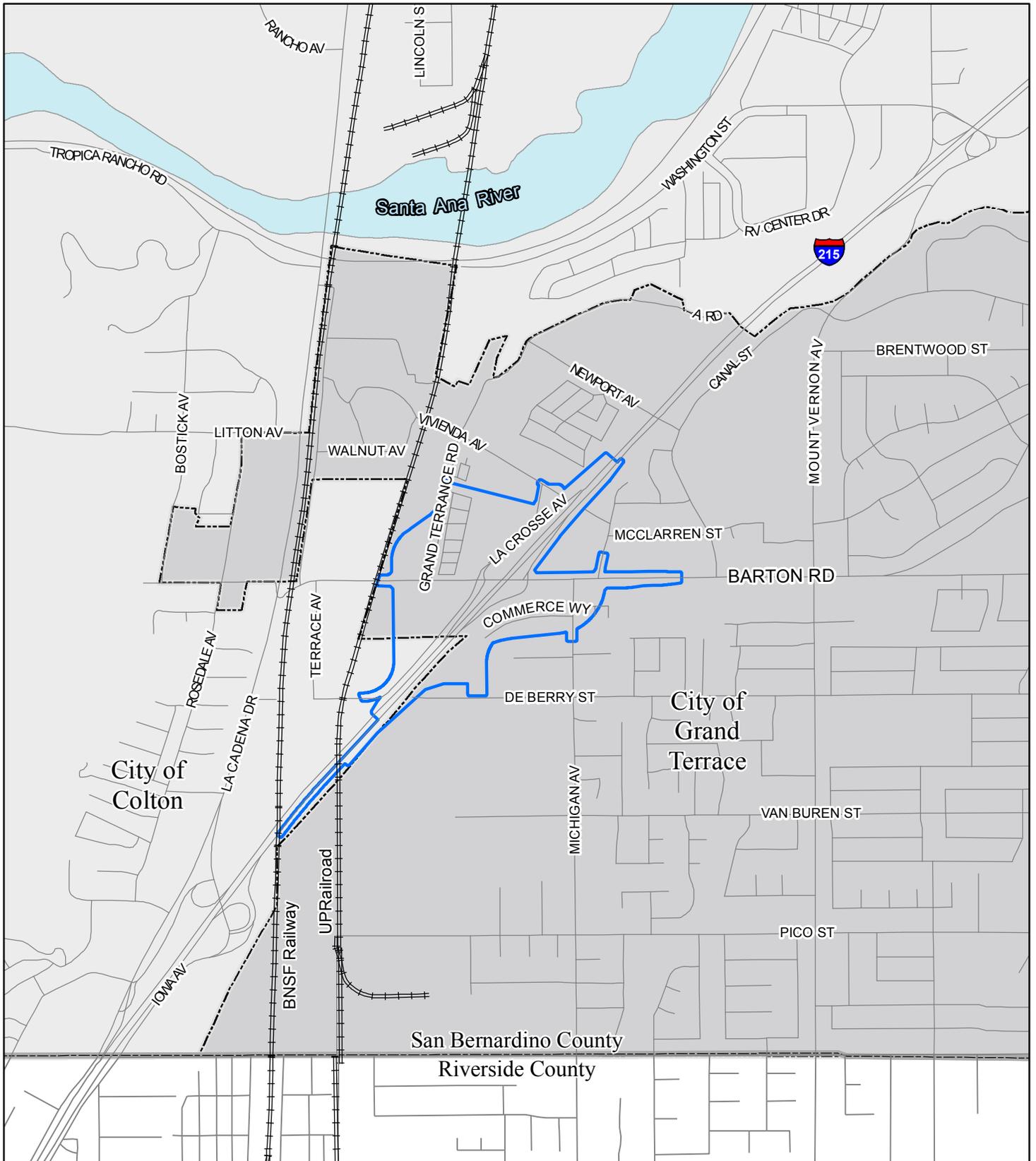
1.1 Executive Summary

The purpose of the Community Impact Assessment (CIA) is to delineate the affected socioeconomic environment and identify and analyze community impacts of the proposed Project. This report identifies the Project setting in terms of land use, population and housing, economic conditions, and public facilities and services. The conclusions of community impacts by topic area are presented below.

- **Community Character and Cohesion.** Impacts to local neighborhoods such as road detours, access restrictions, and relocations would occur. Potential detours and access restrictions during construction would be minimized through implementation of the Transportation Management Plan (TMP) and public outreach program. Relocation impacts would be minimized through compliance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) (Public Law 91-646, 84 Statutes 1894).

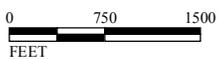
Sound barriers will be constructed as part of the I-215 Bi-County High Occupancy Vehicle (HOV) Lane Gap Closure Project to separate Grand Terrace Elementary School and adjacent single-family dwellings, as well as Grand Royal Mobile Estates from I-215. Currently, these properties are separated from I-215 by chain-link fences. These sound barriers (solid block walls) will also reduce freeway noise associated with the proposed Project and will provide a better sense of separation from the freeway. Businesses that remain after Project construction would benefit from improved interchange operations, which would improve the use of this land. Terrace Village RV Park and Grand Terrace Mobile Home Park would lose the buffer (i.e., the commercial strip mall that currently separates them

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- Project Area
- City of Colton
- City of Grand Terrace



SOURCE: Thomas Brothers (2010)

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FIGURE 1

I-215/Barton Road Interchange Improvement Project
Project Location

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from the southbound I-215 off-ramp); however, they would not be substantially impacted by traffic noise or exhaust emissions.

The Build Alternatives would not substantially impact community cohesion because the interchange and I-215 already divide the community, and the nearby residential uses are currently interspersed among transportation land uses. Based on the types of businesses to be displaced, it is expected that the majority of these businesses would serve the City of Grand Terrace, the Highgrove community, and the southeastern portion of the City of Colton as opposed to just serving the local neighborhood. Local circulation changes would maintain access to area properties.

- **Environmental Justice.** Based on the proportion of minority residents, residents below poverty, median household incomes, and expected displacements, the Project would not cause disproportionately high and adverse effects on any minority or low-income populations, per Executive Order (EO) 12898 regarding environmental justice. The determination of whether or not the effects of the proposed Project are disproportionately high and adverse depends on whether (1) the effects of the Project are predominantly borne by a minority or low-income population, or (2) the effects of the Project are appreciably more severe or greater in magnitude on minority or low-income populations compared to the effects on nonminority or non-low-income populations (refer to Federal Highway Administration [FHWA] Western Resource Center Interim Guidance: Addressing Environmental Justice in the Environmental Assessment/Environmental Impact Statement [EA/EIS] [1999]).

The Project area is mostly within the City of Grand Terrace, which has a smaller environmental justice population than the City of Colton or the County. Based on the criteria used as the basis for evaluating environmental justice (minority groups, median household income, and poverty level), the Build Alternatives could impact minority or low-income populations but would not cause disproportionately high and adverse effects on minority or low-income populations because the impacts are not targeted at low-income and minority groups when compared to the populations in the City of Colton, the City of Grand Terrace, and the County of San Bernardino.

- **Economic Impacts.** During construction, there would be detours, and access to local businesses may be reduced such that businesses may experience temporary loss of clientele and decrease in revenue. These impacts would be minimized through implementation of the TMP, public outreach, and nonresidential

relocation programs. The Project potentially creates temporary construction jobs including 1,364 jobs for Alternative 3, 822 jobs for Alternative 6, and 812 jobs for Modified Alternative 7 based on the current estimated capital cost of each alternative.

Alternative 3 would result in the estimated displacement of 131 to 321 employees and would potentially fully acquire 30 parcels, resulting in the loss of an estimated \$154,983 in annual property tax revenue. The potential annual sales tax loss for the City of Grand Terrace would be an estimated \$51,423 for Alternative 3 if all the displaced businesses in the City of Grand Terrace were relocated outside of the city. If all displaced businesses in the City of Colton were relocated outside this city, the potential sales tax losses for the City of Colton would be an estimated \$13,483 for Alternative 3.

Alternative 6 would result in an estimated displacement of 40 to 102 employees and would potentially fully acquire 10 parcels in the City of Grand Terrace, resulting in a loss of \$49,087 in property taxes. The potential annual sales tax loss for the City of Grand Terrace would be an estimated \$28,926 for Alternative 6 if the displaced businesses were relocated outside of this city.

Modified Alternative 7 would result in an estimated displacement of 60 to 140 employees and would result in full acquisition of 8 parcels in the City of Grand Terrace, resulting in a loss of \$42,127 in property taxes. The potential annual sales tax loss for the City of Grand Terrace would be an estimated \$35,354 for Modified Alternative 7 if the displaced businesses were relocated outside of this city.

- **Business Impacts.** Implementation of the Build Alternatives would result in temporary impacts to local businesses during construction. Road detours and access restrictions due to construction would result in traffic delays for local business owners, their employees, and customers. Because the Build Alternatives would improve the operation of the interchange and reduce congestion, the businesses that remain in the Project area would benefit from improved interchange operations. Local circulation changes would maintain access to area businesses.
- **Relocation and Real Property Acquisition.** As discussed in the *Draft Relocation Impact Statement (DRIS)*, a sufficient number of replacement properties similar to the displaced properties are available on the market. Based on the type of business, the majority of the potentially displaced businesses is expected to serve the local as well as adjacent communities and, therefore, could

maintain their clientele after relocation, although there would be a loss of revenue between the closing of the old business and the establishment of the business at the new location.

- **Property Values.** The Project would result in a minimal change to safety, noise, visual quality, and community cohesion. The Project would reduce congestion at the interchange, thereby improving interchange operations for remaining local businesses and residents. Since the residences and businesses that would remain under the Build Alternatives are already located adjacent to an existing interchange, and the I-215 Bi-County HOV Lane Gap Closure Project sound barriers would reduce noise effects at residential properties along I-215 in the vicinity of the interchange, the overall character of the community as freeway- and interchange-adjacent would not change, and substantial impacts to property values are not expected.
- **Community Facilities.** The Project would require minimal temporary and permanent right-of-way from Grand Terrace Elementary School. The TMP includes measures to minimize impacts to school operations and access. During construction, some impairment to the delivery of services, including fire and police response times, may occur; however, these temporary impacts would be substantially minimized through implementation of the TMP.
- **Land Use.** The Build Alternatives are consistent with the regional mobility goals of the Cities of Grand Terrace and Colton, the County of San Bernardino, SANBAG, and the Southern California Association of Governments (SCAG). The Build Alternatives are consistent with applicable City of Grand Terrace and City of Colton General Plan goals and policies. Therefore, the land use changes associated with the Build Alternatives are consistent with the approved land use and transportation plans.

Because the Build Alternatives would improve interchange operations, and are consistent with local and regional plans and policies, land use compatibility impacts are not considered substantial.

- **Growth.** The Project would not provide new transportation facilities or create new access points to areas previously not accessible; thus, the Project would not result in changes in accessibility to the transportation system in this area. The Project would not influence growth beyond what is currently planned because it does not increase accessibility. Current and planned projects within both the City of Grand Terrace and the City of Colton were proposed and approved prior to

initiation of the proposed interchange improvements, and projects within both Cities have also stalled due to economic and market factors as well as staffing cuts. These trends indicate that growth in the adjoining cities is not dependent on the proposed transportation improvements. While the Project includes reconstruction of an existing interchange, it would not provide new transportation facilities or create new access points to areas previously not accessible. Therefore, the Project would not result in changes in accessibility to the transportation system in this area. The Project would not influence growth beyond what is currently planned and would not change the rate, type, or amount of growth. Therefore, there is no Project-related growth.

- **Cumulative Impacts.** Overall, the planned projects are expected to result in minimal displacements, and the two transportation projects that would displace several businesses and residents would be constructed more than 20 years apart, based on current schedules. Each project would be required to avoid, minimize, or mitigate community impacts consistent with California Environmental Quality Act (CEQA) and/or National Environmental Policy Act (NEPA) requirements. In addition, the cumulative community impacts that have occurred due to past and present projects are consistent with the development of incorporated Cities and were consistent with local plans and policies. For these reasons, direct cumulative community impacts are not considered substantial.

Considering the nature of the resource study area (RSA) for cumulative community impacts as a mostly built-out area, the development trends consistent with what is expected in incorporated Cities, and the limited growth influence expected by the planned projects, cumulative indirect community impacts are not substantial.

1.2 Existing Facility

I-215 is a major north-south freeway facility that begins at the southern junction of Interstate 15 (I-15) in the City of Murrieta in Riverside County and terminates at the northern junction with I-15, near Devore in San Bernardino County. It is an alternative route of I-15. The portion of I-215 within the Project limits currently provides three through lanes in each direction and a paved median.

The existing I-215/Barton Road interchange is a compact diamond interchange with single-lane entrance and exit ramps. Both of the exit ramp approaches expand to two lanes to accommodate turning traffic. The existing northbound ramp intersection and southbound ramp intersection are spaced approximately 350 feet (ft) apart. The

existing overcrossing is a single lane in each direction with back-to-back left-turn pockets for the entrance ramps.

Barton Road is an east-west primary arterial in the County of San Bernardino. It extends from La Cadena Drive in the City of Colton to east of San Mateo Street in the City of Redlands. Within the Project limits, Barton Road is a two-lane roadway west of I-215. East of I-215, Barton Road is a four-lane facility with turn lanes at various intersections. Within the Project limits, there are several intersections:

- Grand Terrace Road (unsignalized T-intersection)
- Southbound ramps and La Crosse Avenue intersection (signalized)
- Northbound ramps intersection (signalized)
- Michigan Avenue intersection (signalized T-intersection)
- Vivienda Avenue intersection (unsignalized T-intersection)

1.3 Project Description

The Project Description describes the proposed action and the design alternatives that were developed to meet the identified need through accomplishing the defined purposes while avoiding or minimizing environmental impacts. The alternatives are Alternative 1 (No Build Alternative), Alternative 3 (Partial Cloverleaf Interchange), Alternative 6 (Modified Cloverleaf Interchange), and Modified Alternative 7 (Modified Cloverleaf/Diamond Interchange). The proposed Project is located in the City of Grand Terrace, and partially in the City of Colton in San Bernardino County, California. Within the limits of the proposed Project, I-215 currently provides three lanes in each direction. Barton Road is a two-lane roadway west of I-215 and a four-lane facility with turn lanes at various intersections east of I-215. Barton Road provides four ramps that connect to I-215: southbound on- and off-ramps, and northbound on- and off-ramps.

The purpose of the proposed Project is to reconstruct and improve the interchange in order to improve operation, increase capacity, and reduce congestion at the I-215/Barton Road interchange. The existing interchange has a nonstandard southbound off-ramp, and the existing interchange restricts large truck movements and pedestrian and bicyclist access. Without the interchange improvement, the operation of this facility will deteriorate over time to reach unacceptable levels of service (LOS) in the future.

The Project area for the I-215/Barton Road Interchange Improvement Project overlaps the Project area with the I-215 Bi-County HOV Lane Gap Closure Project at the Burlington Northern Santa Fe (BNSF) Railway two-track underpass (bridge over the freeway) and the Union Pacific Railroad (UPRR) single-track underpass between the Iowa Avenue/Cadena Drive interchange and the Barton Road interchange. Both projects would require the reconstruction of these two structures. For the I-215/Barton Road Interchange Improvement Project, the reconstruction is needed to accommodate an auxiliary lane that is proposed between the northbound La Cadena entrance ramp and the proposed Barton Road exit ramp. The underpass replacements are required for I-215/Barton Road interchange Alternatives 3, 6, and Modified Alternative 7. For the I-215 Bi-County HOV Lane Gap Closure Project, the reconstruction is necessary due to inadequate horizontal clearance between the existing structure supports and the proposed HOV lane addition. The reconstructed bridges would be raised to provide adequate vertical clearance with the freeway.

Because the I-215 Bi-County HOV Lane Gap Closure Project analyzed the environmental impacts of reconstruction of the two railroad structures, as well as construction of temporary railroad bridges to be utilized during reconstruction of the existing structures (railroad shooflies), these impacts are not evaluated as part of this Project.

1.4 Project Alternatives for the Project

Four alternatives are being analyzed for this Project: the No Build Alternative (Alternative 1) and three Build Alternatives (Alternatives 3, 6, and Modified Alternative 7).

1.4.1 No Build Alternative

1.4.1.1 Alternative 1 (No Build Alternative)

Under this alternative, no interchange reconstruction would occur. This alternative would not improve operations, increase capacity, or reduce congestion at the I-215/Barton Road interchange.

1.4.2 Proposed Build Alternatives

1.4.2.1 Alternative 3 (Partial Cloverleaf Interchange)

Alternative 3 would provide a conventional partial cloverleaf interchange with the northbound on- and off-ramps on the southern side of Barton Road and the southbound on and off-ramps on the northern side. This alternative would widen Barton Road from one through lane to two through lanes in each direction and add

turning lanes onto the southbound and northbound loop on-ramps. The existing overcrossing would be replaced with a new structure with four through lanes and two turn lanes. This alternative also includes the improvements listed below.

- The existing ramps would be removed and a new southbound off-ramp, southbound loop on-ramp, northbound loop on-ramp, and northbound off-ramp would be constructed.
- The southbound off-ramp would make a new connection at Barton Road with one right-turn lane, one shared right-/left-turn lane, and one left-turn lane; La Crosse Avenue north of Barton Road would be removed.
- The southbound loop on-ramp would provide three lanes at Barton Road.
- The northbound off-ramp would accommodate three lanes (two right-turn lanes and one left-turn lane) at the Barton Road intersection.
- The northbound loop on-ramp would provide three lanes at Barton Road.
- A portion of the I-215 Bi-County HOV Lane Gap Closure Project sound barrier in the northwest quadrant would be removed to accommodate the new southbound off-ramp.
- Commerce Way would be reconfigured to intersect with Barton Road at Vivienda Avenue.
- The intersection of Michigan Avenue at Barton Road would be eliminated; Michigan Avenue would form a T-intersection with Commerce Way.
- The segment of Vivienda Avenue west of I-215 would be converted into a cul-de-sac.
- A new two-lane road would be constructed between La Crosse Avenue and Grand Terrace Road adjacent to Vivienda Avenue.
- Grand Terrace Road and the Grand Terrace Road/Barton Road intersection would be realigned.
- Grand Terrace Road would be extended southwest of Barton Road to tie into East De Berry Street.
- Grand Terrace Road at Barton Road would be converted into a cul-de-sac.
- Barton Road would be widened to four through lanes approximately between Grand Terrace Road and Vivienda Avenue.
- Standard sidewalks and a Class II bicycle lane would be provided on both sides of Barton Road within the Project limits.
- Bioswales would be constructed in the northwest and southeast quadrants to treat storm water runoff.

- New landscaping would be provided consistent with the I-215 Bi-County Aesthetic Concept.
- Utilities would be relocated or protected in-place during construction.
- Drainage facilities would be modified consistent with other Project improvements.
- Traffic signal modifications would be made at Barton Road/Grand Terrace Road/De Berry Street, I-215 northbound ramps/Barton Road, I-215 southbound ramps/Barton Road, and Commerce Way/Vivienda Avenue/Barton Road.

The conceptual design for Alternative 3 is shown on Figure 2.

1.4.2.2 Alternative 6 (Modified Cloverleaf Interchange)

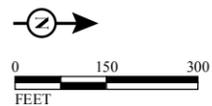
Alternative 6 proposes a modified cloverleaf interchange with the southbound entrance and exit ramps directly connected to Barton Road; the northbound entrance and exit ramps would be constructed to an extension of Commerce Way, which would be realigned to connect to Barton Road at the location of the existing Vivienda Avenue intersection to the east. Barton Road would be widened to two through lanes in each direction plus one left-turn and one right-turn lane. The existing overcrossing would be replaced with a new structure with four through lanes and three turn lanes. This alternative also includes the improvements listed below.

- The existing ramps would be removed.
- A new southbound loop on-ramp would provide two lanes at Barton Road.
- A new southbound off-ramp would make a new connection at Barton Road with one right-turn lane, one left-turn lane, and one shared right-/left-turn lane; La Crosse Avenue north of Barton Road would be removed; La Crosse south of Barton Road would be reconfigured to a right-in/right-out layout.
- A new northbound off-ramp would tie in to Commerce Way and provide for dual left-turn lanes and a single right-turn lane.
- A bridge would be constructed over the Riverside Canal on the northbound off-ramp to span the canal.
- A new northbound hook on-ramp would be provided in the southeast quadrant. The access to the ramp would be through the proposed extension of the Commerce Way.
- A portion of the I-215 Bi-County HOV Lane Gap Closure Project sound barrier in the northwest quadrant would be removed to accommodate the new southbound off-ramp.



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| Alternative 3 Layout | Proposed Retaining Wall | City Boundary |
| Proposed Right of Way | Proposed Sound Barrier | Grand Terrace Fitness Park |
| Temporary Construction Limit | I-215 Bi-County HOV Lane Gap Closure Project Sound Barrier | Existing Caltrans Right of Way |
| Limits of Construction | | |



SOURCE: Microsoft (5/2010); San Bernardino Cnty. (3/08, 9/2013); AECOM (5/2011); OPC (7/1/2013)
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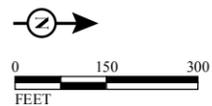
FIGURE 2
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| Alternative 3 Layout | Proposed Retaining Wall | City Boundary |
| Proposed Right of Way | Proposed Sound Barrier | Grand Terrace Fitness Park |
| Temporary Construction Limit | I-215 Bi-County HOV Lane Gap Closure Project Sound Barrier | Existing Caltrans Right of Way |
| Limits of Construction | | |



SOURCE: Microsoft (5/2010); San Bernardino Cnty. (3/08, 9/2013); AECOM (5/2011); OPC (7/1/2013)
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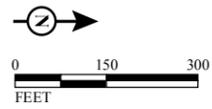
FIGURE 2
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| Alternative 3 Layout | Proposed Retaining Wall | City Boundary |
| Proposed Right of Way | Proposed Sound Barrier | Grand Terrace Fitness Park |
| Temporary Construction Limit | I-215 Bi-County HOV Lane Gap Closure Project Sound Barrier | Existing Caltrans Right of Way |
| Limits of Construction | | |



SOURCE: Microsoft (5/2010); San Bernardino Cnty. (3/08, 9/2013); AECOM (5/2011); OPC (7/1/2013)
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FIGURE 2
 Sheet 3 of 3

I-215/Barton Road Interchange Improvement Project
 Alternative 3

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- Commerce Way would be reconfigured to intersect with Barton Road at Vivienda Avenue.
- Commerce Way would be shifted to the east to accommodate the northbound off-and on-ramps.
- Commerce Way would be extended southeast of Barton Road to cross Michigan Avenue in the vicinity of De Berry Street.
- The northbound on-ramp and off-ramp would intersect with the proposed Commerce Way extension.
- The intersection of Michigan Avenue at Barton Road would be eliminated; Michigan Avenue would form a T-intersection with Commerce Way.
- A new two-lane road between La Crosse Avenue and Grand Terrace Road would be constructed adjacent to Vivienda Avenue.
- Barton Road would be widened to four through lanes approximately between Grand Terrace Road and Vivienda Avenue.
- Standard sidewalks and a Class II bicycle lane would be provided on both sides of Barton Road within the Project limits.
- Bioswales would be constructed in the northwest and southeast quadrants to treat storm water runoff.
- New landscaping would be provided consistent with the I-215 Bi-County Aesthetic Concept.
- Utilities would be relocated or protected in place during construction.
- Drainage facilities would be modified consistent with other Project improvements.
- Traffic signal modifications would be made at Barton Road/Grand Terrace Road, I-215 northbound ramps/Commerce Way, I-215 southbound ramps/Barton Road, and Commerce Way/Vivienda Avenue/Barton Road.

The conceptual design for Alternative 6 is shown on Figure 3.

1.4.2.3 Modified Alternative 7 (Modified Cloverleaf/Diamond Interchange) (Locally Preferred Alternative)

Modified Alternative 7 would provide a tight diamond configuration for the northbound ramps. The southbound ramps would have a modified cloverleaf configuration with a roundabout at the intersection of the southbound ramps, Barton Road, and La Crosse Avenue. Barton Road would be widened to two through lanes in each direction plus one left-turn and one right-turn lane east of the southbound ramps.

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|---|--|--|
|  Alternative 6 Layout |  Proposed Retaining Wall |  City Boundary |
|  Proposed Right of Way |  Potential Sound Barrier |  Grand Terrace Fitness Park |
|  Temporary Construction Easement |  Proposed Sound Barrier |  Existing Caltrans Right of Way |
|  Limits of Construction |  I-215 Bi-County HOV Lane Gap Closure Project Sound Barrier | |

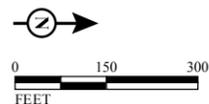


FIGURE 3
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SOURCE: Microsoft (5/2010); San Bernardino Cnty. (3/08, 9/2013); AECOM (11/2011); OPC (7/1/2013)
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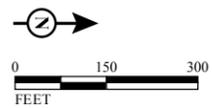
I-215/Barton Road Interchange Improvement Project
Alternative 6

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LEGEND

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| Alternative 6 Layout | Proposed Retaining Wall | City Boundary |
| Proposed Right of Way | Potential Sound Barrier | Grand Terrace Fitness Park |
| Temporary Construction Easement | Proposed Sound Barrier | Existing Caltrans Right of Way |
| Limits of Construction | I-215 Bi-County HOV Lane Gap Closure Project Sound Barrier | |



SOURCE: Microsoft (5/2010); San Bernardino Cnty. (3/08, 9/2013); AECOM (11/2011); OPC (7/1/2013)
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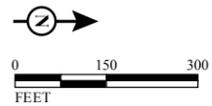
FIGURE 3
 Sheet 2 of 3

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LEGEND

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| Alternative 6 Layout | Proposed Retaining Wall | City Boundary |
| Proposed Right of Way | Potential Sound Barrier | Grand Terrace Fitness Park |
| Temporary Construction Easement | Proposed Sound Barrier | Existing Caltrans Right of Way |
| Limits of Construction | I-215 Bi-County HOV Lane Gap Closure Project Sound Barrier | |



SOURCE: Microsoft (5/2010); San Bernardino Cnty. (3/08, 9/2013); AECOM (11/2011); OPC (7/1/2013)
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FIGURE 3
 Sheet 3 of 3

I-215/Barton Road Interchange Improvement Project
 Alternative 6

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The existing overcrossing would be replaced with a new structure with four through lanes and one turn lane. This alternative also includes the improvements listed below.

- The new southbound loop on-ramp would provide two lanes at Barton Road in a roundabout configuration.
- The new southbound off-ramp would make a connection at Barton Road and transition into a roundabout that would provide one right-turn lane, and one shared through/left-turn lane; La Crosse Avenue north of Barton Road would be removed.
- The new northbound off-ramp would terminate at Barton Road with one left-turn lane, one shared through/right-turn lane and one dedicated right-turn lane.
- The new northbound on-ramp would have two lanes at the Barton Road intersection.
- A portion of the I-215 Bi-County HOV Lane Gap Closure Project sound barrier in the northwest quadrant would be modified to accommodate the new southbound off-ramp.
- Commerce Way would be reconfigured to intersect with Barton Road at Vivienda Avenue.
- The intersection of Michigan Avenue at Barton Road would be eliminated; Michigan Avenue would form a T-intersection with Commerce Way.
- A new two-lane road between La Crosse Avenue and Grand Terrace Road would be constructed adjacent to Vivienda Avenue.
- Barton Road would be widened to four through lanes approximately between Grand Terrace Road and Vivienda Avenue.
- Standard sidewalks and a Class II bicycle lane would be provided on both sides of Barton Road within the Project limits.
- Bioswales would be constructed in the northwest and southeast quadrants to treat storm water runoff.
- New landscaping would be provided consistent with the I-215 Bi-County Aesthetic Concept.
- Utilities would be relocated or protected in place during construction.
- Drainage facilities would be modified consistent with other Project improvements.
- Traffic signal modifications would be made at Barton Road/Grand Terrace Road, I-215 northbound ramps/Barton Road, and Commerce Way/Vivienda Avenue/Barton Road.

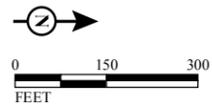
The conceptual design for Modified Alternative 7 is shown in Figure 4.

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LEGEND

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| Modified Alternative 7 Layout | Proposed Retaining Wall | City Boundary |
| Proposed Right of Way | Proposed Sound Barrier | Grand Terrace Fitness Park |
| Temporary Construction Easement | I-215 Bi-County HOV Lane Gap Closure Project Sound Barrier | Existing Caltrans Right of Way |
| Limits of Construction | | |



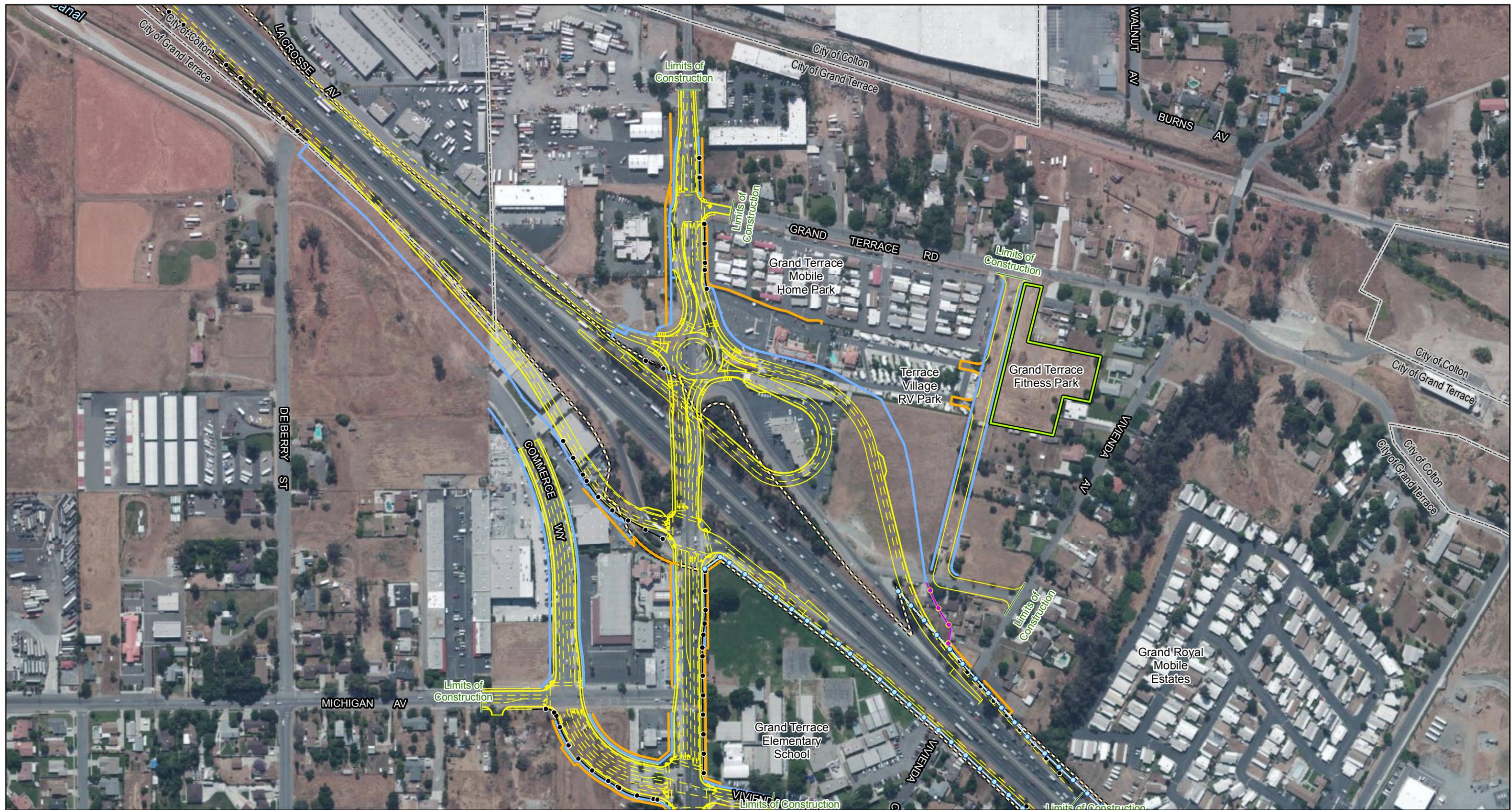
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FIGURE 4
 Sheet 1 of 3

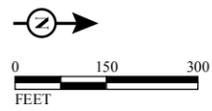
I-215/Barton Road Interchange Improvement Project
 Modified Alternative 7

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LEGEND

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|  Modified Alternative 7 Layout |  Proposed Retaining Wall |  City Boundary |
|  Proposed Right of Way |  Proposed Sound Barrier |  Grand Terrace Fitness Park |
|  Temporary Construction Easement |  I-215 Bi-County HOV Lane Gap Closure Project Sound Barrier |  Existing Caltrans Right of Way |
|  Limits of Construction | | |



SOURCE: Microsoft (5/2010); San Bernardino Cnty. (3/2008, 9/2013); AECOM (4/2013)
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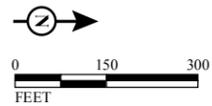
FIGURE 4
 Sheet 2 of 3

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LEGEND

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| Modified Alternative 7 Layout | Proposed Retaining Wall | City Boundary |
| Proposed Right of Way | Proposed Sound Barrier | Grand Terrace Fitness Park |
| Temporary Construction Easement | I-215 Bi-County HOV Lane Gap Closure Project Sound Barrier | Existing Caltrans Right of Way |
| Limits of Construction | | |



SOURCE: Microsoft (5/2010); San Bernardino Cnty. (3/2008, 9/2013); AECOM (4/2013)
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FIGURE 4
 Sheet 3 of 3

I-215/Barton Road Interchange Improvement Project
 Modified Alternative 7

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1.5 Study Area Definition

The study area for community impacts analysis is the community within and surrounding the proposed Project site in which the direct impacts and the indirect impacts of the Project may occur. For this Project, the study area includes the Project area (physical area that will be affected by the Project) and the adjacent neighborhoods within the City of Grand Terrace and the City of Colton. Community Profile data is collected and organized by city, county, and census tract; these boundaries are utilized in evaluating impacts to the affected environment within the study area.

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Chapter 2 Purpose and Need

2.1 Purpose

The purpose of the proposed Project is to improve the operation, increase the capacity, and reduce the existing and future congestion at the I-215/Barton Road interchange, and to improve access to facilities served by the interchange.

2.2 Need

Based on traffic projections and the existing and planned land uses in the vicinity, the facility is forecast to degrade to LOS F (breakdown condition) by 2040 without improvements.

2.3 Capacity and Transportation Demand

The study area intersections currently operate at LOS B or C during the a.m. and p.m. peak hours. Without improvements, in 2016, the Barton Road/Grand Terrace Road intersection would operate at LOS F during the a.m. peak hour and LOS E during the p.m. peak hour. Because of the projected demand, without improvements, by 2040 all seven study area intersections would operate at LOS F during both the a.m. and p.m. peak hours, with the exception of Barton Road/La Cadena Drive during the a.m. peak hour, which would operate at LOS C.

The demand for interchange access is also represented in traffic volumes. Traffic projections for 2040 show that the average daily traffic (ADT) volumes on I-215 will increase by more than 200 percent. The 2009 Barton Road interchange ramp volumes are forecast to double by 2040. Additional capacity is needed to accommodate projected traffic volumes and improve LOS.

2.4 Roadway Deficiencies

The existing I-215 southbound off-ramp at Barton Road is nonstandard per the *Highway Design Manual* (HDM, Sixth Edition) because it intersects with a local street (La Crosse Avenue) before reaching Barton Road. The southbound off-ramp at Barton Road is a five-legged intersection with a two-way frontage road adjacent to the southbound on-ramp. The existing interchange does not have adequate space for Surface Transportation Assistance Act (STAA) truck-turning movements, a sidewalk on the south side, or bicycle lanes. Therefore, the existing interchange restricts large

truck movements and pedestrian and bicyclist access to local streets. Reconstruction of the interchange is needed to improve access to the freeway and local streets.

In the existing condition, the left-turn lane on westbound Barton Road at the I-215 southbound on-ramp does not have sufficient vehicle capacity during the a.m. and p.m. peak hours. This prevents left-turning and through traffic from moving through the interchange. Queue lengths are forecasted to increase substantially by 2040 without interchange improvements. Additional turn-pocket capacity is needed in order to reduce delays at the interchange.

2.5 Social Demand and Economic Development

The I-215/Barton Road interchange is the primary regional access for the City of Grand Terrace. It also serves the southwestern portion of the City of Colton and provides direct access to the City of Loma Linda. The City of Colton is projected to experience substantial population growth through 2035 according to the SCAG 2012-2035 Adopted Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) Growth Forecasts. The build out of the area in accordance with the City of Grand Terrace General Plan and the Barton Road Specific Plan will result in increased traffic congestion on the freeway and the local street networks leading to the interchange. Reconstruction of the interchange is needed to relieve additional congestion.

Chapter 3 Community Profile

The following sections describe the existing land use and planning, population and housing, economic conditions, and public facilities and services in the study area, which is considered the Community Profile. A windshield survey of the study area was conducted in June 2008, April 2010, January 2012, and April 2013, and federal, State, and local demographic resources were used to describe the community.

3.1 Land Use and Planning

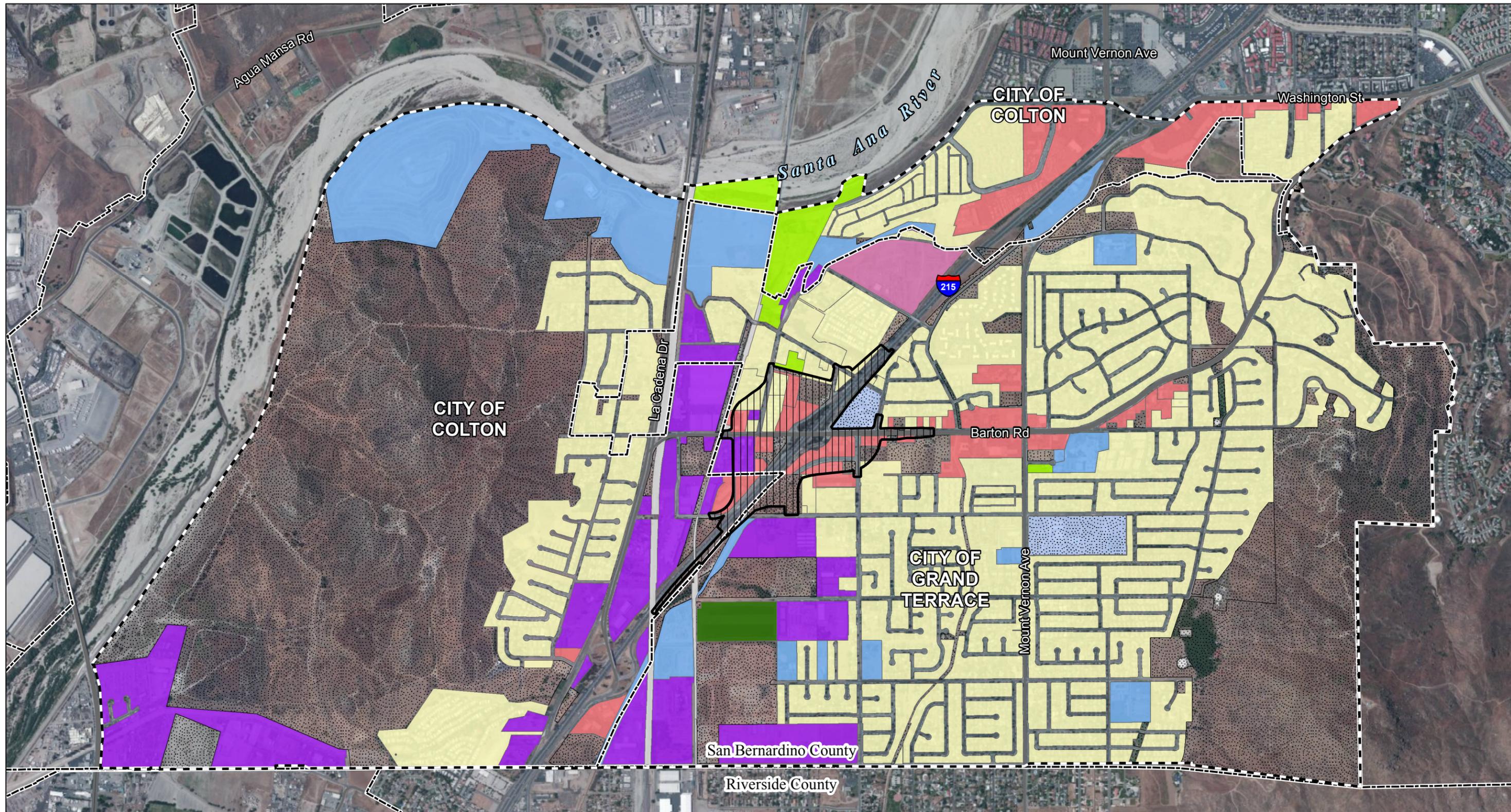
3.1.1 Existing Land Uses

As stated in the City of Grand Terrace General Plan (2010), approximately 54 percent of existing land use distribution in the City is residential, 9 percent is commercial, 9 percent is industrial, 8 percent is open space, 3 percent is public facilities, and 16 percent is transportation. According to the adopted 2012 City of Colton General Plan Land Use Element, 27 percent of the existing land use distribution in Colton is residential, 4 percent is commercial, 12 percent is industrial, 14 percent is open space, 5 percent is public facilities, 2 percent is railroad/utility, and 36 percent is vacant. Existing land uses in the Project area and study area are shown in Figure 5. Within the Project area, existing land use was mapped based on field surveys. Existing land use outside of the Project area is based on aerial photographs and geographic information system (GIS) data provided by SCAG (2008). The data was compiled into general land use designations.

The Project interchange quadrants refer to the four areas at the intersection of Barton Road with I-215. Existing uses in the northeast quadrant of the interchange include Grand Terrace Elementary School, a few small businesses, and single-family residential properties. The current land uses in the northwest quadrant consist of a few single-family residences, a recreational vehicle (RV) park (Terrace Village RV Park), two mobile home parks (Grand Terrace Mobile Home Park and Grand Royal Mobile Estates), two strip malls, a restaurant (Demetri's Burgers), and an office complex. Existing uses in the southwest quadrant include small businesses, bus storage, industrial businesses, office buildings, and retail stores.

The land uses in the southeast quadrant consist of a variety of small businesses, including two gasoline stations (Shell and Arco), retail stores, an auto-repair facility (GT Pit Stop), industrial warehouses, and a few vacant parcels.

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|---------------------|-------------------|------------------------------------|---------------------------|
| Land Use Study Area | Existing Land Use | Communication & Utility Facilities | Open Space and Recreation |
| Project Area | Agriculture | Industrial | Railroad |
| City Boundaries | Residential | Public Facilities | Vacant |
| | Commercial | Education | |



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SOURCE: Microsoft (5/2010); SCAG (2008); LSA (9/2013)

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FIGURE 5

I-215/Barton Road Interchange Improvement Project
Study Area Existing Land Use

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Acres and percentages of existing land uses in the Project area are shown in Table A. Table A is based on data collected from local jurisdictions and consolidated by SCAG.

Table A Existing Land Uses in the Study Area

Land Use	Acres	Percent
Agriculture	51.6	1.4
Commercial	142.2	3.8
Communication & Utility Facilities	31.6	0.8
Facilities & Education	318.6	8.5
Industrial	320.5	8.6
Open Space and Recreation	95.1	2.6
Railroad	3.0	0.1
Residential	1280.5	34.4
Vacant	1483.4	39.8
Total	3726.5	100

Source: OPC, 2013; SCAG, 2008.

3.1.2 General Plan Land Uses

According to the City of Grand Terrace General Plan (2010), approximately 56 percent of the City's land uses are designated for commercial, industrial, mixed, and open space uses; of this amount, approximately 10 percent is designated for commercial and industrial use, and 4.6 percent is designated for public uses. The City of Colton General Plan Land Use Element (2012) does not include percentages of land designated for specific uses. General Plan land use designations for the study area, which guide future development, are shown in Figure 6. General Plan land use data is based on hard copy maps published by the Cities of Grand Terrace (April 2010) and Colton (May 2012), as well as GIS data provided by SCAG as part of the 2008 RTP. No GIS data is available from the adopted 2012–2035 RTP/SCS. The data was compiled into general land use designations.

The designated land use of the Project interchange quadrants are described below.

3.1.2.1 Northeast Quadrant

Located in the City of Grand Terrace, this quadrant is designated as Public, General Commercial (GC), and Low- and Medium-Density Residential. The Public designation includes public facilities such as schools, parks, City Hall, City maintenance facilities, and facilities owned and operated by public utilities. The GC designation provides for general commercial uses to serve the retail and service needs of the community. The Low-Density Residential designation limits land uses to single-family detached residential units and mobile homes.

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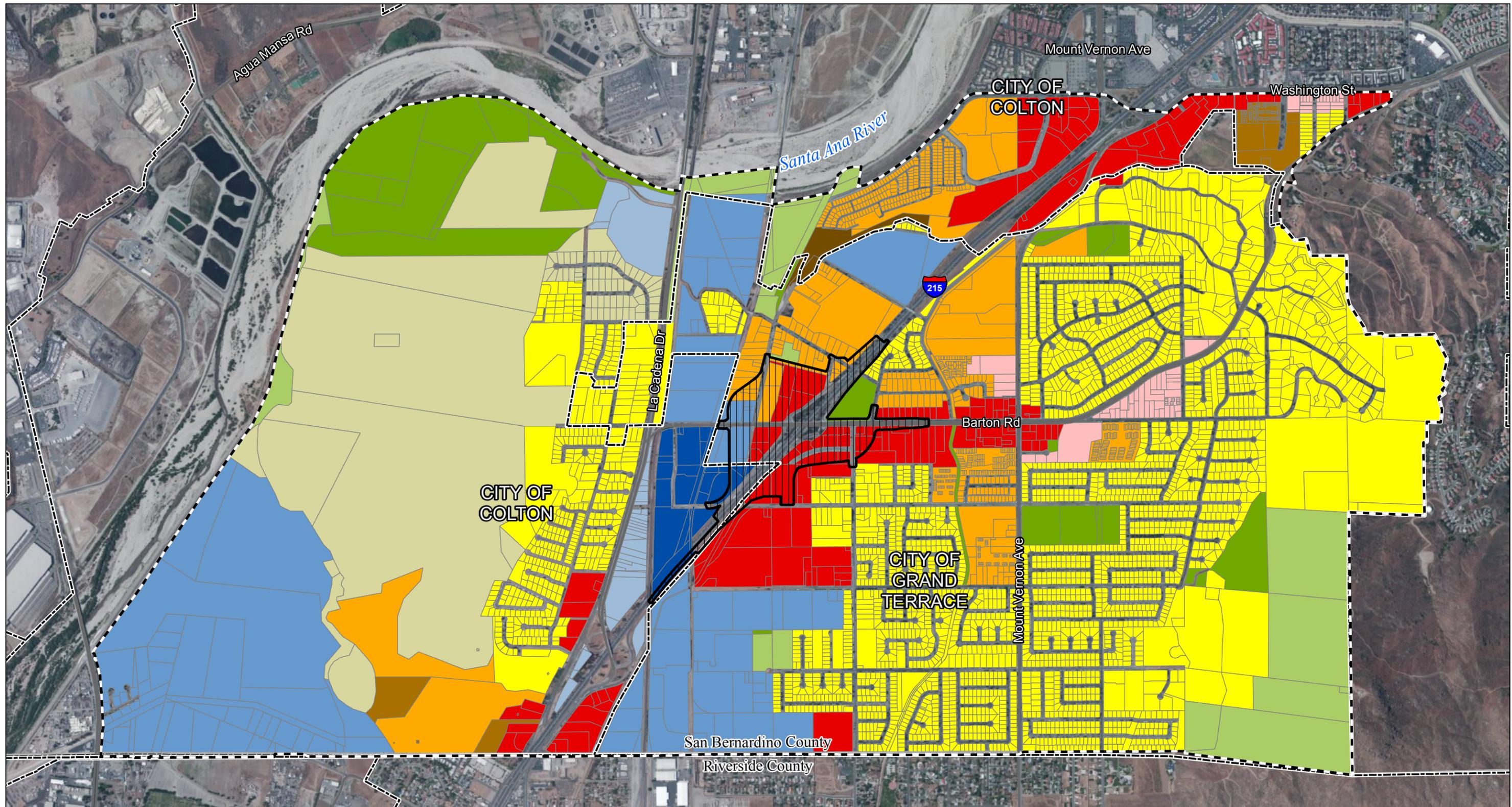


FIGURE 6

LEGEND

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|---------------------|------------------------------|--------------------|-------------------|
| Land Use Study Area | General Plan Land Use | Commercial Office | Open Space |
| Project Area | Residential Estates | General Commercial | Public Facility |
| City Boundaries | Low Density Residential | Industrial Park | Planned Community |
| | Medium Density Residential | Light Industrial | |
| | High Density Residential | Heavy Industrial | |



SOURCE: Microsoft (5/2010); SCAG (2008); City of Grand Terrace (2010); City of Colton (2009, 2012)

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3.1.2.2 Northwest Quadrant

Also located in the City of Grand Terrace, this quadrant is designated as GC, Medium-Family Residential, and Industrial. Medium-Family Residential uses allow for both single-family detached and multiple-family attached developments, including condominiums and apartment complexes. Industrial uses allow for manufacturing and assembly, small-scale warehousing and distribution businesses, research and development, and administrative and service types of uses.

3.1.2.3 Southwest Quadrant

This quadrant is in the Cities of Grand Terrace and Colton, and is designated as GC, Public, and Transportation.

3.1.2.4 Southeast Quadrant

This quadrant is entirely in the City of Grand Terrace and is designated for GC, mixed, and low-density residential uses.

3.1.3 Development Trends

The development of predominantly commercial and industrial uses in the City of Colton resulted in the development of the City of Grand Terrace as a residential community. The City of Grand Terrace was incorporated in 1978. Currently, the City of Grand Terrace is nearly built out; however, there are a few infill projects proposed within the City of Grand Terrace to revitalize key areas, including the core area around Barton Road and a few other locations that are predominantly west of I-215 (Table B).

The City of Colton is one of the oldest communities in the area and was incorporated in 1887. Residential areas are dominated by older residences due to the generally slow but steady development that has occurred throughout the City's history. Much of the City of Colton is built out; however, over 2,000 dwelling units are proposed as part of the Pellisier Ranch Specific Plan, although this Project is delayed for the foreseeable future (refer to Table B). As reported in *Colton the Demographic, Economic, and Quality of Life Data* (2004), Colton also had limited available space for additional industrial and commercial operations, although there are still vacant areas in the vicinity of the Santa Ana River and Interstate 10 (I-10).

Planned projects for the City of Grand Terrace and the City of Colton within the study area are shown in Table B.

Table B Planned Projects in the City of Grand Terrace and the City of Colton

Project Name/ Type	Jurisdiction/ Location	Proposed Use/ Description	Status
City of Grand Terrace			
Town Square Master Development Plan	South side of Barton Road between Michigan Street/ Gage Canal, Grand Terrace	209,611 sf over 5 development units; commercial, retail, and restaurant/fast food uses	Development Unit 1 (65,737 sf) approved with 45,000 sf already constructed. A 7,842 sf Auto Zone retail building was approved, and is in plan check. A McDonald's restaurant application is expected to be filed soon.
Barton Plaza	Northwest corner of Barton Road and Mount Vernon Avenue, Grand Terrace	40,000 sf commercial	10,000 sf building constructed in Phase 1. Phases 2 and 3 have not started. The property owner has not secured tenants to support construction of future phases.
Techno-Dynamics	21910 Vivienda Avenue, Grand Terrace	Single-family residential, 3 lots	Project approved. No final map or permits have been requested. Due to legislative extensions, the map is valid until 2/12/15.
Greystone Group	11830 Mount Vernon Avenue, Grand Terrace	Single-family residential, 35 units	Project approved and map recorded. No permits have been requested or issued.
Karger Pico Tract	North side of Pico Street, east of Kingfisher Road	Single-family residential, 18 lots	Tentative tract map valid until 8/10/2016.
SCE Office Building	22200 Newport Avenue (SCE Vista Substation)	12,257 sf office building	Pending 11/7/2013 Planning Commission meeting for approval.
Residential	12156 Preston Street	12 townhomes	Pending Planning Commission meeting for approval, anticipated before the end of 2013.
City of Colton			
The West Barton Road Connection	West Barton Road across the UPRR	Connection will provide for the ultimate design width for Barton Road of a 100 ft right-of-way	Reprogramming funding. Planned for completion by 2015.
Pellisier Ranch Specific Plan	Pellisier Ranch Road, Colton	1,448 ac, 2101 units; Residential, Commercial, Schools, Parks	This plan has been suspended indefinitely.
La Cadena Bridge over Santa Ana River Bridge Replacement Project	La Cadena Drive at the Santa Ana River	Reconstruct Bridge	Preliminary Engineering. Planned for completion by 2017.
Washington Street Extension to La Cadena Drive Project	On Washington Street	Street Extension and bridge over BNSF Railway	Project Study Phase. Planned for completion by 2030.
I-215 Freeway Projects			
I-215 Bi-County HOV Lane Gap Closure Project	On I-215 between SR-60 and Orange Show Road (SANBAG/RCTC/Caltrans)	Add HOV lanes in each direction	Under construction. Planned for completion by mid-2015.

Table B Planned Projects in the City of Grand Terrace and the City of Colton (Continued)

Project Name/ Type	Jurisdiction/ Location	Proposed Use/ Description	Status
I-215/Mount Vernon Avenue/Washington Street Interchange Improvement Project	On I-215 at Mount Vernon Avenue/Washington Street (SANBAG/Caltrans)	Reconstruct interchange and local streets, add auxiliary lanes	Preliminary Engineering in progress. Planned for completion by 2020.
I-215 Bi-County Improvement Project	On I-215 between SR-60 and Orange Show Road (SANBAG/RCTC/Caltrans)	Add one mixed-flow lane in each direction, add auxiliary lanes	Planned for completion prior to 2018.
I-215/Newport Avenue Overcrossing Project	Over I-215 at Newport Avenue (SANBAG/Caltrans)	Reconstruct overcrossing	Under construction. Planned for completion by mid-2015.

Sources: Sandra Molina, City of Grand Terrace Planning Manager, October 2013; Victor Ortiz, City of Colton Engineering Manager, July 2013; Mark Tomich, City of Colton Planning Director, October 2013.

3.1.4 Adopted Goals, Policies, and Plans

This section discusses the applicability of the 2012–2035 RTP/SCS, 2013 Federal Transportation Improvement Program (FTIP), and SANBAG Congestion Management Program (CMP). It includes adopted goals, policies, and plans from the Circulation Element of the City of Grand Terrace General Plan (2010) and the City of Colton Draft General Plan Mobility Element (2012). Relevant specific plans are also discussed.

3.1.4.1 Regional Transportation Plan

The 2012–2035 RTP/SCS was adopted by SCAG on April 4, 2012, and found to conform by the FHWA/Federal Transit Administration (FTA) on June 12, 2012. The SCAG 2012 RTP/SCS establishes a transportation vision for Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial Counties. The 2012–2035 RTP/SCS places a greater emphasis on sustainability and integrated planning than previous RTPs and defines three principles that collectively work as the key to the region’s future: mobility, economy, and sustainability. SCAG updates the RTP every 4 years. The proposed Project is included in the Adopted 2012 RTP/SCS.

3.1.4.2 Federal Transportation Improvement Program

The 2013 FTIP was adopted by SCAG on September 19, 2012, and approved by FHWA/FTA on December 14, 2012. The SCAG 2013 FTIP was prepared to implement projects and programs listed in the RTP. Amendments to the adopted FTIP are prepared and approved on a continual basis.

The FTIP provides a listing of all capital transportation projects proposed over a 6-year period for the SCAG region. These funded projects include highway

improvements; transit, rail, and bus facilities; carpool lanes; signal synchronization; intersection improvements; freeway ramps; and other related improvements. A new FTIP is prepared and approved every 2 years. The proposed Project is programmed in the 2013 FTIP.

3.1.4.3 San Bernardino Associated Governments Congestion Management Program

The SANBAG CMP (2009) identifies the goals of the program, defines legal requirements, and provides background information and descriptions of each element, component, and requirement of the program. A major update is planned in Fall 2013. The CMP defines the network of State highways and arterials, describes LOS standards for major road facilities, and provides technical justification for the approach to congestion management. The decisions in the CMP are continuously reviewed through meetings of the Technical Advisory Committee and its subcommittees, the Plans and Programs Policy Committee, and the SANBAG Board of Directors. The proposed Project is included in the *Development Mitigation Nexus Study* (Appendix K of the CMP). The Nexus Study identifies the fair share contributions from new development for regional transportation improvements (freeway interchanges, railroad grade separations, and regional arterial highways). The Nexus Study is updated biennially or as requested and in close coordination with local jurisdictions.

3.1.4.4 City of Grand Terrace General Plan Circulation Element (2010)

Relevant circulation/transportation-related goals and policies in the City of Grand Terrace General Plan are described below. In the Circulation Element, Barton Road is defined as a Major Highway (100 ft right-of-way with a 72 ft improved section). As discussed in the Circulation Element: “Major Highways provide service to non-local through trips as well as limited local access. They often provide direct service to major commercial and industrial areas. Typically, Major Highways are characterized with four travel lanes, minimal curb cuts, and signalized intersections.”

Goal 3.1 Provide a comprehensive transportation system that provides for the current and long-term efficient movement of people and goods within and through the City.

Policy 3.1.1 Provide a transportation system which supports planned land uses and improves the quality of life.

Policy 3.1.2 An arterial street system shall be established that provides for the collection of local traffic and provides for the efficient movement of people and goods through the City.

Policy 3.1.3 Commerce Way shall provide for the movement of traffic associated with commercial and business traffic.

Policy 3.1.4 The City shall cooperate with transportation planning, programming and implementation agencies such as SCAG, Caltrans, SANBAG, and the Cities of San Bernardino County, as well as neighboring jurisdictions in Riverside County on various studies relating to freeway, high occupancy vehicle/high occupancy toll lanes and transportation corridor planning, construction, and improvement in order to facilitate the planning and implementation of an integrated circulation system in accordance with regional planning goals.

Goal 3.3: Provide for a safe circulation system.

Policy 3.3.1 Promote the safe and effective movement of all segments of the population and the efficient transport of goods.

Policy 3.3.3 The City shall ensure that local street improvements are designed with proper attention to community appearance and aesthetics as well as the need to move traffic safely and efficiently.

Policy 3.3.4 The City shall route truck traffic away from residential areas and work with regional agencies in order to mitigate potential impacts from regional traffic.

Goal 3.4: Provide for an efficient and safe bikeway system within the City.

Policy 3.4.1 Develop a system of continuous and convenient bicycle routes designed to connect schools, residential areas, shopping centers, parks, and employment areas.

Policy 3.4.2 The City shall promote and facilitate the use of bicycles as an alternative mode of transportation through the development of a City-wide network of bikeways.

Goal 3.5: Provide for efficient alternative methods of travel.

Policy 3.5.7 The City shall provide amenities along the Barton Road corridor that promote pedestrian and bicyclist use, such as a continued

system of pedestrian paths and bike lanes to connect the City Center with schools, parks, and residential areas.

The General Plan also indicates that the City should seek alternative funding sources to supplement Measure I funding for the expansion of the Barton Road interchange.

3.1.4.5 City of Grand Terrace Barton Road Specific Plan (1990)

The Barton Road Specific Plan is intended to carry out the goals and objectives of the General Plan with respect to commercial, office, industrial, and residential development. The Plan, adopted in 1990 and amended in 2003, provides the zoning for all properties fronting, along, or directly related to Barton Road. It is intended to provide guidance for the development of primarily commercial property along this primary transportation corridor through the City of Grand Terrace. It contains guidelines for commercial and office development within three subareas of the Specific Plan: General Commercial (GC), Village Commercial (VC), and Office/Professional (AP). The Barton Road Specific Plan area boundary extends through the commercial and residential area on the south and north of Barton Road, including Grand Terrace Elementary School, which is adjacent to the Project site.

Under the Transportation Development Standards, the Specific Plan indicates that “Bikeways shall be provided in accordance with the City of Grand Terrace Bicycle Transportation Plan.”

3.1.4.6 City of Colton General Plan Mobility Element (2013)

The City’s General Plan Mobility Element was adopted on August 20, 2013. Relevant mobility-related goals and policies in the City of Colton General Plan Mobility Element are described below.

Goal M-1 Provide an integrated and balanced multi-modal transportation network of Complete Streets to meet the needs of all users and transportation modes.

Policy M-1.1 Provide for the needs of drivers, public transportation vehicles and patrons, bicyclists, and pedestrians of all ages and abilities in planning, programming, design, construction, reconstruction, retrofit, operations, and maintenance activities of all streets.

Policy M-1.2 View all transportation improvements as opportunities to improve safety, access, and mobility for all travelers in Colton. Recognize

bicycle, pedestrian, and transit modes as integral elements of the transportation system.

Goal M-4 Provide appropriate access, logical configuration, and adequate capacity at freeway interchanges, street and rail intersections, and at bridges.

Policy M-4.6 Ensure that all interchange reconfiguration projects, grade separation improvements, and bridge widening projects be designed and implemented in a manner that provides positive benefit to the City of Colton.

Goal M-7 Coordinate with other jurisdictions and agencies on regional transportation projects.

Policy M-7.3 Consult with Caltrans, SCAG, the South Coast Air Quality Management District, SANBAG, Omnitrans, San Bernardino County, Riverside County, and the cities of Rialto, San Bernardino, Loma Linda, Grand Terrace, and Riverside to coordinate regional transportation facilities, and to pursue Federal, State, and regional funds for local and regional traffic improvements.

3.1.5 Parks and Recreational Facilities

Pico Park is located 0.3 mi southeast of the interchange at 21950 Pico Street in the City of Grand Terrace (shown later in Figure 9). This 9.3 ac park includes two basketball courts, one shelter with six tables and two barbecues, picnic tables, playgrounds, a tot lot area, walking/jogging tracks, two baseball/softball diamonds, and 24-hour video surveillance for the safety of park patrons.

Grand Terrace Fitness Park is located immediately adjacent to the Project footprint along Grand Terrace Road near the intersection of Grand Terrace Road and Vivienda Avenue. The City of Grand Terrace purchased the property for this park in August 2011, and construction began in January 2012. It was opened to public use in July 2013. Currently, the Fitness Park includes: fitness stations, covered picnic tables, restrooms, a drinking fountain, walking paths, a tennis court, a children's slide, on-site parking, a storage building, trash receptacles, lighting, and environmentally conservative landscaping. The City of Grand Terrace prepared a new parcel map that identifies a planned road easement on the southern portion of the property. This road

easement (to be named Fitness Park Way) is consistent with the width of the new local road, and is proposed as part of all the Build Alternatives. This map was approved by the City Council on September 10, 2013. The parcel map was submitted to the County of San Bernardino for recording on September 17, 2013. The park is still undergoing construction and is scheduled to be completed in July 2014. Items to be added prior to park completion include: a community activities area, a handball court, a turf area, and additional playground equipment.

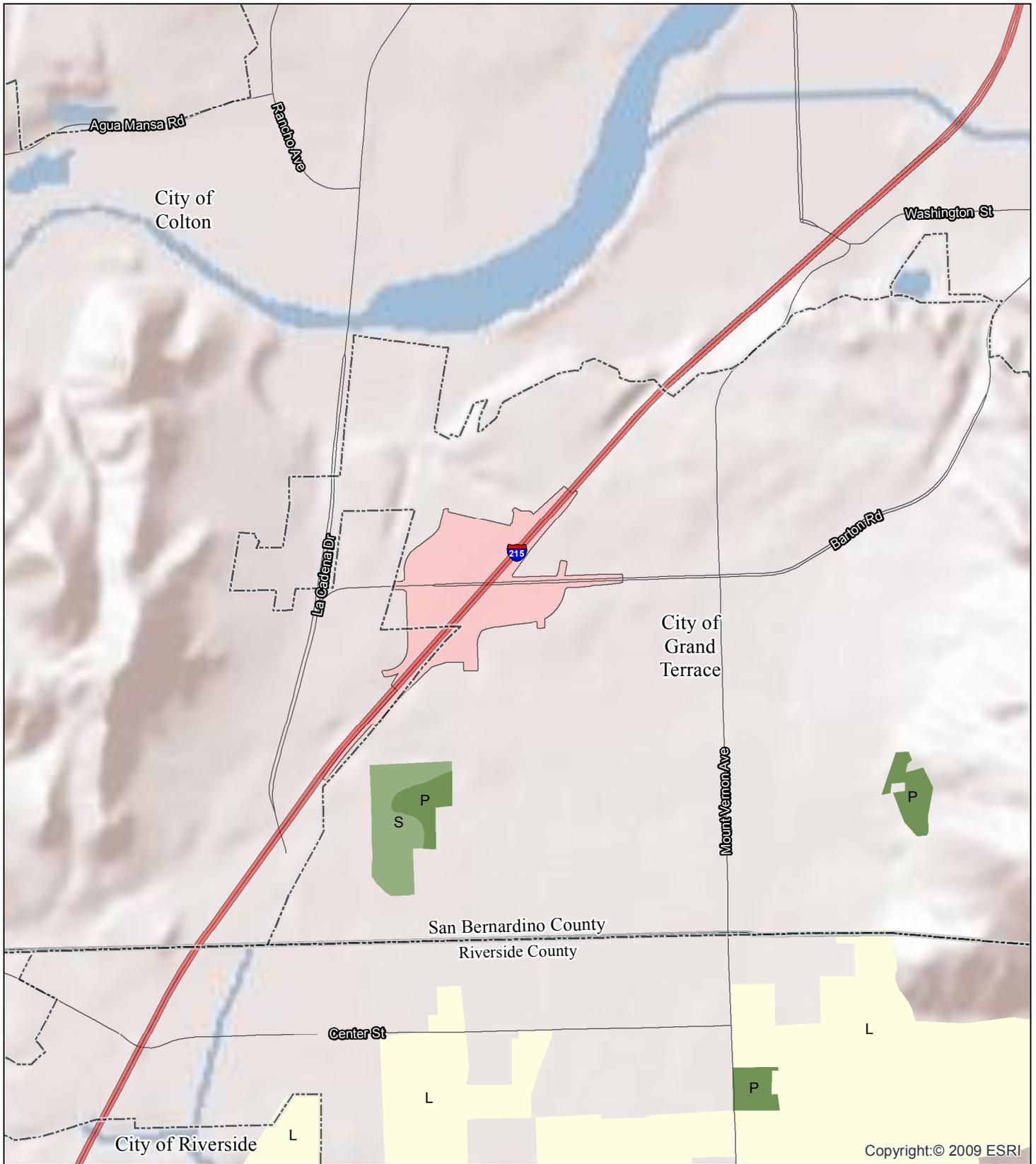
CalSkate Grand Terrace is a roller skating rink within the Project footprint at 22080 Commerce Way. This privately-owned facility is open to the public and provides roller skating lessons, open skating, and private skating parties.

There are no existing parks or recreational facilities within 0.5 mi of the Project area in the City of Colton.

The Santa Ana River Trail is located approximately 0.3 mi north of the interchange and runs parallel to the Santa Ana River. The trail crosses three counties: San Bernardino, Riverside, and Orange Counties, and provides access from the San Bernardino Mountains to the mouth of the Santa Ana River at the Pacific Ocean. The section of the Santa Ana River Trail in the study area is managed by the San Bernardino County Regional Parks Department. The Santa Ana River trail provides for walking, jogging, bicycling, and horseback riding.

3.1.6 Farmlands/Timberlands

NEPA and the Farmland Protection Policy Act (FPPA, United States Code [USC] 4201–4209, and its regulations, 7 Code of Federal Regulations (CFR) Ch. VI Part 658) require coordination with the Natural Resources Conservation Service (NRCS) to examine the effects of farmland conversion before approving any federal action except in cases where it is obvious there is no farmland. No Form NRCS was submitted to the NRCS because after review of the 2010 San Bernardino County Important Farmland map, produced by the California Department of Conservation Farmland Mapping and Monitoring Program (FMMP), it was evident that there is no farmland or agricultural land within the Project footprint. There are no Prime Farmlands, Farmlands of Statewide Importance, Unique Farmlands, or Farmlands of Local Importance within the Project footprint. There are Farmlands of Statewide Importance and Prime Farmlands in the vicinity of the Project footprint adjacent to the UPRR. The designated farmland adjacent to the UPRR (Figure 7) would not be impacted by the Project.

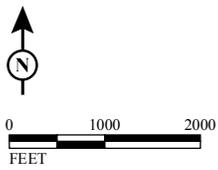


Copyright: © 2009 ESRI

LEGEND

- Project Area
- P - Prime Farmland
- S - Farmland of Statewide Importance
- U - Unique Farmland
- L - Farmland of Local Importance

FIGURE 7



SOURCE: ESRI (2010); USDA FMMP (2010)
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I-215 Barton Road Interchange Improvement Project
 Farmlands

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The FMMP designates the land within and surrounding the study area as Urban and Built-up Land. This designation is occupied by structures with a building density of at least 1 unit to 1.5 acres (ac), or approximately 6 structures to a 10 ac parcel.

Additionally, a review of the 2012/13 San Bernardino Williamson Act Land Map indicates that there is no land enrolled in Williamson Act and Farmland Security Zone Contracts within or adjacent to the study area. As with the FMMP Farmlands Map, the land use designations in the Project area are Urban and Built-Up Land.

There are no timberlands in the Project area or vicinity.

3.2 Community Characteristics

3.2.1 Demographic Profile

The demographics and population analysis was conducted based on census tracts from the 2010 Census and the 2007–2011 American Community Survey (ACS).¹

Existing data from the 2010 Census include the demographics of larger metropolitan areas, such as counties and large cities; however, information regarding communities and census tracts is also available at the ACS level. The main differences between the 2010 Census and the ACS 2007–2011 surveys are in the sample sizes and in the periods of time in which the samples were taken. Whereas the 2010 Census covers all households and residents and provides general demographic characteristics, the ACS is sample-derived data, and provides detailed information on all levels, including census tracts. The study area includes data from the 2007–2011 ACS, and Census 2010 (Census Tracts 71.06, 71.07, 71.09, and 71.10). The study area census tracts are shown on Figure 8. Census tracts were used because they are the most complete data set for the level of detail required for this analysis. Data boundaries with a finer level of detail, such as census blocks, were not used due to incomplete data in some of the required demographic categories necessary for analysis. Detailed information concerning the affected environment is provided for these census tracts where appropriate. For context and comparison, information is also provided at city and county levels for certain topics.

¹ The ACS is an ongoing survey conducted by the U.S. Census Bureau that provides data every year, giving communities the current information they need to plan investments and services. Information from the survey generates data that help determine how more than \$400 billion in federal and State funds are distributed each year (source: http://www.census.gov/acs/www/about_the_survey/american_community_survey/).

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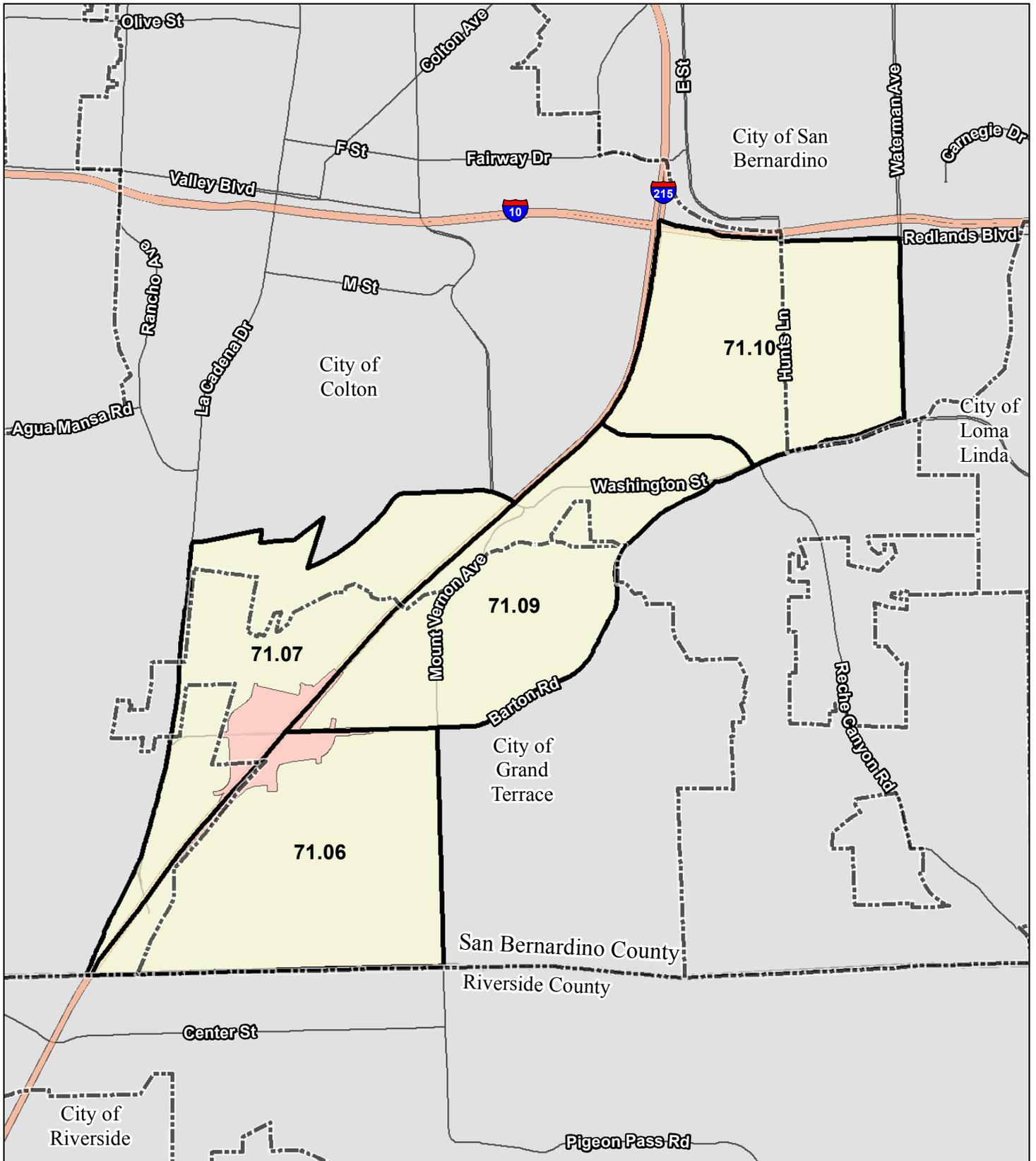


FIGURE 8

LEGEND

- Project Area
- Study Area Census Tracts
- City Boundary



SOURCE: ESRI (2008); US Census Bureau (2010)
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3.2.1.1 Regional and Local Area Population Characteristics

The United States (U.S.) Census Bureau reports that the population of San Bernardino County was approximately 682,000 persons in 1970. In the 30 years that followed, the County’s population increased by almost 300 percent, to over 2 million persons in 2010.

SCAG provides current and projected population levels in the 2012–2035 RTP/SCS for the Southern California region, including the County of San Bernardino. The adopted 2012–2035 RTP/SCS includes projected population levels in 2020 and 2035, which illustrate growth trends. Table C shows population from the 2010 Census and projected 2020, and 2035 populations for the County of San Bernardino, the Cities of Grand Terrace and Colton from the 2012–2035 RTP/SCS Growth Forecasts. The 2012–2035 RTP/SCS anticipates a growth rate of 26 percent for the County of San Bernardino, 7 percent for the City of Grand Terrace and 27 percent for the City of Colton.

Table C Existing (2010) and Projected Population

Jurisdiction	2010 ¹	2020 ²	2035 ²	Percent Increase 2010 to 2035
County of San Bernardino	2,035,210	2,268,000	2,750,000	26%
City of Grand Terrace	12,040	11,600	13,000	7%
City of Colton	52,154	62,700	71,700	27%

Sources:

¹ 2010 Census, <http://www.census.gov/2010census>, Table SF1 DP1.

² 2012–2035 RTP/SCS Growth Forecast, <http://www.scag.ca.gov/forecast/>, site accessed August 9, 2013. The 2012-2035 RTP/SCS Growth Forecast does not include forecasts for Census Tracts.

3.2.1.2 Race and Ethnicity

Table D shows the racial and ethnic demographics of the Cities of Grand Terrace and Colton and of the County of San Bernardino based on the 2010 Census. In the City of Grand Terrace, the population is predominantly White (66 percent), higher than the County average of 57 percent, whereas the City of Colton’s White population percentage (43 percent) is lower than the County’s average, but Whites are still the largest racial group in that city.

The White population percentage in Census Tract 71.06 is similar to that of the City of Grand Terrace, while the other census tracts’ White population percentage is similar to that of the City of Colton. The Black population percentage in Census Tracts 71.07 and 71.09 is approximately twice that of the other census tracts, the cities, and the County. All jurisdictions have similar percentages of individuals of two

Table D Racial and Ethnic Demographics

Jurisdiction	White	Black	American Indian/ Native Alaskan	Asian	Hawaiian/ Pacific Islanders	Other and Two or More Races	Hispanic
County of San Bernardino	1,153,161 (57%)	181,862 (9%)	22,689 (1%)	128,603 (6%)	6,870 (0.3%)	542,025 (27%)	1,001,145 (49%)
City of Grand Terrace	7,912 (66%)	673 (6%)	120 (1%)	778 (7%)	32 (0.3%)	2,525 (21%)	4,708 (39%)
City of Colton	22,613 (43%)	5,055 (10%)	661 (1%)	2,590 (5%)	176 (0.3%)	21,059 (40%)	37,039 (71%)
Census Tract 71.06 (City of Grand Terrace and City of Colton)	2,523 (64%)	223 (6%)	28 (0.7%)	220 (6%)	16 (0.4%)	933 (24%)	1,616 (41%)
Census Tract 71.07 (City of Grand Terrace and City of Colton)	1,442 (44%)	695 (21%)	39 (1%)	93 (3%)	10 (0.3%)	1,023 (31%)	1,738 (53%)
Census Tract 71.09 (City of Grand Terrace and City of Colton)	2,971 (49%)	1,132 (19%)	67 (1%)	374 (6%)	26 (0.4%)	1,494 (25%)	2,340 (39%)
Census Tract 71.10 (City of Colton and City of San Bernardino)	2,146 (44%)	411 (9%)	26 (0.5%)	1,112 (23%)	14 (0.3%)	1,122 (23%)	1,899 (39%)

Source: U.S. Census Bureau, 2010 Census, Table SF1 DP1.

Note: Percentages do not add up to 100 percent because Hispanics (as an ethnicity), as counted by the Census, may be of any race.

or more races. There is a relatively high percentage (23 percent) of Asians in Census Tract 71.10.

The County and the study area Cities each contain substantial Hispanic populations, with the largest percentage (71 percent) in the City of Colton. Although all four study area census tracts contain substantial Hispanic populations, only Census Tract 71.07 contains a higher percentage of Hispanics (53 percent) than the County overall (49 percent). The other census tracts' Hispanic population percentages range from 39 to 41 percent. Hispanics can be of one or more races.

Grand Terrace Elementary School is located adjacent to the I-215/Barton Road interchange. The percentage of minority students enrolled in the school is similar to the study area census tracts statistics. The percentages of Hispanic students are larger than the overall percentage of Hispanics in the study area. Specifically, based on the School Enrollment by Ethnicity for 2011–12 for Grand Terrace Elementary School,¹

¹ California Department of Education Educational Demographics Unit (<http://data1.cde.ca.gov/dataquest/>, accessed on May 9, 2013).

the percentage of racial minority students (Black, Asian, American Indian, Pacific Islander) is 11 percent, with 70 percent of the students enrolled being Hispanic. The total percentage of minority students in the school follows the demographic trends of the City of Grand Terrace minority populations. However, the percentage of Hispanic students is larger than the percentage of Hispanics in the City of Grand Terrace and the County.

3.2.1.3 Households

Table E shows the number of existing and projected households based on the 2007–2011 ACS and the 2012–2035 RTP/SCS, respectively. As seen in Table E, the number of households in the County of San Bernardino is projected to increase by approximately 29 percent between 2010 and 2035. The number of households in the City of Grand Terrace is projected to increase by approximately 18 percent, whereas the number of households in the City of Colton is expected to increase by approximately 28 percent.

Table E Existing and Projected Households

City/County/ Census Tract	2010 ¹	2020 ²	2035 ²	Percent Increase 2010 to 2035
County of San Bernardino	598,822	698,000	847,000	29
City of Grand Terrace	4,449	4,600	5,400	18
City of Colton	15,076	17,800	21,100	28

Sources:

¹ 2007–2011 ACS, Table DP02.

² 2012–2035 RTP/SCS Growth Forecast, <http://www.scag.ca.gov/forecast/>; site accessed August 9, 2013. The 2012–2035 RTP/SCS Growth Forecast does not include forecasts for Census Tracts.

3.2.1.4 Household Size

According to the 2007–2011 ACS, the typical household size in the County is 3.3 persons, similar to the City of Colton household size (3.7 persons) and higher than the City of Grand Terrace household size (2.8 persons). Most of the census tracts have fairly uniform household sizes with Census Tract 71.06 at 2.9 persons per household, Census Tract 71.07 at 2.7 persons per household, and Census Tract 71.09 at 2.7 persons per household, which are less than the County’s household size. Census Tract 71.10 has an average of 3.7 persons per household.

3.2.1.5 Housing Tenure

Table F provides data on how long homeowners have been residing in their units for the study area census tracts, the study area Cities, and the County. With the exception of Census Tract 71.10, the majority of the population in all the geographic units has

Table F Housing Tenure

Area	Year Householder Moved Into Unit					
	2005 or later	2000–2004	1990–1999	1980–1989	1970–1979	Moved in 1969 or earlier
County of San Bernardino	252,152 (42.1%)	137,833 (23.0%)	118,133 (19.7%)	52,473 (8.8%)	24,181 (4.0%)	14,050 (2.3%)
City of Grand Terrace	1,745 (39.2%)	999 (22.5%)	821 (18.5%)	528 (11.9%)	248 (5.6%)	108 (2.4%)
City of Colton	6,598 (43.8%)	3,223 (21.4%)	2,733 (18.1%)	1,181 (7.8%)	504 (3.3%)	837 (5.6%)
Census Tract 71.06 (City of Grand Terrace and City of Colton)	663 (44.8%)	252 (17.0%)	232 (15.7%)	152 (10.3%)	116 (7.8%)	65 (4.4%)
Census Tract 71.07 (City of Grand Terrace and City of Colton)	499 (45.9%)	311 (28.6%)	183 (16.8%)	76 (7.0%)	9 (0.8%)	9 (0.8%)
Census Tract 71.09 (City of Grand Terrace and City of Colton)	1,640 (68.9%)	372 (15.6%)	242 (10.2%)	67 (2.8%)	35 (1.5%)	25 (1.0%)
Census Tract 71.10 (City of Colton and City of San Bernardino)	468 (30.7%)	356 (23.3%)	520 (34.1%)	181 (11.9%)	0 (0.0%)	0 (0.0%)

Source: U.S. Census Bureau, ACS 2007–2011, Table DP04.

lived in their residence less than 10 years. The majority of those living in Census Tract 71.10 (34 percent) moved in between 1990 and 1999. The second highest percentage, with the exception of Census Tract 71.10, falls within the 2000-2004 interval. When combined with those who moved in after 2005, the majority of the population within or near the Project area have lived in their current residence less than 15 years.

Based on the data provided in the 2007–2011 ACS, three of the study area census tracts, the cities, and the County do not show a long-term housing tenure (i.e., a substantial majority living in their current residence prior to 2000). The longest-term housing tenure is represented by Census Tract 71.10 because it has the highest percentage of residents that have occupied their residences for 11 years or more.

3.2.1.6 Housing Occupancy

Table G shows the occupied housing units and the percentage of owner- and renter-occupied housing units within the study area census tracts, the Cities of Grand Terrace and Colton, and the County of San Bernardino. The homeownership rate in the City of Grand Terrace is similar to that of the County – 64.5 percent of Grand Terrace residents own their homes, which is close to the County’s percentage of 64.2.

Table G Housing Occupancy

	San Bernardino County	City of Grand Terrace	City of Colton	Census Tract 71.06	Census Tract 71.07	Census Tract 71.09	Census Tract 71.10
Occupied Housing Units	598,822	4,449	15,076	1,480	1,087	2,381	1,525
Owner-occupied	384,624 (64.2%)	2,869 (64.5%)	8,302 (55.1%)	953 (64.4%)	523 (48.1%)	639 (26.8%)	1,202 (78.8%)
Renter-occupied	214,198 (35.8%)	1,580 (35.5%)	6,774 (44.9%)	527 (35.6%)	564 (51.9%)	1,742 (73.2%)	323 (21.2%)

Source: U.S. Census Bureau, 2007–2011 ACS, Table DP04.

In the City of Colton, the homeownership rate of 55.1 percent is much lower than the County. With respect to the residents closest to the Project, the numbers vary substantially. In the census tracts directly adjacent to the Project, Census Tracts 71.06, 71.07, and 71.09, the percentage of residents who own their homes is much lower. Although the homeownership percentage in Census Tract 71.06 is similar to that of the County and of Grand Terrace, the percentages in Tracts 71.07 and 71.09 where most of the Project is located, are 48.1 percent and 26.8 percent, respectively.

3.2.1.7 Employment

Table H shows the existing and projected employment within the study area census tracts, the Cities of Grand Terrace and Colton, and the County of San Bernardino. Employment in the County of San Bernardino is projected to increase by approximately 23 percent between 2010 and 2035. Employment in the City of Grand Terrace is projected to decrease by 33 percent. Employment in the City of Colton is projected to increase by approximately 29 percent.

Table H Existing and Projected Employment

Jurisdiction	Employed Population			Percent Increase 2010 to 2035
	2010 ¹	2020 ²	2035 ²	
County of San Bernardino	815,102	897,489	1,059,000	30
City of Grand Terrace	6,031	3,959	4,000	(-)33
City of Colton	20,892	33,064	29,600	42

Sources:

1. 2007–2011 ACS, Table DP03.

2. 2012–2035 RTP/SCS Growth Forecast, <http://www.scag.ca.gov/forecast/>; site accessed August 9, 2013. The 2012–2035 RTP/SCS Growth Forecast does not include forecasts for Census Tracts.

3.2.1.8 Age Distribution

The median age of the population in the study area Cities and census tracts is shown in Table I. The age distribution patterns across the age groups of the studied census tracts, the Cities, and the County are similar. The Cities and affected census tracts reported similar percentages of population between 18 and 64. The percentage of the population over age 64 in the study area census tracts ranges between 5 to 11 percent, and is lower than the City of Grand Terrace. The percentages of the population under age 18 in the study area census tracts are also substantially the same and slightly below the percentages in the City of Colton and the County, with exception of Census Tract 71.07, which has a higher population under 18.

Table I Age Distribution

Jurisdiction	Median Age	Percent		
		Population < 18	Population 18–64	Population > 64
County of San Bernardino	32	33	58	9
City of Grand Terrace	36	26	62	12
City of Colton	28	35	57	8
Census Tract 71.06 (City of Grand Terrace and City of Colton)	34	27	62	11
Census Tract 71.07 (City of Grand Terrace and City of Colton)	26	37	58	5
Census Tract 71.09 (City of Grand Terrace and City of Colton)	30	28	63	9
Census Tract 71.10 (City of Colton and City of San Bernardino)	34	30	62	8

Source: United States Census Bureau, 2010 Census, Table SF1 DP1.

3.2.1.9 Income and Poverty Status

To determine the income and poverty characteristics for the study area, data were obtained from the 2007–2011 ACS for the counties, the cities, and the census tracts. Income and poverty data for the 2007–2011 ACS are not available at the block level.

Table J provides income and poverty level characteristics for the census tracts, Cities, and County, as reported in the 2007–2011 ACS and the 2010 Census. The poverty level is defined annually by the U.S. Department of Health and Human Services and was \$22,050 for a family of four in 2010.

As shown in Table J, the City of Grand Terrace is characterized by more affluent residents, with a higher median household income and fewer persons living below the poverty level than the City of Colton and the County averages. The study area census

Table J Income and Poverty Level

Jurisdiction	Total population for whom poverty is determined	Median household income	Persons living in poverty (percent)
County of San Bernardino	1,977,432	\$55,853	16
City of Grand Terrace	11,985	\$64,337	6
City of Colton	51,839	\$41,788	22
Census Tract 71.06 (City of Grand Terrace and City of Colton)	4,052	\$68,446	10
Census Tract 71.07 (City of Grand Terrace and City of Colton)	3,286	\$32,637	39
Census Tract 71.09 (City of Grand Terrace and City of Colton)	6,439	\$38,684	18
Census Tract 71.10 (City of Colton and City of San Bernardino)	5,606	\$81,206	4

Source: 2007-2011 ACS, Tables S1701 and S1903.

Note: Persons living in the poverty percentile, which is based on U.S. Census Bureau thresholds not United States Department of Health and Human Services guidelines. For 2010, the poverty threshold for a family of four was \$22,314.

tracts' median income ranges between \$32,637 (below the median for the Cities) and \$81,206 (above the Cities of Colton, Grand Terrace, and County of San Bernardino medians). In the study area census tracts, Census Tract 71.10 has the fewest residents living below the poverty level, while Census Tract 71.07 has the highest percentage of residents living below the poverty level.

3.2.1.10 Circulation

I-215 passes through the western part of the City of Grand Terrace in a generally northeast-southwest direction. Table K summarizes commuter travel patterns within the study area census tracts, the Cities, and the County based on the 2007–2011 ACS. The majority of residents in the Cities of Grand Terrace and Colton, the County, and the study area census tracts work in the County. However, most study area residents work in a different city than their city of residence. Approximately 75 percent of all study area census tract residents have an average commute time of less than 30 minutes, while 13 percent have an average commute of 30 to 44 minutes. These commutes are made to the cities outside of the study area.

Since the Barton Road interchange is a primary access to the I-215 in the City of Grand Terrace, it is a key feature for commuters to utilize to travel to work between cities and counties.

Table K Commuter Travel

	San Bernardino County	City of Grand Terrace	City of Colton	Census Tract 71.06	Census Tract 71.07	Census Tract 71.09	Census Tract 71.10
Work in county of residence	562,603 (71%)	4,052 (69%)	14,399 (71%)	1,276 (63%)	786 (77%)	2,022 (65%)	1,776 (70%)
Work outside county of residence	234,575 (29%)	1,813 (31%)	5,837 (29%)	740 (37%)	241 (23%)	1,090 (35%)	751 (30%)
Work in place of residence	205,539 (27%)	435 (7%)	3,128 (15%)	140 (7%)	244 (24%)	241 (8%)	392 (16%)
Work outside place of residence	551,758 (73%)	5,448 (93%)	17,137 (85%)	1,883 (93%)	783 (76%)	2,886 (92%)	2,135 (84%)
Travel Time to Work							
< 30 minutes	60%	73%	70%	78%	70%	73%	76%
30–44 minutes	18%	12%	15%	14%	13%	13%	13%
45–59 minutes	8%	4%	4%	2%	5%	6%	6%
> 60 minutes	14%	11%	11%	6%	12%	9%	5%

Source: U.S. Census Bureau, 2007–2011 ACS, Tables B08007, B08008, and B08303.

The existing I-215/Barton Road interchange provides regional access to the City of Grand Terrace, with secondary access available at La Cadena Drive. According to the City of Grand Terrace General Plan, Circulation Element, Barton Road is the principal major highway in the City. It provides direct access to the commercial corridor that runs along its length through the City of Grand Terrace. Barton Road currently provides two lanes of travel within 80 ft of right-of-way and one lane of travel in each direction on the Barton Road overcrossing, with sidewalk on one side and no bicycle lanes. Barton Road presently has a continuous left-turn lane in the eastern part of the City. The City of Grand Terrace General Plan Circulation Element (2010) plans for Barton Road to provide four lanes within 100 ft of right-of-way, with sidewalk and bicycle lanes on both sides.

The Cities of Grand Terrace and Colton depend on the distribution of jobs within and outside their borders. Both Cities share Barton Road and La Cadena Drive and both utilize the I-215/Barton Road interchange. The I-215/Barton Road interchange is considered the main access point to the relatively small City of Grand Terrace; the City of Colton is larger and has several major access points to the regional freeway system along I-10 and I-215.

3.2.2 Community Cohesion

Some indicators that a community has a high degree of cohesion include a substantial presence of residents with long tenure, households of two or more people, high rates

of homeownership, racial and/or ethnic homogeneity, and a high percentage of elderly residents. The Project is primarily within the City of Grand Terrace and only a small portion is within the City of Colton.

Residents who have lived in the same location for many years typically have a strong attachment to their neighborhood as a result of continued association with their neighbors and local groups and institutions over time. The percentage of the population that moved into their current residences in 2000 or later is 62 percent in the City of Grand Terrace and 65 percent in the City of Colton. These numbers are similar to the percent of County residents (65 percent) who moved into their current residences in 2000 or later. In addition, approximately 18 percent of the residents in the City of Grand Terrace and the City of Colton moved into their current residences between 1990 and 1999. By comparison, approximately 20 percent of the County's residents moved into their current residences between 1990 and 1999. Only 20 percent of the population in the City of Grand Terrace and 17 percent of the population in the City of Colton moved in to their current residence prior to 1990, which is higher than the County (15 percent). Because neither of the study area cities nor any of the study area census tracts contain a substantial majority of long-term residents, as shown in Table F, the area does not display a high level of community cohesion.

Elderly residents include retirees (65 years of age and older) who typically have more time to engage in neighborhood groups and volunteer in their communities than the working age population, and if long-tenured in the community, often have a greater social connection with the community. The City of Grand Terrace is a predominantly White community characterized by smaller household sizes (2.8 persons per household) than the County as a whole (3.3 persons per household). The percentage of residents 65 years of age or older (12 percent) in the City of Grand Terrace is relatively low compared to the population between the ages of 18 and 64 (62 percent), and the median age of 36 years is only slightly higher than the median age in the County (32 years). The City of Colton has a younger and more ethnically diverse population, and is characterized by a higher number of persons per household (3.7) than the population of the County as a whole. The median age for residents in the City of Colton is 28 years. As no part of the study area, in either city, hosts a high percentage of elderly residents, and both exhibit a relatively young median age, as evidenced by the data in Table I, this indicator for potentially high community cohesion is considered to be predominantly absent.

Another indicator of community cohesion is a high rate of homeownership. The homeownership rate in the City of Grand Terrace is similar to that of the County – 64.5 percent of Grand Terrace residents own their home, which is close to the County’s percentage of 64.2. In the City of Colton, the homeownership rate of 55.1 percent is much lower than the County. When we look at the residents closest to the Project, the numbers vary substantially. The homeownership rate in the census tracts directly adjacent to the Project, Census Tracts 71.06, 71.07, and 71.09, the percentage of residents who own their homes is much lower. Although the percentage in Census Tract 71.06 is similar to that of the County and of Grand Terrace, the percentages in Tracts 71.07 and 71.09, where most of the Project is located, are 48.1 percent and 26.8 percent, respectively. Accordingly, as evidenced by the aforementioned data, most of the Project area is located in census tracts with a substantially lower rate of homeownership.

In general, indicator values for Census Tract 71.06 are similar to the City of Grand Terrace’s cohesion indicator values, while the remaining census tracts reflect the cohesion indicator values in the City of Colton. Based on these indicators, separate from ethnic homogeneity as evidenced by the 66 percent White population in the City of Grand Terrace and 64 percent in Census Tract 71.06, overall the Project area does not evidence a particularly pronounced degree of community cohesion.

3.2.3 Community Facilities

This topic includes schools, libraries, and fire protection and law enforcement facilities. Accessibility of community facilities and services helps improve the quality of life in the community and provides a sense of cohesiveness. Community facilities and emergency service providers within 0.5 mi of the Project area are shown on Figure 9.

3.2.3.1 Grand Terrace Elementary School

Grand Terrace Elementary School (Grades K–6), operated by the Colton Joint Unified School District (CJUSD), is in the northeast quadrant of the interchange at 12066 Vivienda Avenue (Figure 9). The school is immediately adjacent to the existing I-215 northbound on-ramp. The school property includes portable and permanent classroom buildings, a teachers’ lounge and library, the historic Lions Club building, and sports fields, including two hard courts and a turf play area.

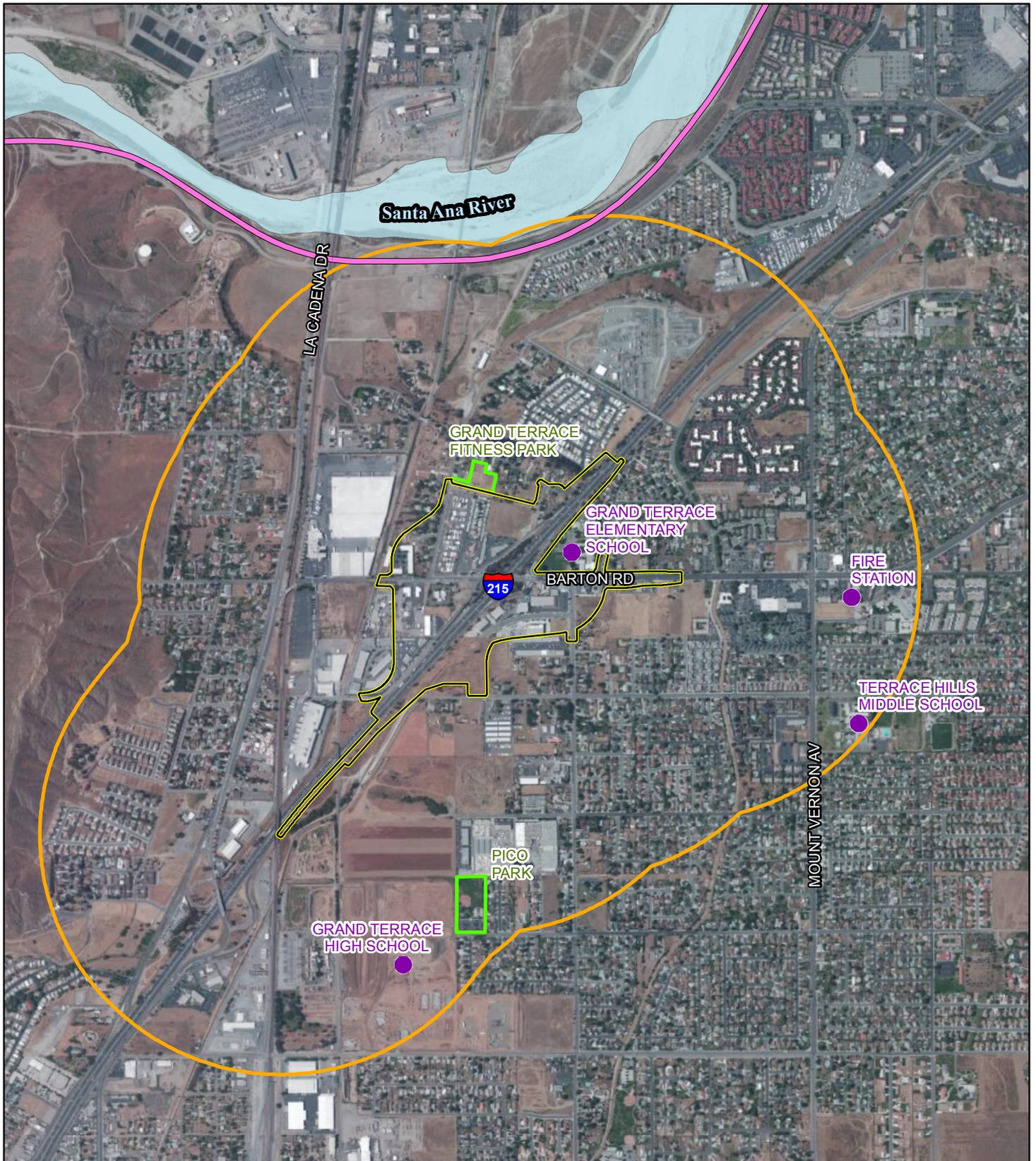


FIGURE 9

LEGEND

- Project Area
- 0.5 Mile Radius
- Schools and Public Facilities
- Santa Ana River Trail
- Parks



0 750 1500
FEET

SOURCE: Microsoft (5/2010)

F:\SBA330\Barton_I-215\GIS\CIA\PublicFacilities.mxd (10/28/2013)

I-215/Barton Road Interchange Improvement Project
Community Facilities

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The City of Grand Terrace General Plan Open Space and Conservation Element (2010) identifies all public schools as improved open space. However, it was confirmed during a site visit in November 2010 that Grand Terrace Elementary School is fenced and is locked after school hours and is not available to the public for walk-on use after regular school hours. Although the City and the CJUSD have a joint-use agreement for use of the school facilities, the City has not utilized the school for public use for the past 2 years.¹ In its February 2011 *Technical Memorandum for Resources Evaluated Relative to the Requirements of Section 4(f)* prepared for the I-215 Bi-County HOV Lane Gap Closure Project, Caltrans made a determination that “because the recreational area [of the school] is not open to the public for walk-on use, the requirements for protection under Section 4(f) are not triggered,” in accordance with 23 CFR 774.

3.2.3.2 Terrace Hills Middle School

This public middle school (grades 7–8) is approximately 0.4 mi southeast of the Project area at 22579 De Berry Street. The school facilities include classrooms, offices, an auditorium, band room, locker rooms, and a pool.

A site visit was conducted on October 26, 2013. Terrace Hills Middle School is fenced and is locked after school hours and is not available to the public for walk-on use after regular school hours. Because this school is not open to the public for walk-on use, the requirements for protection under Section 4(f) are not triggered in accordance with 23 CFR 774.

3.2.3.3 Grand Terrace High School

This public high school (grades 9–12) is approximately 0.3 mi south of the Project area at 21810 Main Street. This school opened for the 2012 school year. The school facilities include classrooms, offices, a gymnasium, a band room, locker rooms, a football field, tennis courts, a soccer field, a track, a baseball field, and a pool.

A site visit was conducted on October 26, 2013. Grand Terrace High School is fenced and is locked after school hours and is not available to the public for walk-on use after regular school hours. Because this school is not open to the public for walk-on use, the requirements for protection under Section 4(f) are not triggered, in accordance with 23 CFR 774.

¹ Email correspondence with Joyce Powers, Community Development Director, City of Grand Terrace, February 2, 2012.

3.2.3.4 Libraries

The City of Grand Terrace Branch Library is outside the Project limits, approximately 1 mi east of the interchange, at 22795 Barton Road.

3.2.3.5 Alternative Transportation

Pedestrian Facilities

Sidewalks are provided along the north side of Barton Road, ending approximately 225 ft west of the southbound ramps within the Project area. In order to safely traverse the entire east-west length of the Project area along Barton Road, pedestrians currently must follow the existing sidewalks along the north side of Barton Road, crossing two unsignalized “T” intersections (Barton Road/Vivienda Avenue and Barton Road/Grand Terrace Road), which lack crosswalk facilities. Pedestrians are further required to cross the two entrances to the Barton Road on-ramp for northbound I-215 on-ramp (the eastbound on-ramp entrance is signalized, while the westbound on-ramp is not), and the two exit lanes from the Barton Road off-ramp for southbound I-215 (the exit lane for eastbound traffic is signalized, while the westbound exit lane remains unsignalized). There are no sidewalks on La Crosse Avenue, Grand Terrace Road, or Vivienda Avenue within the Project area. Michigan Street and La Cadena Drive have sidewalks in some areas, but they are not continuous through the Project area.

Bicycle Lanes

An existing Class II bicycle lane is located on the eastbound side of Barton Road, east of Michigan Street. The City of Grand Terrace General Plan shows a planned bicycle lane on Barton Road from west of Michigan Street to the western city limit.

Transit

The Project site and its vicinity are served by Omnitrans and the Riverside Transit Agency (RTA). Omnitrans and the RTA provide extensive fixed-route bus systems that include bus routes in the interchange area. Omnitrans Route 325, which starts at the corner of Barton Road and Michigan Avenue within the Project area, runs east along Barton Road, and connects Grand Terrace residents to locations such as the Grand Terrace Senior Center, Loma Linda Hospital, City Hall, and the United States Department of Veterans Affairs (VA) Hospital. Omnitrans Route 19 connects to Route 325 near Washington Street and provides access to areas west of I-215, including the City of Colton and the Fontana Metrolink Station. RTA Route 14 connects downtown Riverside with Omnitrans Route 325 at Michigan Avenue and Center Street near the Highgrove Library.

3.2.4 Community Outreach and Public Involvement

Three meetings have been held with SANBAG, the City of Grand Terrace staff, and the CJUSD to discuss the potential impacts to the Grand Terrace Elementary School resulting from the proposed I-215/Barton Road Alternatives. At the initial meeting on December 6, 2007, the possible relocation of the Grand Terrace Elementary School to accommodate Alternatives 2 and 4 was discussed. At a follow-up meeting on January 16, 2008, it was decided that, due to the cost and schedule for school relocation, additional build alternatives would be developed to avoid full acquisition of the school property. School operations/activities and measures to avoid substantial impacts to the school during construction of the two proposed projects were discussed at the last meeting on May 10, 2010.

As a result of the meetings with CJUSD staff, Alternative 3 was revised to completely avoid permanent right-of-way acquisition at the school. In addition, Alternative 6 was developed to minimize overall right-of-way impacts as well as to avoid permanent right-of-way impacts to the school.

A toll-free helpline for questions about the Project was established in June 2008 to coincide with right-of-entry requests that were mailed to property owners.

The revised Alternative 3 and the new Alternative 6 were presented to the Grand Terrace City Council at its regular meeting on January 8, 2009.

Alternative 7 was developed in January 2011 in order to provide a direct connection from the northbound off-ramp to Barton Road. Alternatives 3, 6, and 7 were presented to the Grand Terrace City Council on May 8, 2012.

Modified Alternative 7 was developed in February 2013 to replace Alternative 7 because it allows full access to the southern segment of La Crosse Avenue to and from the I-215 ramps on Barton Road. Alternatives 3, 6, and Modified Alternative 7 were presented to the Grand Terrace City Council on April 23, 2013 and September 10, 2013. The City of Grand Terrace passed a resolution identifying Modified Alternative 7 as its Locally Preferred Alternative on September 10, 2013.

The public will have an additional opportunity to comment at the Open House Public Hearing to be held during the public review period for the environmental document.

3.3 Utilities and Emergency Services

3.3.1 Utilities

Utilities in the Project area are shown in Table L.

Table L Utility Providers

Utility	Owner
Sewer	City of Grand Terrace
Water Line	Riverside Highland Water, Elsinore Valley Municipal Water District
Gas Line	Southern California Gas Company
Electrical-underground	Southern California Edison
Utility Poles	Southern California Edison
Electrical-overhead	Southern California Edison
Telecom	AT&T, Time Warner
Cable Television	AT&T, Time Warner, Charter Communications
Riverside Canal Aqueduct	City of Riverside

3.3.2 Fire Protection

The City of Grand Terrace contracts with the San Bernardino County Fire Department for fire and rescue services. Fire Station 23 at 22582 Center City Court in Grand Terrace has both paid and volunteer staff, including a fire chief, a battalion chief, and a division chief. There are currently 2 paid employees per shift and 15 paid-call employees. The station is approximately 0.7 mi from the I-215/Barton Road interchange.

The City of Colton has its own fire department staffed with 46 personnel at four fire stations. The City of Colton Fire Department offers a wide range of services, including, but not limited to: fire suppression, emergency medical services, light and heavy rescue, and hazardous materials mitigation. Stations 213 and 214 are the stations closest to the interchange.

- Station 213 is at 1100 South La Cadena Drive, Colton, approximately 2 mi from the site. This station is staffed with three personnel (a captain, an engineer, and a firefighter/paramedic) and is also home to the Heavy Rescue Unit.
- Station 214 is at 1151 South Meadow Lane, approximately 2 mi from the Project site, and is also staffed with three personnel (a captain, an engineer, and a firefighter/paramedic).

3.3.3 Police

The City of Grand Terrace contracts with the San Bernardino County Sheriff's Department (SBSD) for full-service law enforcement, traffic services, investigations, and a wide variety of safety services. The sheriff's station responsible for servicing the City of Grand Terrace is located at 655 East Third Street in San Bernardino.

The City of Colton has its own police department that enforces law within the City. The nearest City of Colton police station is at 650 North La Cadena Drive, approximately 4 mi north of the interchange.

3.3.4 California Highway Patrol

The California Highway Patrol (CHP) has jurisdiction on freeways in the State of California, including I-215. The nearest CHP office is the Inland Communications Center at 847 East Brier Drive, San Bernardino, approximately 5.5 mi from the interchange.

3.4 Economic Conditions

3.4.1 Regional Economy

Table M shows employment percentages by economic sectors for the Cities and the County. According to the 2007–2011 ACS, education, health, and social services, and retail were the largest and second largest County industry sectors in terms of employment, comprising approximately 22 and 13 percent, respectively, of the total employed labor force in the County, with manufacturing following at approximately 10 percent. Education, health, and social services was also the largest industry sector in Grand Terrace and Colton, at 23 and 21 percent, respectively, of the employed labor force in the respective cities, followed by retail at approximately 13 percent in both cities. The employment percentages for these and other sectors are shown in Table M.

3.4.2 Employment and Income

The 2007–2011 ACS found that there were 949,657 persons in the County of San Bernardino civilian labor force.¹ According to the California Employment Development Department, the unemployment rate in the County of San Bernardino was 11 percent as of April 2013. At that time, the Cities of Grand Terrace and Colton had a higher percentage of employed civilians, and the City of Grand Terrace had slightly lower unemployment rates than the County. According to the California

¹ 2007-2011 ACS, Table DP03.

Table M 2007–2011 Employment Percentages for the Cities of Grand Terrace and Colton and San Bernardino County

Economic Sector	City of Grand Terrace	City of Colton	San Bernardino County
Construction	8	9	8
Manufacturing	8	11	10
Retail	13	13	13
Finance and Insurance	5	4	6
Professional and Technical Services	10	9	8
Education, Health, and Social Services	23	21	22
Lodging and Foodservice	7	9	9
All Other Sectors	26	24	24

Source: U.S. Census Bureau, 2007–2011 ACS, Table DP03.

Employment Development Department, as of June 2013,¹ the unemployment rate in the City of Grand Terrace was 5.3 percent, while the unemployment rate in Colton was 11.2 percent, indicating that the local economy is consistent with the national economic downturn.

Table N provides other demographic characteristics for the Cities and County, as reported in the 2007–2011 ACS and 2010 Census. As seen in Table N, all study area census tracts (with exception of Census Tract 71.07) have a slightly higher percentage of employed labor force than the respective Cities and the County, with Census Tract 71.09 having the highest percentage of employed civilians at 68 percent.

Census Tract 71.10 has the highest median household income compared to other census tracts, the Cities, and the County average. Census Tract 71.07 reported the lowest median household income, the lowest percentage of employed population, and the highest percentage of individuals (39 percent) living below the poverty level compared to the averages for the other study area census tracts, the Cities, and the County.

3.4.3 Study Area Business Activity

The Project vicinity contains a few businesses located along Barton Road, Grand Terrace Road, and Commerce Way. The types of businesses in the study area include half-vacant office centers, strip malls, “mom and pop” businesses, fast-food restaurants, gas/convenience stores, and warehouses. There are no major commercial business centers located in or adjacent to the study area.

¹ <http://www.labormarketinfo.edd.ca.gov>. Site accessed August 9, 2013.

Table N Local, County, Regional, and State Demographic Summaries

Jurisdiction	Total population ¹	Median household income ²	Persons below poverty (percent) ²	High school graduate or higher (over age 25; percent) ²	College graduate or higher (over age 25; percent) ²	Employed civilian labor force (percent) ²	Persons per household ¹
County of San Bernardino	2,035,210	\$55,853	16	79	18	54	3.3
City of Grand Terrace	12,040	\$64,337	6	89	23	62	2.7
City of Colton	52,154	\$41,788	22	69	13	56	3.5
Census Tract 71.06 (City of Grand Terrace and City of Colton)	3,943	\$68,446	10	86	28	64	2.9
Census Tract 71.07 (City of Grand Terrace and City of Colton)	3,302	\$32,637	39	79	5	48	2.9
Census Tract 71.09 (City of Grand Terrace and City of Colton)	6,064	\$38,684	18	87	24	68	2.5
Census Tract 71.10 (City of Colton and City of San Bernardino)	4,831	\$81,206	4	89	30	64	3.3

Source: U.S. Census Bureau, 2007–2011, 2010 Census.

¹ From 2010 Census, Table SF1 DP1.

² From 2007–2011 ACS, Tables DP02 and DP03.

3.4.4 Property Tax

Property taxes are levied on the assessed value of privately owned property. Property taxes for properties in the study area are collected by San Bernardino County and apportioned to the incorporated Cities in the County, including the Cities of Colton and Grand Terrace. The amount levied is approximately 1 percent of the assessed property value. The amount of property tax paid by parcel is recorded based on property taxes paid to the San Bernardino County Office of the Assessor in 2011. For fiscal year 2011/2012, the reported property tax roll in the City of Grand Terrace totaled \$7,572,296 and in the City of Colton totaled \$25,565,795.¹

3.4.5 Sales Tax

Effective January 1, 2013, the sales tax rate in the City of Grand Terrace is 8.0 percent, 6.5 percent of which is allocated to the State, 0.75 percent is allocated to the City of Grand Terrace, 0.25 percent is allocated to the San Bernardino County

¹ Total City tax revenue was obtained from the Auditor’s Controller’s Office and is based on the tax roll obtained from the Cities. Email correspondence with San Bernardino County Auditor-Controller-Recorder, Franciliza Zyss, Accountant III (February 2012).

Transportation Fund, and 0.5 percent is used to fund transportation improvements in San Bernardino County (SANBAG Measure I). The State Board of Equalization tabulates sales tax transactions for each city and county in California on a quarterly and yearly basis. According to the latest published report (Taxable Sales in California [Sales & Use Tax] 2011¹), the City of Grand Terrace's 194 permitted sales tax-producing businesses generated approximately \$83,563,000 in taxable sales in 2011. Based on the sales tax rate in effect in the City of Grand Terrace in January 2013, the average sales tax revenue per business in 2011 was \$34,282, approximately \$3,214 of which would be distributed to the City of Grand Terrace.

Effective January 1, 2013, the sales tax rate in the City of Colton is also 8.0 percent, 6.5 percent of which is allocated to the State, 0.75 percent is allocated to the City of Colton, 0.25 percent is allocated to the San Bernardino County Transportation Fund, and 0.5 percent is used to fund transportation improvements in San Bernardino County (SANBAG Measure I). According to the State Board of Equalization, the City of Colton's 857 permitted sales tax-producing business generated approximately \$513,554,000 in taxable sales in 2011. Based on the sales tax rate in effect in the City of Colton in January 2013, the average sales tax revenue per business in 2011 was \$47,940, approximately \$4,494 of which would be distributed to the City of Colton.

¹ The most recent report for taxable sales is for calendar year 2011 (<http://www.boe.ca.gov/news/tsalescont11.htm>, accessed August 11, 2013).

Chapter 4 Impacts

The following discussion is intended to describe the potential impacts to the community that could result from construction and operation of the proposed Project. The impacts are broadly discussed under the main headings of (1) Land Use Impacts, (2) Community Impacts, (3) Utilities and Emergency Services, (4) Economic Impacts, (5) Growth-Related Impacts, and (6) Cumulative Impacts.

4.1 Land Use Impacts

This section discusses potential land use and planning impacts related to the compatibility of the Project with existing land uses and the consistency of the Project with local plans and policies.

4.1.1 Compatibility with Existing Land Uses

The residential parcels that would be acquired by the Build Alternatives are on land designated low-density and medium-density residential and GC in the City of Grand Terrace General Plan. The GC designation does not permit single-family residences except by Conditional Use Permit (CUP).

4.1.1.1 Alternative 1 (No Build Alternative)

The I-215 Bi-County HOV Lane Gap Closure Project and the I-215/Newport Avenue Overcrossing Project are under construction within the I-215/Barton Road Interchange Improvement Project area until late 2014, as one project. These projects are collectively known as the I-215 Bi-County HOV Lane Gap Closure Project in this document. The I-215 Bi-County HOV Lane Gap Closure Project will not change land use in the Project area; therefore, there would be no conflict with existing land uses. Alternative 1, as the No Build Alternative, would not change land uses.

4.1.1.2 Alternative 3 (Partial Cloverleaf Interchange)

Approximately 37 ac of land for the proposed right-of-way would be converted to transportation land uses. Potential full acquisitions under Alternative 3 would acquire approximately 20 ac of commercial/industrial land uses, 9 ac of residential uses, and 8 ac of vacant land uses. Five residential acquisitions would occur just west of I-215; three would occur in the proximity of Grand Terrace Road, and one would occur just south of Barton Road and west of La Crosse Avenue. Two of these properties are designated GC in the City of Grand Terrace General Plan (2010), and all of these residential properties are freeway-adjacent. Businesses that remain after Project

construction would benefit from improved interchange operations, which would improve the use of this land. Terrace Village RV Park and Grand Terrace Mobile Home Park would lose the buffer (i.e., the commercial strip mall that currently separates them from the southbound I-215 off-ramp). However, because Alternative 3 would impact freeway adjacent properties, improve interchange operations and reduce traffic congestion in the area, land use compatibility impacts are not considered substantial.

4.1.1.3 Alternative 6 (Modified Cloverleaf Interchange)

Approximately 22 ac of land for the proposed right-of-way would be converted to transportation land uses; therefore, there would be fewer land use impacts than under Alternative 3. Potential full acquisitions under Alternative 6 would convert approximately 8 ac of commercial/industrial land uses, 2 ac of residential uses, and 12 ac of vacant land uses. The two residential displacements for Alternative 6 are designated GC in the City of Grand Terrace General Plan (2010). Due to their proximity to I-215, designated land use, and proximity to other land use types, these residences are not considered a part of a well-established and cohesive community.

The conditions at Terrace Village RV Park and Grand Terrace Mobile Home Park would be similar, although the ramps would not be as close to these properties as they are under Alternative 3. Because Alternative 6 would impact freeway-adjacent properties, improve interchange operations and reduce traffic congestion in the area, land use compatibility impacts are not considered substantial.

4.1.1.4 Modified Alternative 7 (Modified Cloverleaf/Diamond Interchange) (Locally Preferred Alternative)

Modified Alternative 7 would widen and improve the existing I-215/Barton Road interchange and convert approximately 15 ac of existing land uses to transportation land uses; therefore, there would be fewer land use impacts than under Alternatives 3 or 6. Potential full acquisitions under Modified Alternative 7 would convert approximately 9 ac of commercial/industrial land uses and 2 ac of residential uses and 4 ac of vacant land uses. Modified Alternative 7 would displace the same residential properties as Alternative 6 and, therefore, the land use impacts would be similar. Because Modified Alternative 7 would impact freeway-adjacent properties, improve interchange operations and reduce traffic congestion in the area, land use compatibility impacts are not considered substantial.

4.1.2 Consistency with Plans and Policies

The alternatives were analyzed based on consistency with the City of Grand Terrace General Plan (2010), the City of Grand Terrace Barton Road Specific Plan (2010), the City of Colton General Plan Mobility Element (2013), the 2012–2035 RTP/SCS, the 2013 FTIP, and the SANBAG CMP (2009).

4.1.2.1 Alternative 1 (No Build Alternative)

The existing condition of the I-215/Barton Road interchange is not consistent with the regional mobility goals and objectives of the Cities of Grand Terrace and Colton, SANBAG, and SCAG, and does not meet the standards and goals of the Cities of Grand Terrace and Colton General Plans to improve the interchange and local circulation in the area. Alternative 1 does not anticipate improvements to the I-215/Barton Road interchange and, therefore, would not be consistent with the goals of local and regional agencies.

4.1.2.2 Alternatives 3, 6, and Modified Alternative 7 (Build Alternatives)

Under the Build Alternatives, local roadways would be designed consistent with the description identified in the respective city general plans.

Alternative 3, 6, and Modified Alternative 7 are consistent with the City of Grand Terrace General Plan (2010), Circulation Element Goal 3.1, and its related policies (3.1.1, 3.1.2, 3.1.3, 3.1.4) regarding the provision of a comprehensive transportation system for movement of people and goods because the Build Alternatives improve operation of and reduce congestion at the Barton Road interchange. The design of Barton Road provided for each Build Alternative provides four travel lanes and turn lanes and a right-of-way of 100 ft, including sidewalks and bike lanes on both sides of the street, which is consistent with the General Plan designation of Barton Road as a Major Highway. The Build Alternatives are also consistent with General Plan Goal 3.4 regarding the provision of an efficient and safe bikeway system in the City and Goal 3.5 regarding the provision of alternative methods of travel because the Build Alternatives would maintain the Class II bicycle lane on Barton Road and would continue the bicycle lane throughout the Project limits. The Build Alternatives support the commercial development pattern along Barton Road and, therefore, are consistent with the goals and policies of the Land Use Element to promote the development of freeway-oriented land uses south of Barton Road and east of I-215.

The Build Alternatives are also consistent with the City of Colton General Plan Mobility Element Goal M-1 and its related policies to provide an integrated and balanced multi-modal transportation network of Complete Streets because it would include facilities for pedestrians and bicycles and would maintain access for transit (buses). Consistent with Goal M-4, the Build Alternatives would provide adequate capacity at a freeway interchange and bridge. Consistent with Goal M-7, the Build Alternatives involve coordination with SANBAG and Caltrans on a regional transportation project.

Because Alternatives 3, 6, and Modified Alternative 7 would improve LOS at the Project area intersections, they are consistent with the SANBAG CMP. In addition, the proposed Project is identified in the 2012 RTP/SCS and is programmed in the 2013 FTIP to reduce traffic congestion and improve operations.

Alternatives 3, 6, and Modified Alternative 7 are consistent with the regional mobility goals of the Cities of Grand Terrace and Colton, the County of San Bernardino, SANBAG, and SCAG. Therefore, the land use changes associated with the Build Alternatives are consistent with the approved land use and transportation plans.

4.1.3 Parks and Recreational Facilities

Grand Terrace Fitness Park is located directly adjacent to a new local road proposed under all of the Build Alternatives as shown in detail in Figures 2, 3, 4, and 10. As shown in the figures, a new local access road (Fitness Park Way) would provide a secondary access to residences along Vivienda Avenue in the northwest quadrant of the interchange in place of the segment of La Crosse Avenue north of Barton Road that would be removed as part of all of the Build Alternatives. During construction of the Project, access to and from the Fitness Park will be maintained during the hours the Fitness Park is open. In the long term, access to and from the Fitness Park will continue to be provided via the driveway on Grand Terrace Road. This requirement is stipulated in the TMP measure for the Project (refer to Chapter 5).

Park patrons would potentially be subject to some construction-related noise during construction of the interchange project, in particular in conjunction with Fitness Park Way planned adjacent to the park. The construction period for Fitness Park Way would be short, however, and the contractor would comply with applicable Caltrans and City requirements in this regard throughout construction.

According to the *Supplemental Noise Study Report* prepared for the Project, the I-215 Bi-County HOV Lane Gap Closure Project sound barrier to be constructed along the

I-215 southbound off-ramp would attenuate traffic noise at several noise receptors in the vicinity of the park. Long-term noise impacts were evaluated based on traffic volumes projected on I-215 and on local roads, including Grand Terrace Road and Vivienda Avenue. The noise levels at the three closest receptors to the Fitness Park, for any of the three Build Alternatives in the design year for the Project (2040), are 61, 60, and 58 dBA L_{eq} , which represent a 0 to 1 dBA increase when compared to the No Build Alternative. A-weighted means that noise levels are weighted based on noise level sensitivity to the human ear. L_{eq} represents an average of the sound energy occurring over a specified period. These levels are below the Noise Abatement Criteria of 67 dBA L_{eq} . Therefore, Grand Terrace Fitness Park would not be impacted by future traffic noise associated with the Project.

4.1.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative does not include any improvements to the interchange or local roads in the Project area; therefore, it would not result in temporary impacts to parks or recreational facilities.

Alternatives 3, 6, and Modified Alternative 7 (Build Alternatives)

Park patrons would be subject to construction noise and dust during construction of the new road; however, the construction period for the road would be short and the Build Alternatives would comply with Caltrans and City of Grand Terrace standards to minimize impacts. There would also be short-term visual impacts due to construction equipment in the area. The three parking spaces proposed for the park on Grand Terrace Road would not be impacted. The wrought iron fence along the southern border of the park would remain in place.

During construction, best management practices would be implemented to prevent storm water runoff from affecting the park as required by local and State regulations. No impacts to water quality in the park vicinity are anticipated.

4.1.3.2 Permanent impacts

Alternative 1 (No Build Alternative)

This alternative does not include any road modification/maintenance projects in the vicinity of Grand Terrace Fitness Park. No impacts would occur.

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FIGURE 10

LEGEND

-  Grand Terrace Fitness Park
-  Geometrics for Alternatives 3, 6 & Modified 7
-  Temporary Construction Easement
-  Proposed Right of Way
-  Existing Fence



SOURCE: Microsoft (5/2010); San Bernardino Cnty. (3/2008, 9/2013)
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I-215/Barton Road Interchange Improvement Project
 Grand Terrace Fitness Park

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Alternatives 3, 6, and Modified Alternative 7 (Build Alternatives)

The Build Alternatives would not require any land from Grand Terrace Fitness Park. The new road would provide the same local access that is currently provided by the northern segment of La Crosse Avenue that would be removed as part of the Project. Alternative 3 would require the full acquisition of Cal Skate Grand Terrace; however, there are replacement properties available that could accommodate the relocation of this business. Alternative 6 and Modified Alternative 7 would require the partial acquisition of Cal Skate Grand Terrace that would remove approximately three parking spaces for both alternatives, which would not substantially impact this business.

4.2 Community Impacts

This section discusses how the physical changes associated with the Project (e.g., new construction, disturbance, and residential and business displacements) would impact the community.

4.2.1 Community Character and Cohesion

4.2.1.1 Temporary Impacts

Alternative 1 (No Build Alternative)

This alternative does not include modifications to the I-215/Barton Road interchange, and there are no planned road modification/maintenance projects on local roadways within the interchange area.¹ During construction of the I-215 Bi-County HOV Lane Gap Closure Project, neighborhoods adjacent to the freeway will be temporarily impacted by ramp closures at the I-215/Barton Road interchange, detours, and closure of the Newport Avenue overcrossing. Avoidance, minimization and/or mitigation measures, including the requirement for a TMP, have been included in the approved environmental documentation for these projects, and no substantial impacts were identified.

Alternatives 3, 6, and Modified Alternative 7 (Build Alternatives)

Construction activities associated with the implementation of the Build Alternatives would result in temporary impacts to residences and businesses adjacent to the I-215/Barton Road interchange, including construction equipment noise and emissions, access restrictions, and detours.

¹ Email correspondence with Richard Shields, City of Grand Terrace, Public Works Director, February 7, 2012.

During construction, access would be maintained for residents and businesses affected by the Build Alternatives.

Road detours would result in some traffic delays for local residents, businesses, and commuters. However, substantial disruptions to the local neighborhoods in the study area are not anticipated. During final design, a TMP will be prepared to address potential detours.

Appropriate detour signage will be developed for the proposed Project. Extensive ramp closures are not anticipated; however, travel times could temporarily increase due to the closure of lanes. During ramp closures at Barton Road, the I-215/Iowa Avenue/La Cadena Drive and I-215/Mount Vernon Avenue/Washington Street interchanges would be available as alternate access points to and from I-215. La Cadena Drive and Mount Vernon Avenue would provide north-south access to Barton Road in the Project vicinity.

Construction impacts would be minimized through compliance with Caltrans standards for noise, emissions, and temporary construction easements (TCEs), and the City of Grand Terrace and City of Colton standards for construction noise (for work within local jurisdictional boundaries), as well as implementation of a comprehensive TMP and public outreach program. No substantial impacts are anticipated.

4.2.1.2 Permanent Impacts

Alternative 1 (No Build Alternative)

This alternative does not include modifications to the I-215/Barton Road interchange, and there are no planned road modification/maintenance projects on local roadways within the interchange area. The I-215 Bi-County HOV Lane Gap Closure Project does not include changes to local circulation or right-of-way acquisition and there will be no permanent community and cohesion impacts. However, congestion in the I-215/Barton Road interchange area would increase.

Alternative 3 (Partial Cloverleaf Interchange)

As shown on Figure 2, the eight residences that would be potentially displaced under Alternative 3 are interspersed in a commercial area and do not demonstrate indicators of high community cohesion. In addition, residents living in properties adjacent to I-215 that would be acquired would have an opportunity to relocate to other residential areas away from a freeway. Due to the fragmented nature of the residential community, and the limited cohesion indicated by the existing demographic profile,

the residential acquisitions would not divide an existing neighborhood or fragment a cohesive neighborhood.

As shown in Table O and Figure 2, Alternative 3 would potentially displace 31 businesses. Based on a review by City staff,¹ the businesses that would be displaced are listed by business name and Build Alternative in Table O.

Based on communication with City of Grand Terrace staff, it was determined that many businesses to be displaced cater to local as well as to regional clientele; however, there are several that likely serve mostly local clientele.² For purposes of this table, “local” refers to the surrounding neighborhood, as well as adjacent communities such as Highgrove (less than a 2 mi radius from the Project area), and “regional” would generally be areas north of I-10, west of the Santa Ana River, east of the Grand Terrace city boundary and south of the Highgrove community. Businesses catering to regional clientele and pass-through traffic, such as the gasoline stations, are typically less affected by relocation than those that serve only local clientele that has been built up over many years.

For example, the TV repair, tattoo studio, auto repair, kitchen showroom, beauty supply, dental lab, flooring, plumbing, roller-skating, plumbing, pool products, real estate, tax, and loan services, boutique, sprinkler, hose, and the animal clinic businesses are specialty businesses that are expected to draw customers from a larger area than the local community. The gasoline stations serve the local community as well as pass-through traffic on Barton Road and I-215. The restaurants serve local residents and employees as well as people from the surrounding area. There would be no displacement of other neighborhood-serving businesses/facilities such as churches or grocery stores.

Because the majority of the businesses serve adjacent communities, it is expected that they could maintain their clientele after relocation, although there would be a loss of revenue between the closing of the old business and the establishment of the business at the new location.

¹ Email from Richard Shields, City of Grand Terrace Public Works Director, June 11, 2013.

² Telephone conversation with Sandra Molina, Planning Department, City of Grand Terrace, August 23, 2012.

Table O Business Displacements by Build Alternative

Business Name	Type of Business	Service Area	Sales or Service ¹	City	Alt 3	Alt 6	Modified Alt 7
Genesis Hair	Hair salon	Local	Sales/Service	Grand Terrace	X	X	X
All TV VCR	Electronics repair	Local/Regional	Service	Grand Terrace	X	X	X
Empire Cash Register	Cash register sales and repair	Regional	Service	Grand Terrace	X	X	X
Mori Hokana Smile Solutions	Dental lab	Local/Regional	Sales/Service	Grand Terrace	X	X	X
Animal Emergency Clinic	Pet clinic	Local/Regional	Service	Grand Terrace	X	X	X
Diane Johnson (enrolled agent)	Taxes	Local	Sales/Service	Grand Terrace	X	X	X
Auto Diagnostic Service aka Automotive Network Solutions	Auto repair	Local	Sales	Grand Terrace	X	X	X
The Paragon Tattoo and Gallery	Tattoo	Local	Service	Grand Terrace	X	X	X
Vintage Boutique	Clothing sales	Local	Service	Grand Terrace	X	X	X
The Rec Center	Business services	Local	Sales	Grand Terrace	X	X	X
Terra Loma Real Estate, Inc.	Real estate	Local/Regional	Service	Grand Terrace	X	X	X
Ornell Fire Sprinklers	Sprinklers	Local/Regional	Sales	Grand Terrace	X	X	X
Financial Solutions	Financial planning/taxes	Local/Regional	Service	Grand Terrace	X	X	X
Soft Touch Poodle Palace	Pet grooming	Local	Sales/Service	Grand Terrace	X	X	X
Demetri's Burgers	Restaurant	Local	Sales	Grand Terrace	X	X	X
On Point Tax Services	Taxes	Local/Regional	Service	Grand Terrace	X	X	X
PDS Transportation	Railroad	Service	Service	Grand Terrace	X	X	X
Loan Savings/American Professional Group	Loans	Local/Regional	Service	Grand Terrace	X	X	X
Shell Station aka Keromina Market Place/Circle K Convenience Store	Gas station and food mart	Local	Sales	Grand Terrace	X		
Auto Zone	Auto parts and accessories	Local	Sales	Grand Terrace	X	X	X
Blue Mountain Collision Center	Auto Repair/Restoration	Local	Service	Grand Terrace	X		
WinBath & Kitchen Showroom/DarCrest Vehicle Storage	Bath and kitchen furniture sales/vehicle storage	Local/Regional	Sales/Service	Colton	X		
Orkin	Pest control services	Local/Regional	Sales/Service	Colton	X		
Hose-Man	Hydraulic/industrial hose sales and service	Local/Regional	Sales/Service	Colton	X		
Cal Skate	Recreation	Local/Regional	Sales/Service	Grand Terrace	X		
Quick Stop (Arco Station)	Gas station and food mart	Local	Sales	Grand Terrace	X		
Roblee's Carpet & Flooring	Tile and carpet sales, carpet cleaning	Local	Sales/Service	Grand Terrace	X		
Superior Pool Products	Wholesale distributor of swimming pool supplies	Regional	Sales/Service	Grand Terrace	X		X
Winnelson Wholesale Plumbing	Wholesale plumbing	Regional	Sales/Service	Grand Terrace	X		X
Essco	Wholesale electric	Regional	Sales/Service	Grand Terrace	X		
Miguel's Jr.	Restaurant	Local	Sales	Grand Terrace	X		

¹ Based on the business type, a determination was made regarding whether or not the business likely collected sales tax.

As detailed on the City of Grand Terrace's website,¹ there are 9 registered auto-repair-related businesses, 1 pet grooming service, 7 tax companies, 13 beauty and hair salons, 3 dental labs, and 12 restaurants within a 2 mi radius of the interchange, in addition to the businesses that would be acquired under Alternative 3. There were also an additional 9 pet clinics within a 5 mi radius of the interchange,² and 2 tattoo studios are located within approximately 5 mi.³ Therefore, there are replacement businesses available to the local community in case the displaced businesses could not be relocated near the interchange area. For these reasons, it is not expected that business displacements under Alternative 3 would result in substantial impacts to community character and cohesion.

The sound barriers that will be constructed as part of the I-215 Bi-County HOV Lane Gap Closure Project, adjacent to Grand Terrace Elementary School along the northbound I-215 on-ramp and adjacent to the Grand Royal Mobile Estates at the southbound I-215 off-ramp, will reduce traffic noise associated with the proposed Project. The I-215 Bi-County HOV Lane Gap Closure Project sound barriers are anticipated to be completed by late 2014.

A portion of the sound barrier that will be constructed adjacent to Grand Royal Mobile Estates as part of the I-215 Bi-County HOV Lane Gap Closure Project would be removed (approximately 650 ft of the barrier) to allow for reconstruction of the I-215 southbound off-ramp and the new southbound loop on-ramp that are part of Alternative 3. The removed portion of the sound barrier would be reconstructed along the proposed State right-of-way line for Alternative 3.

As discussed in the Noise Abatement Decision Report (NADR) for the Project, other sound barriers were modeled for Alternative 3. Only the sound barriers that meet the Caltrans Traffic Noise Analysis Protocol requirements and that are not already included as part of the I-215 Bi-County HOV Lane Gap Closure Project are proposed for each Build Alternative. For Alternative 3, no additional sound barriers are proposed.

As shown in Figure 2, local streets in the neighborhoods would be modified, which would change the circulation pattern in these areas. For instance, on the west side of

¹ <http://www.cityofgrandterrace.org/index.aspx?NID=501>, accessed August 12, 2013.

² <http://www.vetstreet.com/find-a-veterinarian-animal-hospital/california/grand-terrace/?radius=5>, accessed August 12, 2013.

³ <http://www.yellowpages.com/grand-terrace-ca/tattoos>, accessed August 12, 2013.

I-215, a new east-west road would be constructed between Grand Terrace Mobile Home Park and the single-family residential area that connects to Vivienda Avenue and Grand Terrace Road. This would provide an alternative route to this area, since La Crosse Avenue in the northwest quadrant would be removed as a result of the new southbound I-215 freeway ramps. In addition, Grand Terrace Road would be realigned and would connect with the extension of De Berry Street at Barton Road. This would provide an alternative route to this area, since La Crosse Avenue in the southwest quadrant would be removed as a result of the new southbound I-215 freeway on-ramp. Because the circulation changes would maintain access to area properties, no substantial impacts would occur.

Alternative 6 (Modified Cloverleaf Interchange)

Alternative 6 would potentially displace 2 residences and 19 businesses (Figure 3). All displacements would occur in the City of Grand Terrace.

Alternative 6 would result in fewer residential and business displacements than Alternative 3. Based on the discussion provided in Section 4.2.1.2 for Alternative 3, displacements under Alternative 6 would not result in substantial community character and cohesion impacts due to residential and business displacements.

Like Alternative 3, a portion of the sound barrier that will be constructed adjacent to Grand Royal Mobile Estates along the southbound I-215 off-ramp as part of the approved I-215 Bi-County HOV Lane Gap Closure Project would be removed (approximately 250 ft of the barrier) to allow for reconstruction of the I-215 southbound off-ramp and the new southbound on-ramp that are part of Alternative 6. The removed portion of the sound barrier would be reconstructed along the proposed State right-of-way line for Alternative 6.

Like Alternative 3, the sound barriers that will be constructed as part of the I-215 Bi-County HOV Lane Gap Closure Project adjacent to Grand Terrace Elementary School along the northbound I-215 on-ramp and adjacent to the Grand Royal Mobile Estates will reduce traffic noise associated with the proposed Project.

As discussed in the Noise Abatement Decision Report (NADR) for the Project, other sound barriers were modeled for Alternative 6. For Alternative 6, there is the potential for a sound barrier to be constructed adjacent to Grand Terrace Mobile Home Park and Terrace Village RV Park; however, construction of this barrier is dependent on surveys of property owners and completion of final design.

Like Alternative 3, on the west side of I-215, a new east-west road would be constructed between Grand Terrace Mobile Home Park and the single-family residential area, which connects to Vivienda Avenue and Grand Terrace Road. This would provide an alternative route to this area, since La Crosse Avenue in the northwest quadrant would be displaced by new freeway ramps (Figure 3). Because this circulation change would maintain access to area properties, no substantial impacts would occur.

***Modified Alternative 7 (Modified Cloverleaf/Diamond Interchange)
(Locally Preferred Alternative)***

As shown in on Figure 4, Modified Alternative 7 would potentially displace 2 residences and 21 businesses. All displacements would occur in the City of Grand Terrace.

Modified Alternative 7 would result in fewer residential and business displacements than Alternative 3. Based on the discussion provided in Section 4.2.1.2 for Alternative 3, acquisition of these properties under Modified Alternative 7 would not result in substantial community character and cohesion impacts due to residential and business displacements.

A portion of the sound barrier that will be constructed adjacent to Grand Royal Mobile Estates along the southbound I-215 off-ramp as part of the approved I-215 Bi-County HOV Lane Gap Closure Project would be modified (approximately 285 ft of the barrier) to allow for reconstruction of the I-215 southbound off-ramp and the new southbound on-ramp that are part of Modified Alternative 7. The removed portion of the sound barrier would be reconstructed along the proposed State right-of-way line for Modified Alternative 7.

The sound barriers that will be constructed as part of the I-215 Bi-County HOV Lane Gap Closure Project adjacent to Grand Terrace Elementary School along the northbound I-215 on-ramp and adjacent to the Grand Royal Mobile Estates will reduce traffic noise associated with the proposed Project. The I-215 Bi-County HOV Lane Gap Closure Project sound barriers are anticipated to be completed by late 2014.

As discussed in the Supplemental NADR for the Project, other sound barriers were modeled for Modified Alternative 7. Only the sound barriers that meet the Caltrans Traffic Noise Analysis Protocol requirements and that are not already included as part of the I-215 Bi-County HOV Lane Gap Closure Project, are proposed for each Build

Alternative. For Modified Alternative 7, no additional sound barriers are proposed, other than the modified section at the I-215 southbound off-ramp described above.

Like Alternatives 3 and 6, on the west side of I-215, a new east-west road would be constructed between Grand Terrace Mobile Home Park and the single-family residential area, which connects to Vivienda Avenue and Grand Terrace Road. This would provide an alternative route to this area, since La Crosse Avenue in the northwest quadrant would be removed as a result of the new southbound I-215 ramps (Figure 4). Because this circulation change would maintain access to area properties, no substantial impacts would occur.

4.2.2 Community Facilities

4.2.2.1 Temporary Impacts

Alternative 1 (No Build Alternative)

This alternative does not include modifications to the I-215/Barton Road interchange, and there are no planned road modification/maintenance projects on local roadways within the interchange area. The approved I-215 Bi-County HOV Lane Gap Closure Project will temporarily impact circulation and access in the vicinity of the interchange. Implementation of the TMP for this Project will minimize impacts, and no substantial impacts are anticipated.

A sound barrier will be constructed adjacent to Grand Terrace Elementary School as part of the I-215 Bi-County HOV Lane Gap Closure Project, and a TCE will be required.

Alternatives 3, 6, and Modified Alternative 7 (Build Alternatives)

Although there may be lane closures on Barton Road west of Vivienda Avenue during construction in this area, vehicular access to the school from Vivienda Avenue would be maintained. Pedestrian access to the Grand Terrace Elementary School administrative building from Barton Road west of Vivienda Avenue would be provided through the walkway to the Lions Club facility. The main entrance to the school on Vivienda Avenue would not be affected. Therefore, the school would be provided with continuous access to the buildings. The TMP will address school access and circulation needs in order for the school to fully operate during interchange reconstruction.

Because the Project is located in the vicinity of the existing bicycle lane on westbound Barton Road, the TMP will address the need for temporary closure and/or detours of the existing bicycle lane.

4.2.2.2 Permanent Impacts

Alternative 1 (No Build Alternative)

Alternative 1 would not reconstruct the existing I-215 interchange and there are no planned road modification/maintenance projects on local roadways within the interchange area. The I-215 Bi-County HOV Lane Gap Closure Project would not permanently impact Grand Terrace Elementary School or other community facilities.

Alternative 3 (Partial Cloverleaf Interchange)

Alternative 3 includes improvements that would affect public facilities. This alternative requires acquisition of a sliver of land from Grand Terrace Elementary School at the corner of Barton Road and Vivienda Avenue to allow space for the right-turn lane from Vivienda Avenue to Barton Road at this reconfigured intersection. A sliver of land from Grand Terrace Elementary School along Barton Road is also required to accommodate the widening of Barton Road as well as the northbound I-215 loop on-ramp and off-ramp configuration. Both acquisitions are minor and would not affect the use of the school property. Parking and access to the school would not be impacted. Alternative 3 would continue the bicycle lane on Barton Road from Michigan Avenue west over the new Barton Road overcrossing.

Alternative 6 (Modified Cloverleaf Interchange)

Alternative 6 includes improvements that would affect public facilities. Similar to Alternative 3, Alternative 6 requires acquisition of a sliver of land on Grand Terrace Elementary School property at the corner of Barton Road and Vivienda Avenue to allow space for the right-turn lane from Vivienda Avenue to Barton Road at this reconfigured intersection. A sliver of land from Grand Terrace Elementary School along Barton Road is also required to accommodate the widening of Barton Road. However, the required right-of-way would not affect the use of the school property, and parking and access to the school would not be impacted. Alternative 6 would continue the bicycle lane on Barton Road from Michigan Avenue west over the new Barton Road overcrossing.

Modified Alternative 7 (Modified Cloverleaf/Diamond Interchange) (Locally Preferred Alternative)

A sliver of land from Grand Terrace Elementary School along Barton Road is required to accommodate the widening of Barton Road. Modified Alternative 7 would continue the bicycle lane on Barton Road from Michigan Avenue west over the new Barton Road overcrossing and through the roundabout.

4.2.3 Relocations and Real Property Acquisition

4.2.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative would not require temporary right-of-way. The I-215 Bi-County HOV Lane Gap Closure Project will require TCEs in the Project area. After construction, all of the TCEs will be restored to their original pre-Project conditions.

Alternatives 3, 6, and Modified Alternative 7 (Build Alternatives)

As shown in Table P, Alternative 3 would require TCEs from approximately 18 parcels, Alternative 6 would require TCEs from approximately 15 parcels, and Modified Alternative 7 would require TCEs from approximately 3 parcels in order to reconstruct the ramps, widen Barton Road, and construct walls and other structural components.

After construction, all of the TCEs would be restored to their original pre-Project conditions.

4.2.3.2 Permanent Impacts

Alternative 1 (No Build Alternative)

The No Build Alternative would not permanently acquire right-of-way in the I-215/Barton Road interchange area. The I-215 Bi-County HOV Lane Gap Closure Project would not permanently acquire right-of-way within the Project area that would result in displacements. No impacts would occur.

Alternative 3 (Partial Cloverleaf Interchange)

As shown in Tables Q and R and on Figure 2, Alternative 3 would potentially result in 30 full acquisitions and 42 partial acquisitions. A total of 28 potential full acquisitions are expected in the City of Grand Terrace, and 2 potential full acquisitions are expected in the City of Colton.

According to the DRIS, it is anticipated that the businesses potentially displaced by the Build Alternatives could be relocated within the two Cities, with the exception of the two gasoline stations potentially displaced by Alternative 3, which may need to be relocated to adjacent jurisdictions. The majority of replacement business locations are within the City of Colton rather than the City of Grand Terrace. Sufficient housing is available within the City of Grand Terrace and Colton for residential relocations for all of the Build Alternatives. It is anticipated that the properties affected by partial acquisitions would not result in displacements.

Table P Potential Temporary Construction Easements Anticipated for the Build Alternatives

Alternative 3 APNs	Alternative 6 APNs	Modified Alternative 7 APNs
0275-212-04	0275-211-17	0275-211-17
0275-212-09	0275-211-43	0275-211-43
0275-212-15	1167-231-02	0275-242-12
0275-212-16	0275-211-53	
0275-212-17	0275-212-04	
0275-212-18	0275-212-09	
0275-242-04	0275-212-15	
0275-242-05	0275-231-28	
0275-242-06	0275-232-09	
0275-242-07	0275-271-12	
0275-242-08	0275-271-13	
0275-242-26	0275-271-14	
0275-271-12	0275-271-15	
0275-271-13	0275-271-16	
0275-271-14	0275-271-17	
0275-271-15		
0275-271-16		
1167-141-03		

Source: OPC, 2013.

Table Q Summary of Potential Property Acquisitions for the Build Alternatives

Build Alternative	Permanent Acquisitions	
	Full	Partial
	Number of Parcels	Number of Parcels
Alternative 3	Total: 30 Residential: 8 Commercial/Industrial: 16 Vacant Land: 6	Total: 42+/- Residential: 10 Commercial/Industrial: 13 Vacant Land: 16 Public Land: 2 Railroad: 1
Alternative 6	Total: 10 Residential: 2 Commercial/Industrial: 4 Vacant Land: 4	Total: 43+/- Residential: 5 Commercial/Industrial: 21 Vacant Land: 15 Public Land: 2
Modified Alternative 7	Total: 8 Residential: 2 Commercial/Industrial: 6	Total: 41 +/- Residential: 7 Commercial/Industrial: 16 Vacant Land: 15 Public Land: 3

Source: OPC, 2013.

Table R Potential Full Acquisitions Anticipated Under Alternative 3

APN	Property Type	Present Use	Business Names	Sales or Service ¹	City
0275-211-17	Residential	SFR	N/A	N/A	Grand Terrace
0275-211-43	Vacant	Residential Yard	N/A	N/A	Grand Terrace
0275-223-59	Residential	SFR	N/A	N/A	Grand Terrace
0275-231-25	Residential	SFR	N/A	N/A	Grand Terrace
0275-223-12	Residential	SFR	N/A	N/A	Grand Terrace
0275-223-16	Commercial	Business Offices (Vacant)	N/A	N/A	Grand Terrace
0275-223-60	Residential	SFR/Storage	N/A	N/A	Grand Terrace
0275-231-46	Commercial	Retail Strip	Genesis Hair	Sales/Service	Grand Terrace
			All TV VCR	Service	
			Empire Cash Register	Service	
			Mori Hokana Smile Solutions	Sales/Service	
			Animal Emergency Clinic	Service	
			Diane Johnson (enrolled agent)	Sales/Service	
			Auto Diagnostic Service aka Automotive Network Solutions	Sales	
			The Paragon Tattoo and Gallery	Service	
			Vintage Boutique	Service	
			The Rec Center	Sales	
			Terra Loma Real Estate, Inc.	Service	
			Ornell Fire Sprinklers	Sales	
			Financial Solutions	Service	
0275-231-68	Commercial	Offices/Restaurant	Soft Touch Poodle Palace (Pet Salon)	Sales/Service	Grand Terrace
			Demetri's Burgers	Sales	
			On Point Tax Services	Service	
			PDS Transportation	Service	
0275-232-05	Residential	SFR	Loan Savings/American Professional Group	Service	Grand Terrace
			N/A	N/A	
0275-232-10	Residential	SFR	N/A	N/A	Grand Terrace
0275-232-09	Residential	SFR	N/A	N/A	Grand Terrace
1167-121-01	Vacant	Vacant Lot	N/A	N/A	Grand Terrace
1167-121-10	Vacant	Vacant Lot	N/A	N/A	Grand Terrace
1167-121-11	Commercial	Auto Repair	Blue Mountain Collision Center	Service	Grand Terrace
1167-131-01	Commercial	Stores	WinBath & Kitchen Showroom/DarCrest Vehicle Storage	Sales/Service	Colton
			Orkin	Sales/Service	
1167-131-02	Commercial	Stores	Hose-Man	Sales/Service	Colton
			N/A	N/A	
1167-131-12	Vacant	Transmission Lines	N/A	N/A	Grand Terrace
1167-141-01	Commercial	Service Station	Shell Station aka Keromina Market Place/Circle K Convenience Store	Sales	Grand Terrace
			Quick Stop (Arco Station)	Sales	
1167-141-02	Commercial	Service Station	Quick Stop (Arco Station)	Sales	Grand Terrace
1167-141-04	Commercial	Recreational	Cal Skate	Sales/Service	Grand Terrace
1167-141-05	Commercial	Office Building	N/A	N/A	Grand Terrace
1167-141-08	Vacant	Vacant Lot	N/A	N/A	Grand Terrace
1167-141-09	Commercial	Retail	Roblee's Carpet & Flooring	Sales/Service	Grand Terrace
1167-141-10	Commercial	Service/Retail	Superior Pool Products	Sales/Service	Grand Terrace
1167-141-11	Commercial	Service/Retail	Winnelson Wholesale Plumbing	Sales/Service	Grand Terrace
1167-141-12	Commercial	Service/Office	Essco	Sales/Service	Grand Terrace
1167-151-08	Vacant	Vacant Lot	N/A	N/A	Grand Terrace
1167-231-10	Commercial	Service/Retail	Auto Zone	Sales	Grand Terrace
1167-231-20	Commercial	Fast Food	Miguel's Jr.	Sales	Grand Terrace

Sources: County of San Bernardino Assessor's data, 2013; OPC 2013.

¹ Based on the business type, a determination was made regarding whether or not the business likely collected sales tax.

Additional relocation resources for commercial and industrial uses (including gasoline stations) may become available in the replacement area. Furthermore, adjacent Cities (e.g., San Bernardino) may be considered for relocations, if necessary. A search of surrounding communities indicated that several gasoline stations are available for sale in the City of San Bernardino. Therefore, given recent economic conditions, adequate relocation resources should be available for nonresidential displacees.

With exception of the gasoline stations, which serve pass-through traffic and rely on good visibility from surrounding roadways, the remaining businesses are not in high visibility locations and do not display elevated signs. The gasoline stations would need to be relocated to suitable areas based on visibility, appropriate subsurface conditions, and appropriate geographic distance between nearby stations. Because the majority of the businesses are not expected to be directly dependent on the local neighborhoods for survival and do not rely on high visibility from roadways, no substantial impacts are anticipated.

Alternative 6 (Modified Cloverleaf Interchange)

As shown in Tables Q and S and on Figure 3, Alternative 6 would result in 10 potential full acquisitions and 43 potential partial acquisitions. All full acquisitions would occur in the City of Grand Terrace. Alternatives 6 would not require the relocation of any gasoline stations. Based on the discussion provided in Section 4.2.3.2 for Alternative 3, relocations and real property acquisitions under Alternative 6 would not result in substantial impacts.

***Modified Alternative 7 (Modified Cloverleaf/Diamond Interchange)
(Locally Preferred Alternative)***

As shown in Tables Q and T and on Figure 4, Modified Alternative 7 would potentially result in 8 full acquisitions and 41 partial acquisitions. All full acquisitions would occur in the City of Grand Terrace. Modified Alternative 7 would not require the relocation of any gasoline stations. Based on the discussion provided in Section 4.2.3.2 for Alternative 3, relocations and real property acquisitions under Modified Alternative 7 would not result in substantial impacts.

Table S Potential Full Acquisitions Anticipated Under Alternative 6

APN	Property Type	Present Use	Business Names	City
0275-231-46	Commercial	Retail Strip	Genesis Hair	Grand Terrace
			All TV VCR	
			Empire Cash Register	
			Mori Hokana Smile Solutions	
			Animal Emergency Clinic	
			Diane Johnson (enrolled agent)	
			Auto Diagnostic Service aka Automotive Network Solutions	
			The Paragon Tattoo and Gallery	
			Vintage Boutique	
			The Rec Center	
			Terra Loma Real Estate, Inc.	
			Ornell Fire Sprinklers	
			Financial Solutions	
Soft Touch Poodle Palace (Pet Salon)				
0275-231-68	Commercial	Offices/ Restaurant	Demetri's Burgers	Grand Terrace
			On Point Tax Services	
			PDS Transportation	
			Loan Savings/American Professional Group	
0275-231-25	Residential	SFR	N/A	Grand Terrace
1167-141-05	Commercial	Office Building	N/A	Grand Terrace
1167-151-01	Vacant	Vacant Lot	N/A	Grand Terrace
1167-161-01	Vacant	Vacant Lot	N/A	Grand Terrace
1167-161-02	Vacant	Vacant Lot	N/A	Grand Terrace
1167-231-10	Commercial	Service/Retail	Auto Zone	Grand Terrace
0275-232-05	Residential	SFR	N/A	Grand Terrace
1167-151-08	Vacant	Vacant Lot	N/A	Grand Terrace

Source: OPC, 2013.

¹ Based on the business type, a determination was made regarding whether or not the business likely collected sales tax.

Table T Potential Full Acquisitions Anticipated Under Modified Alternative 7

APN	Property Type	Present Use	Business Names	City
0275-231-46	Commercial	Retail Strip	Genesis Hair	Grand Terrace
			All TV VCR	
			Empire Cash Register	
			Mori Hokana Smile Solutions	
			Animal Emergency Clinic	
			Diane Johnson (enrolled agent)	
			Auto Diagnostic Service aka Automotive Network Solutions	
			The Paragon Tattoo and Gallery	
			Vintage Boutique	
			The Rec Center	
			Terra Loma Real Estate, Inc.	
			Ornell Fire Sprinklers	
			Financial Solutions	
Soft Touch Poodle Palace (Pet Salon)				
0275-231-68	Commercial	Office/ Restaurant	Demetri's Burgers	Grand Terrace
			On Point Tax Services	
			PDS Transportation	
			Loan Savings/American Professional Group	
0275-231-25	Residential	SFR	N/A	Grand Terrace
1167-141-05	Commercial	Office Building	N/A	Grand Terrace
0275-232-05	Residential	SFR	N/A	Grand Terrace
1167-141-10	Commercial	Service/Retail	Superior Pool Products	Grand Terrace
1167-141-11	Commercial	Service/Retail	Winnelson Wholesale Plumbing	Grand Terrace
1167-231-10	Commercial	Service/Retail	Auto Zone	Grand Terrace

Source: OPC, 2013.

¹ Based on the business type, a determination was made regarding whether or not the business likely collected sales tax.

4.2.4 Environmental Justice

All projects involving a federal action (funding, permit, or land) must comply with EO 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, signed by President Clinton on February 11, 1994. This EO directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. The term “minority” includes persons who identify themselves as Black/African-American, Asian, Native Hawaiian/Pacific Islander, Native American/Native Alaskan, or of Hispanic/Latino origin. “Low-income” is defined based on the Department of Health and Human Services poverty guidelines. For 2010 (the year of the Census data used for this analysis), this was \$22,050 for a family of four.

The discussion of environmental justice that follows has been prepared in accordance with the applicable guidance for addressing environmental justice, including: United States Department of Transportation Order 5610.2 (April 15, 1997), FHWA Order 6640-23 (December 2, 1998), the FHWA Western Resource Center Interim Guidance (March 2, 1999), the FHWA California Division Environmental Justice Environmental Documents Checklist, and Caltrans Desk Guide – Environmental Justice in Transportation Planning and Investments (January 2003).

Consistent with this guidance, the environmental justice analysis for the proposed Project describes: (1) the existing study area population and the presence of minority and low-income population groups in the study area; (2) potential adverse effects and measures to avoid or minimize those effects for all study area population groups, including minority and low-income population groups; (3) potential disproportionately high and adverse effects on minority and low-income population groups; and (4) community outreach and public involvement efforts.

4.2.4.1 Existing Population

The percentage of racial minority residents was calculated by adding the number of Black, Asian, and American Indian/Native Alaskan, and Hawaiian/Pacific Islander residents (one race only, as identified by the 2010 Census). The percentage of the racial minority, Hispanic, and low-income populations for each affected census tract, the Cities, and the County is shown below. As identified in Table U, Census Tracts 71.07, 71.09, and 71.10 have the highest percentages of racial minorities in the study area; these percentages are twice as large as the percentages in the City of Grand Terrace and Colton as a whole. The majority population in Census Tract 71.07 and the City of Colton is a minority race and/or Hispanic. Census Tract 71.06 has a substantially lower percentage of racial minorities in the study area (13 percent) which is consistent with the City of Grand Terrace percentage. Census Tracts 71.06, 71.09, 71.10, and the City of Grand Terrace reported the lowest percentages of Hispanics, whereas Census Tract 71.07 reported the highest percentage of Hispanics, which is higher than the County's percentage. Overall, the City of Colton has the highest percentage of Hispanics in the study area.

As shown in Table U, the percentage of persons living below the poverty level varies in the study area census tracts. Census Tract 71.07 has the largest percentage of persons living below the poverty level, whereas Census Tract 71.10 has the lowest percentage of such individuals. The percentage of persons living below the

Table U Minority and Low-Income Demographics

Area	Percent			Median Household Income ²
	Racial Minorities ¹	Hispanics ¹	Below Poverty Level ²	
County of San Bernardino	16	49	16	\$55,853
City of Grand Terrace	14	39	6	\$64,337
City of Colton	16	71	22	\$41,788
71.06 (City of Grand Terrace)	13	41	10	\$68,446
71.07 (City of Grand Terrace and City of Colton)	25	53	39	\$32,637
Census Tract 71.09 (City of Grand Terrace and City of Colton)	26	39	18	\$38,684
Census Tract 71.10 (City of Colton and City of San Bernardino)	33	39	4	\$81,206

Source: U.S. Census Bureau, American FactFinder, <http://factfinder2.census.gov>; site accessed December 5, 2011.

¹ 2010 Census, Table SF DP1. Racial minorities include individuals who identify themselves as Black/African-American, Asian, Native Hawaiian/Pacific Islander, Native American/Native Alaskan (one race only) on the U.S. Census. The Hispanic population is not considered a race but rather an ethnicity; therefore, Hispanics can be of any race.

² 2007-2011 ACS, Table DP03.

poverty level in Census Tracts 71.07 and 71.09 and in the City of Colton is higher than the County percentage.

Census Tract 71.07 represents the least affluent population, with a relatively low median household income, well below that of the County. This census tract is west of I-215 between the Riverside County line and the Santa Ana River. In addition, the median household income for the City of Colton is lower than the median household income for the County. Census Tract 71.10 represents the most affluent population among the study area census tracts. This census tract is in the northern portion of the City of Colton between Washington Street and I-10.

Based on environmental justice indicators, portions of the Project area appear to contain environmental justice populations. All census tracts except Census Tract 71.06 have a racial minority population that is higher than the County, the City of Grand Terrace, and the City of Colton averages. This census tract is located in the southwest portion of the City of Grand Terrace between Barton Road and the Riverside County line. Overall, Census Tract 71.06 and the City of Grand Terrace have lower percentages of racial minorities, Hispanics, and persons living below the poverty level than the County. The City of Grand Terrace has a primarily White population (66 percent) and a relatively low percentage of persons living below the poverty level (6 percent). Census Tract 71.07 has higher percentages of racial minorities, Hispanics, and persons living below the poverty level than the County.

The City of Colton is generally characterized by higher percentages of racial minorities, Hispanics, and persons living below the poverty level. Although certain portions of the study area contain environmental justice populations (Census Tracts 71.07, 71.09, and 71.10), the Project is primarily within the City of Grand Terrace and only a small portion is within the City of Colton. All of the residential properties in the Project area and vicinity are within the City of Grand Terrace, which, as described above, does not contain a substantial environmental justice population .

4.2.4.2 Adverse Effects on Overall Population

Noise, air quality, traffic, water quality, hazardous waste, cultural resources, natural environment, and relocation impact technical studies have been conducted in order to determine the potential for the proposed Project to result in adverse effects on all segments of the general population, including minority and low-income population groups. These studies determined that impacts would not be adverse with compliance with Caltrans standards; local, State, and federal regulations; and avoidance, minimization, and mitigation measures.

Residential displacements under the Build Alternatives would occur only in the City of Grand Terrace.

4.2.4.3 Alternative 1 (No Build Alternative)

This alternative does not include modifications to the I-215/Barton Road interchange. There are no planned road modification/maintenance projects on local roadways within the interchange area.

4.2.4.4 Alternative 3 (Partial Cloverleaf Interchange)

Alternative 3 would result in eight residential displacements from Census Tract 71.07 within the City of Grand Terrace. Census Tract 71.07 has an ethnically diverse population, with a large Hispanic minority group, a higher poverty level, a lower median household income, and a lower median household income than the County average; however, the City of Grand Terrace, overall, has a lower minority population, a lower poverty level, and a higher median household income than the County average. Therefore, acquisitions under Alternative 3 may have the potential to impact low-income populations.

When compared to the other Build Alternatives, Alternative 3 requires acquisition of the most properties and has the largest footprint. Alternative 3 has the greatest change to drainages, which has the potential to affect biological resources and water quality. Noise, air quality, hazardous waste, and utilities impacts would be similar among the

Build Alternatives because the Project would add capacity at the interchange, and the footprints of the Build Alternatives are in the vicinity of the same hazardous sites of environmental concern and would involve relocation of utilities.

4.2.4.5 Alternative 6 (Modified Cloverleaf Interchange)

Alternative 6 would result in two residential displacements in Census Tract 71.07. Given the low number of residential displacements, Alternative 6 would not substantially impact low-income and minority populations.

4.2.4.6 Modified Alternative 7 (Modified Cloverleaf/Diamond Interchange) (Locally Preferred Alternative)

Modified Alternative 7 would result in the same two residential displacements in Census Tract 71.07 as Alternative 6. Given the low number of residential displacements, Modified Alternative 7 would not substantially impact low-income and minority populations. Because Modified Alternative 7 has the least amount of disturbance, it has incrementally lower impacts than the other Build Alternatives.

4.2.4.7 Potential Disproportionately High and Adverse Effects

The determination of whether or not the effects of the proposed Project are disproportionately high and adverse depends on whether (1) the effects of the Project are predominantly borne by a minority or low-income population, or (2) the effects of the Project are appreciably more severe or greater in magnitude on minority or low-income populations compared to the effects on nonminority or non-low-income populations (refer to FHWA Western Resource Center Interim Guidance – Addressing Environmental Justice in the Environmental Assessment/Environmental Impact Statement (EA/EIS) [1999]).

Based on the criteria used as the basis for evaluating environmental justice (minority groups, median household income, and poverty level), the Build Alternatives could impact minority and low-income populations with regards to temporary noise, dust, traffic congestion/detours impacts and changes to community character and visual quality due to ramp realignments and loss of businesses. However, since all interchange users (not just minority and low-income populations) would be subjected to traffic congestion and detours during construction, all neighboring uses (including both environmental justice and non-environmental justice populations) would experience temporary noise and dust impacts during construction, and all residents and workers in the vicinity of the Project (regardless of their minority status or income level) would experience changes to community character, visual quality, and

the loss of businesses following the completion of the Project, these impacts would be comparable for all affected populations in proximity to the Project and would not be appreciably more severe or greater in magnitude in a particular area. Furthermore, all of the residential properties in the Project area and vicinity are within the City of Grand Terrace, which does not contain substantial minority or low-income populations. Therefore, the Project would not cause disproportionately high and adverse effects on minority or low-income populations.

Residents in the vicinity of the interchange would be temporarily impacted by ramp closures, detours, dust, and noise during construction activities, and these impacts would be minimized through compliance with Caltrans standards; other local, State, and federal regulations; and avoidance, minimization, and/or mitigation measures. Residents that are displaced would be relocated consistent with Caltrans requirements. Circulation would be modified as discussed in detail in Section 4.4.

4.2.4.8 Other Measures to Minimize Adverse Effects

As part of the Project planning and development process, efforts were taken to avoid or minimize impacts to public services, sensitive environments, and the overall community. Additional measures to minimize effects to minority and low-income populations have been included in Chapter 5.0.

4.2.4.9 Project Benefits

The I-215/Barton Road interchange is an existing facility, and the interchange improvements will benefit all populations equally in that traffic congestion would be reduced. In addition, displaced residents have the potential to be relocated to residential areas away from a freeway. The Project would also provide employment during the construction period.

4.2.4.10 Environmental Justice Determination

Alternative 1 (No Build Alternative)

This alternative does not include modifications to the I-215/Barton Road interchange, and there are no planned road modification/maintenance projects on local roadways within the interchange area. The I-215 Bi-County HOV Lane Gap Closure Project will temporarily impact circulation and access within the interchange project area; however, impacts would be comparable for all affected populations in proximity to the Project. All residents that utilize the interchange would be affected. These impacts have been analyzed in the Project's environmental document and were found to be not substantial.

Alternatives 3, 6, and Modified Alternative 7 (Build Alternatives)

The Build Alternatives would not result in disproportionate impacts to environmental justice populations due to the demographics of the affected census tracts when compared to the County and Cities as a whole, the number of displacements, and the availability of replacement housing. In addition, as described above, all interchange users would be subjected to traffic congestion and detours during construction, all neighboring uses would experience temporary noise and dust impacts during construction, and all residents and workers in the vicinity of the Project would experience changes to community character, visual quality, and the loss of businesses following the completion of the Project. The Build Alternatives would improve interchange operations that would benefit all local populations.

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have been included in the proposed Project. Based on the current proportion of minority residents, and residents below poverty, median household incomes, and expected displacements in the study area census tracts, disproportionate impacts to environmental justice populations are not anticipated as a result of the proposed Project. Based on the above discussion and analysis, Alternatives 3,6, and Modified Alternative 7 will not cause disproportionately high and adverse effects on any minority or low-income populations per EO 12898 regarding environmental justice.

4.3 Utilities and Emergency Services

4.3.1 Temporary Impacts

4.3.1.1 Alternative 1 (No Build Alternative)

No local road modifications would occur under the No Build Alternative that could result in temporary impacts to utilities or emergency services. The I-215 Bi-County HOV Lane Gap Closure Project will require relocation of utilities or protection in place during construction. Utility searches and coordination has been conducted, and no substantial impacts will occur.

4.3.1.2 Alternatives 3, 6, and Modified Alternative 7 (Build Alternatives)

The Build Alternatives would impact various underground and overhead utilities, which would require protection in place, removal, replacement, or relocation. Utilities that have the potential to be impacted during construction by Alternative are listed in Table V. Alternative 3 is the only alternative that would potentially relocate cable television lines owned by AT&T, Time Warner, and Charter Communications. For Alternatives 6 and Modified Alternative 7, a bridge will be placed over the Riverside

Table V Potential Utility Conflicts During Project Construction

Utility	Owner	Alternative 3	Alternative 6	Modified Alternative 7
Sewer	City of Grand Terrace	✓	✓	✓
Water Line	Riverside Highland Water, Elsinore Valley Municipal Water District	✓	✓	✓
Gas Line	Southern California Gas Company	✓	✓	✓
Electrical-underground	Southern California Edison	✓	✓	✓
Utility Poles	Southern California Edison	✓	✓	✓
Electrical-overhead	Southern California Edison	✓	✓	✓
Telecom	AT&T, Time Warner	✓	✓	✓
Cable Television	AT&T, Time Warner, Charter Communications	✓		
Riverside Canal Aqueduct	City of Riverside		✓	✓

Source: Draft Project Report, August 2013.

Canal Aqueduct to avoid impacts since this facility has been found to be eligible for the National Register of Historic Places.

The Build Alternatives would impact various underground and overhead utilities, which would require protection in place, removal, replacement, or relocation. An updated utility search would be conducted during final design to determine all utility conflicts that require protection in place or relocation. In addition, all utility relocations would be coordinated with the affected utility agencies. No substantial impacts are anticipated.

4.3.2 Permanent Impacts

4.3.2.1 Alternative 1 (No Build Alternative)

No local road modifications would occur under the No Build Alternative that could result in permanent impacts to utilities or emergency services. Construction of the I-215 Bi-County HOV Lane Gap Closure Project may require relocation of various underground and overhead utilities in the Project area; however, any relocated utility services will be permanently maintained. Therefore, the No Build Alternative would not result in permanent utility impacts.

4.3.2.2 Alternatives 3, 6, and Modified Alternative 7 (Build Alternatives)

Any relocation of utilities as a result of the Build Alternatives would occur during the final design or construction phase such that all utility services are permanently maintained. In addition, the Project would not increase the need for domestic water

services, wastewater facilities, or solid waste disposal. Therefore, no permanent impacts to utilities would occur.

As required by Caltrans and the respective City standards, emergency access would be maintained or provided as part of the Project design.

4.4 Economic Impacts

This section discusses the business, employment, and tax revenue impacts associated with reconstruction of the interchange and local roadways.

4.4.1 Business Impacts

This section discusses the impacts to local businesses not affected by real property acquisition.

4.4.1.1 Temporary Impacts

Alternative 1 (No Build Alternative)

This alternative does not include modifications to the I-215/Barton Road interchange, and there are no planned road modification/maintenance projects on local roadways within the interchange area. The I-215 Bi-County HOV Lane Gap Closure Project will temporarily impact circulation and access in the vicinity of the interchange. This could temporarily reduce revenue at local businesses, which will be minimized through implementation of the required public outreach program. Implementation of the TMPs for these projects would minimize circulation and access impacts, and no substantial impacts are anticipated.

Alternatives 3, 6, and Modified Alternative 7 (Build Alternatives)

Implementation of the Build Alternatives would result in temporary impacts to local businesses during construction. Road detours and access restrictions due to construction would result in traffic delays, which may temporarily experience a decrease in clientele and loss of revenue due to the construction work. They would also result in traffic delays for local business owners, their employees, and customers. Appropriate detour signage will be developed for the proposed Project. Extensive ramp closures are not anticipated, but travel times could temporarily increase due to lane closures. With implementation of a comprehensive public outreach program and a TMP that identifies closures and detours and distributes this information to the public, these impacts are not considered substantial.

4.4.1.2 Permanent Impacts

All of the Build Alternatives would improve the operation of the interchange and reduce congestion; therefore, the businesses that remain in the Project area would benefit from improved interchange operations.

Alternative 1 (No Build Alternative)

The No Build Alternative would not result in any improvements to the existing I-215/Barton Road interchange. Additionally, no specific maintenance projects are currently planned that would include this interchange. A separate project, SANBAG's I-215 Bi-County HOV Lane Gap Closure project is currently under construction, and it would still complete the portion of that project which goes through the I-215/Barton Road interchange on the freeway. It would not change the configuration of the on- and off-ramps specific to the existing I-215/Barton Road interchange, therefore no access changes to local businesses would result; although, congestion in the interchange area would continue to increase because no improvements to the interchange would occur.

Alternative 3 (Partial Cloverleaf Interchange)

As shown in Figure 2, local streets would be modified, which would change the circulation pattern for local businesses. For instance, De Berry Street would be extended to Barton Road. This would provide an alternative route to businesses in this area, since La Crosse Avenue in the southwest quadrant of the interchange would be removed the proposed I-215 southbound on-ramp. In addition, Commerce Way would be realigned to intersect with Vivienda Avenue to accommodate the proposed I-215 northbound on- and off-ramps. Because these circulation changes would maintain access to area properties, no substantial impacts would occur.

Alternative 6 (Modified Cloverleaf Interchange)

As shown in Figure 3, local streets would be modified, which would change the circulation pattern for local businesses. For instance, the segment of La Crosse Avenue in the southwest quadrant of the interchange would be modified such that only a right turn could be made from La Crosse Avenue to Barton Road and from Barton Road to La Crosse Avenue. Businesses on La Crosse Avenue would be reached by traveling west on Barton Road to Terrace Avenue to La Crosse Avenue. In addition, Commerce Way would be realigned to intersect with Vivienda Avenue to accommodate the proposed I-215 northbound on- and off-ramps. Because these circulation changes would maintain access to area properties, no substantial impacts would occur.

Modified Alternative 7 (Modified Cloverleaf/Diamond Interchange) (Locally Preferred Alternative)

As shown in Figure 4, Modified Alternative 7 would involve the construction of a roundabout at the I-215 southbound ramps and Barton Road. Unlike Alternative 6, the roundabout configuration would provide full access to the southern segment of La Crosse Avenue. Commerce Way would be realigned to intersect with Vivienda Avenue to accommodate the proposed I-215 northbound off-ramp. Because these circulation changes would maintain access to area properties, no substantial impacts would occur.

4.4.2 Employment Impacts

4.4.2.1 Temporary Impacts

Loss of employment due to business displacement is a permanent impact and is described under the following section. Temporary jobs would be created by construction of the I-215/Barton Road Interchange Improvement Project.

As shown in Table W, construction employment has two components, direct and indirect. The direct effect is the number of construction jobs created to complete the Project. The indirect effect is the additional employment and business activity that would be generated in the regional economy by the initial construction expenditure.

Table W Estimated Construction Employment

Estimated Project Costs ¹		Estimated Employment Generated		
		Direct Jobs ²	Indirect Jobs ²	Total Jobs
Alternative 3	\$104,912,000	682	682	1364
Alternative 6	\$63,287,000	411	411	822
Modified Alternative 7	\$62,486,000	406	406	812

¹ Project cost estimates taken from *Draft Project Report*, August 2013.

² Employment impacts vary over time. Based on the latest data provided by FHWA, \$1 billion in investments supports approximately 13,000 construction jobs, with approximately 50 percent each for direct and indirect jobs (<http://www.fhwa.dot.gov/policy/otps/pubs/impacts/index.htm>).

Alternative 1 (No Build Alternative)

This alternative does not include modifications to the I-215/Barton Road interchange, and there are no planned road modification/maintenance projects on local roadways within the interchange area. Therefore, the No Build Alternative would not generate construction employment. However, other planned projects, such as the I-215 Bi-County HOV Lane Gap Closure Project, will generate temporary construction jobs.

Alternatives 3, 6 and Modified Alternative 7 (Build Alternatives)

As seen in Table W above, because Alternative 3 has the greatest cost, it would generate the most construction jobs (1,364 jobs). Modified Alternative 7 would generate the fewest construction jobs (812). These construction jobs would generate revenue for both the local and regional economies.

4.4.2.2 Permanent Impacts

Full acquisitions of the properties would require relocation of employees and businesses to other locations. Information from the DRIS was used to identify businesses requiring relocation under Build Alternatives 3, 6, and Modified Alternative 7. The number of employees displaced as a result of full property acquisitions were estimated based on data from California Employment Development Department, Labor Market Info database. This database includes the names of businesses in all cities in California and the estimated number of employees at each business. The labor data presented in the Labor Market Info database is updated semiannually and comes from a variety of sources, including phone books, annual reports, business directories, public records data from county courthouse filings, the Securities and Exchange Commission, Secretary of State Corporations Division data, listings for new business registrations, and utility hookups. Table X presents the estimated number of employee displacements by alternative.

Table X Estimated Employee Displacements Under the Build Alternatives

Build Alternative	Estimated Displaced Employees	Percent Displaced Employees in the City of Grand Terrace ¹	Percent Displaced Employees in the City of Colton ¹
Alternative 3	131-321	2.1-5.0	0.03-0.1
Alternative 6	40-102	0.7-1.7	—
Modified Alternative 7	60-140	1.0-2.3	—

Sources: <http://www.labormarketinfo.edd.ca.gov/>; accessed August 2, 2013.

¹ The employed civilian labor force for each city used to determine the percent of displaced employees is taken from the 2007-2011 ACS, Table DP03.

Alternative 1 (No Build Alternative)

No businesses would be acquired and displaced as a result of this alternative. As such, no substantial effects to businesses in the region would occur.

Alternative 3 (Partial Cloverleaf Interchange)

As shown in Tables Q and R, Alternative 3 would displace 28 businesses in the City of Grand Terrace and 3 businesses in the City of Colton. As shown in Table X, these

relocations would result in the estimated displacement of 131 to 321 employees. Alternative 3 would potentially displace approximately 2.1 to 5.0 percent of the City of Grand Terrace's labor force and approximately 0.03 to 0.1 percent of the City of Colton's labor force.

Alternative 6 (Modified Cloverleaf Interchange)

Alternative 6 would displace 19 businesses in the City of Grand Terrace. Alternative 6 would result in an estimated displacement of 40 to 102 employees. As shown in Table X, Alternative 6 would result in the lowest impacts related to employee displacement in the City of Grand Terrace (0.7 to 1.7 percent) among the Build Alternatives, and would result in no employee displacements in the City of Colton.

***Modified Alternative 7 (Modified Cloverleaf/Diamond Interchange)
(Locally Preferred Alternative)***

Modified Alternative 7 would displace 21 businesses in the City of Grand Terrace. Alternative 7 would result in an estimated displacement of 60 to 140 employees, which represents 1.0 to 2.3 percent of the labor force in the City of Grand Terrace. Modified Alternative 7 would not result in displacements in the City of Colton.

Potential employee displacement impacts would be minimized if the displaced businesses are able to relocate within these Cities. The City of Grand Terrace has plans to redevelop the area along Commerce Way, which would potentially create opportunities for some of the relocated businesses and displaced employees.

4.4.3 Tax Revenue Impacts

4.4.3.1 Temporary Impacts

Alternative 1 (No Build Alternative)

No I-215/Barton Road interchange or local road modifications would occur under the No Build Alternative that would result in temporary loss of tax revenue. Construction of the I-215 Bi-County HOV Lane Gap Closure Project is not anticipated to temporarily affect tax revenue in the Project area.

Alternatives 3, 6, and Modified Alternative 7 (Build Alternatives)

The Build Alternatives could result in a minor loss of sales tax revenue for businesses in the interchange as the result of detours and access restrictions. This impact would cease once construction is complete.

4.4.3.2 Permanent Impacts – Property Tax

Alternative 1 (No Build Alternative)

No businesses would be acquired or displaced, under the No Build Alternative; therefore, there would be no direct effect on tax revenues.

Alternative 3 (Partial Cloverleaf Interchange)

Alternative 3 would fully acquire 30 parcels and would result in the loss of an estimated \$154,983 in annual property tax revenue as shown in Table Y. The City of Grand Terrace would lose 2.0 percent of the City’s total property annual tax revenue. Alternative 3 would acquire two businesses in the City of Colton, which equates to an estimated 0.03 percent in property tax loss.

Table Y Estimated Annual Property Tax Loss for the Build Alternatives

Alternative	Property Tax Loss		Total Annual City Property Tax Revenue ¹	Percent of Total Annual Property Tax Revenue Loss
	City of Grand Terrace	City of Colton		
Alternative 3	City of Grand Terrace	\$147,793	\$7,572,296	2.0%
	City of Colton	\$7,190	\$25,565,795	0.03%
Alternative 6	City of Grand Terrace	\$49,087	\$7,572,296	0.6%
Modified Alternative 7	City of Grand Terrace	\$42,127	\$7,572,296	0.6%

Source: San Bernardino County Office of Tax Collector, www.mytaxcollector.com, accessed February, 2012 and August 2013.

¹ Total City tax revenue was obtained from the Auditor’s Controller’s Office and is based on the tax rolls obtained from the Cities in 2011. Email correspondence with San Bernardino County Auditor-Controller-Recorder, Franciliza Zyss, Accountant III, February 2012.

Alternative 6 (Modified Cloverleaf Interchange)

Alternative 6 would fully acquire 10 parcels in the City of Grand Terrace, resulting in a loss of \$49,087 in property taxes, which constitutes 0.6 percent of the City’s total annual property tax revenue. No parcels from the City of Colton would be fully acquired under Alternative 6, and no property tax loss would occur.

***Modified Alternative 7 (Modified Cloverleaf/Diamond Interchange)
(Locally Preferred Alternative)***

Modified Alternative 7 would result in full acquisition of 8 parcels in the City of Grand Terrace, resulting in a loss of \$42,127 in property taxes, which constitutes 0.6 percent of the City’s total annual property tax revenue. No parcels from the City of Colton would be fully acquired under Modified Alternative 7, and no property tax loss would occur.

4.4.3.3 Permanent Impacts – Sales Taxes

When businesses completely cease to operate, State and local jurisdictions lose sales tax revenue. This analysis provides an estimate of the annual sales tax revenue losses to City, County, and State governments as a result of the business relocations that would occur under the Build Alternatives.

The full acquisitions associated with the respective Build Alternatives would cause a number of sales-tax-generating businesses to be relocated. In the event that all businesses from one city relocate within the same city boundary, there would be no net loss of sales tax revenue to that city. However, relocation outside a particular city would result in a net loss of sales tax revenue to the city that the business is leaving. Publicly available sales tax revenue provided by the Board of Equalization is listed by type of business in each jurisdiction in California. Therefore, the potential loss in sales tax revenue was estimated using total taxable sales in the Cities of Grand Terrace and Colton.

The potential annual sales tax revenue losses to the City of Grand Terrace and the County of San Bernardino resulting from the loss of businesses in Grand Terrace are shown in Table Z.

Table Z Potential Annual Sales Tax Revenue Losses Related to Business Displacements in the City of Grand Terrace

Jurisdiction	Tax Rate	Taxable Sales (2011)	Total Sales Tax Revenue	Average Sales Tax/Business	Alternative 3 ¹	Alternative 6 ²	Modified Alternative 7 ²
City of Grand Terrace	0.75%	\$83,563,000	\$626,723	\$3,214	\$51,423	\$28,926	\$35,354
County of San Bernardino Transportation Fund	0.25%	—	\$208,908	\$1,071	\$17,141 ³	\$9,642 ³	\$11,785 ³
County of San Bernardino (Measure I)	0.50%	—	\$417,815	\$2,143	\$34,282 ³	\$19,284 ³	\$23,569 ³

Source: Taxable Sales in California (Sales and Use Tax) Report 2011, <http://www.boe.ca.gov/news/tsalescont11.htm>; accessed August 11, 2013.

¹ Assumes displacement of 16 sales tax-generating businesses.

² Assumes displacement of 9 sales tax-generating businesses for Alternative 6 and 11 for Modified Alternative 7.

³ Represents the maximum sales tax loss that could occur if displaced businesses were relocated outside of San Bernardino County.

A number of these parcels to be fully acquired by the Build Alternatives are occupied by several business units, some of which form business parks or strip malls. If all sales tax-generating businesses to be potentially displaced (see Table O) were

relocated outside the City of Grand Terrace, the potential annual sales tax loss for the City of Grand Terrace would be an estimated \$51,423 for Alternative 3 (based on the displacement of 16 sales tax-generating businesses); an estimated \$28,926 for Alternative 6 (based on the displacement of 9 sales tax-generating businesses); an estimated \$35,354 for Alternative 7 (based on the displacement of 11 sales tax-generating businesses). The displacement of businesses that provide services as opposed to sales (see Table O) would not result in the loss of sales tax. According to the DRIS, it is anticipated that displaced businesses would be relocated within San Bernardino County. Under this scenario, there would be no loss of Measure I funding, which is administered by SANBAG, nor any loss of sales tax revenue to the San Bernardino County Transportation Fund. Nevertheless, Table Z shows the estimated maximum annual sales tax loss if all of the businesses were relocated outside of San Bernardino County.

The potential annual sales tax revenue losses to the City of Colton and the County of San Bernardino resulting from business displacements in the City of Colton are shown in Table AA. If all displaced businesses were relocated outside the City of Colton, the potential sales tax losses for the City of Colton would be an estimated \$13,483 for Alternative 3 based on the displacement of three sales tax generating businesses. Alternatives 6 and Modified Alternative 7 would not require full acquisition of any properties in the City of Colton and, therefore, would not result in sales tax revenue loss. According to the DRIS, it is anticipated that displaced businesses would be relocated within San Bernardino County. Under this scenario, there would be no loss of Measure I funding nor any loss of sales tax revenue to the San Bernardino County Transportation Fund. Nevertheless, Tables Y and Z show the estimated maximum annual sales tax loss if all of the businesses were relocated outside of San Bernardino County.

4.5 Property Value Effects

According to the Community Assessment Handbook (October 2011), the direct effects of transportation projects can influence property values in a number of ways. The Handbook refers to the *Guidebook for Assessing the Social and Economic Effects of Transportation Projects* (National Cooperative Highway Research Program [(NCHRP) Report 456]) for additional guidance on the appropriate type of analysis. The *Guidebook* lists six metrics related to transportation projects that may affect property values: changes in accessibility, safety, noise, visual quality, community cohesion, and business productivity. According to the *Guidebook*:

Table AA Potential Annual Sales Tax Revenue Losses Related to Business Displacements in the City of Colton

Jurisdiction	Tax Rate	Taxable Sales (2011)	Total Sales Tax Revenue	Average Sales Tax/ Business	Alternative 3 ¹	Alternative 6 ²	Alternative 7 ²
City of Colton	0.75%	\$513,554,000	\$3,851,655	\$4,494	\$13,483	\$0	\$0
County of San Bernardino Transportation Fund	0.25%	—	\$1,283,885	\$1,498 ³	\$4,494 ³	\$0	\$0
County of San Bernardino (Measure I)	0.50%	—	\$2,567,770	\$2,996 ³	\$8,989 ³	\$0	\$0

Source: Taxable Sales in California (Sales and Use Tax) Report 2011. <http://www.boe.ca.gov/news/tsalescont10.htm>, accessed August 11, 2013.

¹ Assumes displacement of 3 sales tax-generating businesses.

² Assumes no displacement of sales tax-generating businesses.

³ Represents the maximum sales tax loss that could occur if displaced businesses were relocated outside of San Bernardino County.

Analyses of the effects on property values should be conducted only when required for compensation programs or mitigation programs or when necessary to assess environmental justice issues (i.e., equity concerns involving vulnerable, low-income populations or minority populations).

The acquisition of property and displacement of businesses and residents associated with implementation of the proposed Project would be conducted in accordance with the Uniform Act (Public Law 91-646, 84 Statutes 1894). No special compensation or mitigation programs beyond what is afforded by law are anticipated to be necessary. In addition, as discussed in Section 4.2.4, the Build Alternatives would result in comparable impacts to all populations in the vicinity of the interchange. For these reasons, a qualitative analysis of property value effects due to the Project was conducted in lieu of market studies, property value comparisons, or regression models. A summary of the six transportation Project metrics are presented in Table AB.

4.5.1 Alternative 1 (No Build Alternative)

There will be no interchange improvements under Alternative 1; however, construction of sound barriers that will separate Grand Terrace Elementary School and Grand Royale Mobile Estates from I-215 would be considered a beneficial impact.

Table AB Summary of Transportation Metrics for the Project Alternatives

Alt	Accessibility	Safety	Noise	Visual Quality	Community Cohesion	Business Productivity
1	LOS at study area intersections will continue to deteriorate. Large trucks will not be able to use the interchange.	Sidewalk only on north side of Barton Road Bridge over I-215. No bicycle lanes.	Two sound barriers will be constructed adjacent to Grand Terrace Elementary School and single-family dwellings on the east side of I-215 and Grand Royal Mobile Estates at Newport Avenue on the west side of I-215 as part of the HOV Project.	Grand Terrace Elementary School and single-family dwellings on the east side of I-215 and Grand Royal Mobile Estates at Newport Avenue on the west side of I-215 would be separated from I-215 by sound barriers.	No change	No change
3	Upgrade interchange to current HDM standards. Improve LOS. Local circulation would be modified to accommodate reconstructed freeway ramps, but access would be maintained.	Includes sidewalks and bicycle lanes on both sides of bridge.	Minimal increase in traffic noise levels at receivers that approach the noise abatement criteria when compared to Alternative 1 except for Receiver 142 on Barton Road. In some cases, noise levels are lower than Alternative 1. In addition, sound barriers adjacent to freeway ramps would further reduce noise levels.	Grand Terrace Elementary School and single-family dwellings on the east side of I-215 and Grand Royal Mobile Estates on the west side of I-215 would be separated from I-215 by sound barriers. Terrace Village RV Park and Grand Terrace Mobile Home Park would be adjacent to freeway ramps.	The residences to be acquired are adjacent to I-215 and commercial uses and do not demonstrate indicators of high community cohesion. Due to the location of these properties, the acquisitions would not divide an existing neighborhood or fragment a cohesive neighborhood.	Businesses would benefit from improved interchange operations.
6	Upgrade interchange to current HDM standards. Improve LOS. Local circulation would be modified to accommodate reconstructed freeway ramps, but access would be maintained.	Includes sidewalks and bicycle lanes on both sides of bridge.	Minimal increase in traffic noise levels at receivers that approach the noise abatement criteria when compared to Alternative 1 except for Receiver 60 on Grand Terrace Road. In some cases, noise levels are lower than Alternative 1. In addition, sound barriers adjacent to freeway ramps would further reduce noise levels.	Same as Alternative 3.	The residences to be acquired are adjacent to I-215 and commercial uses and do not demonstrate indicators of high community cohesion. Due to the location of these properties, the acquisitions would not divide an existing neighborhood or fragment a cohesive neighborhood.	Businesses would benefit from improved interchange operations.

Table AB Summary of Transportation Metrics for the Project Alternatives (Continued)

Alt	Accessibility	Safety	Noise	Visual Quality	Community Cohesion	Business Productivity
Modified 7	Upgrade interchange to current HDM standards. Improve LOS. Local circulation would be modified to accommodate reconstructed freeway ramps, but access would be maintained.	Includes sidewalks and bicycle lanes on both sides of bridge.	Minimal increase in traffic noise levels at receivers that approach the noise abatement criteria when compared to Alternative 1 except for Receiver 60 on Grand Terrace Road. In some cases, noise levels are lower than Alternative 1. In addition, sound barriers adjacent to freeway ramps would further reduce noise levels.	Same as Alternative 3.	The residences to be acquired are adjacent to I-215 and commercial uses and do not demonstrate indicators of high community cohesion. Due to the location of these properties, the acquisitions would not divide an existing neighborhood or fragment a cohesive neighborhood.	Businesses would benefit from improved interchange operations.

Sources: *Draft Project Report*, August 2013; *Noise Study Report*, February 2012; *Supplemental Noise Study Report*, September 2013; *Visual Impact Assessment*, September 2013; *Draft Relocation Impact Statement*, September 2013.

4.5.2 Alternative 3 (Partial Cloverleaf Interchange)

Alternative 3 would improve operations and LOS at the interchange. Bicycle lanes and sidewalks would be constructed consistent with the City of Grand Terrace Circulation Element (2010).

Traffic noise level increases would be minimal and would be reduced adjacent to sensitive receptors through construction of sound barriers.

As seen on Figure 2, the new southbound I-215 ramps would be placed adjacent to Terrace Village RV Park and Grand Terrace Mobile Home Park. The proximity of the southbound on- and off-ramps has the potential to affect the value of this parcel and/or the nearby Grand Terrace Mobile Home Park. The sound barriers adjacent to Grand Terrace Elementary School and single-family dwellings and the Grand Royal Mobile Estates would provide a beneficial impact. Alternative 3 would reduce congestion at the interchange, thereby improving circulation for local businesses and residents. Since the residences and businesses that would remain are already located adjacent to an existing interchange and new sound barriers are proposed to reduce noise effects at residential properties, the overall character of the community as freeway- and interchange-adjacent would not change, and substantial impacts to property values are not expected.

4.5.3 Alternative 6 (Modified Cloverleaf Interchange)

Like Alternative 3, Alternative 6 would improve operations and LOS at the interchange. Bicycle lanes and sidewalks would be constructed consistent with the City of Grand Terrace Circulation Element (2010).

Traffic noise level increases would be minimal and would be reduced adjacent to sensitive receptors through construction of sound barriers.

Similar to Alternative 3, the new southbound I-215 ramps would be placed adjacent to Terrace Village RV Park and Grand Terrace Mobile Home Park. There is a potential sound barrier for this location, and the ramps would not be as close to the parcels as they are under Alternative 3. The sound barriers adjacent to Grand Terrace Elementary School, single-family dwellings, and Grand Royal Mobile Estates would provide a beneficial impact.

Like Alternative 3, the overall character of the community as freeway- and interchange-adjacent would not change, and substantial impacts to property values are not expected.

4.5.4 Modified Alternative 7 (Modified Cloverleaf/Diamond Interchange) (Locally Preferred Alternative)

Like Alternatives 3 and 6, Modified Alternative 7 would improve operations and LOS at the interchange. Bicycle lanes and sidewalks would be constructed consistent with the City of Grand Terrace Circulation Element (2010).

Traffic noise level increases would be minimal and would be reduced adjacent to sensitive receptors through construction of sound barriers.

Alternative 7 would place the new southbound I-215 ramps in a roundabout configuration at Barton Road. The sound barriers adjacent to Grand Terrace Elementary School and single-family dwellings and Grand Royal Mobile Estates would provide a beneficial impact.

Like Alternatives 3 and 6, the overall character of the community as freeway- and interchange-adjacent would not change, and substantial impacts to property values are not expected.

4.6 Growth-Related Impacts

The potential growth-related impacts of the proposed Project were considered in the context of the first-cut screening analysis approach to assess the likely growth potential effect of the proposed Project and whether further analysis is necessary, based on consideration of the following:

- How, if at all, does the proposed Project potentially change accessibility?
- How, if at all, do the Project type, Project location, and growth pressure potentially influence growth?
- Is Project-related growth reasonably foreseeable as defined in NEPA? Under NEPA, indirect impacts need only be evaluated if they are reasonably foreseeable as opposed to remote and speculative.
- If there is Project-related growth, how, if at all, will that impact resources of concern?

4.6.1 Alternative 1 (No Build Alternative)

As no I-215/Barton Road interchange or local road improvements would occur under the No Build Alternative, there would be no permanent growth-related impacts.

4.6.2 Alternatives 3, 6, and Modified Alternative 7 (Build Alternatives)

The determination of whether the Build Alternatives influence or generate growth is based on answers to the first-cut screening analysis questions.

- How, if at all, does the proposed Project potentially change accessibility?

The Project would reduce traffic congestion in the Project area, resulting in better operation of the existing interchange and local circulation. In addition, the Project would alleviate existing deficiencies and accommodate projected future (2040) traffic volumes in the traffic study area, consistent with adopted local land use and transportation plans (refer to Section 3.1.4). While the Project includes reconstruction of an existing interchange, it would not provide new transportation facilities or create new access points to areas previously not accessible. Therefore, the Project would not result in changes in accessibility to the transportation system in this area.

- How, if at all, do the Project type, Project location, and growth pressure potentially influence growth?

The I-215/Barton Road interchange is the main access to the City of Grand Terrace and provides an alternative access to the eastern portion of the City of Colton (in addition to the I-215/Mount Vernon/Washington Street interchange). The City of Grand Terrace's Barton Road Specific Plan provides guidance for the development of primarily commercial property along this primary transportation corridor.

The Project would accommodate approved and planned growth in the area (refer to Table B, Planned Projects) because it would add capacity at the interchange, thereby reducing congestion in this area. Pressure for growth is typically a result of a combination of factors, including economic, market, and land use demands and conditions. Growth in the City of Grand Terrace and the City of Colton is expected to occur with or without the Project. As an interchange improvement, the Project may make growth in the area more attractive; however, as seen in Table B, a substantial number of development projects were proposed and approved prior to the initiation of the interchange project, which indicates that development in the area is not dependent on completion of the interchange improvements. The residential projects in the City of Colton, specifically Pellisier Ranch, have stalled due to economic and market

factors as well as staffing cuts at the City.¹ Besides the projects identified in Table B, there are not a substantial number of acres available in the study area for new development. Therefore, although the Project would accommodate existing and planned growth, it would not influence growth beyond what is currently planned.

- Is Project-related growth reasonably foreseeable as defined in the National Environmental Policy Act (NEPA)?

As discussed above, the Project would not influence growth beyond what is currently planned (refer to Table B) and would not change the rate, type, or amount of growth. Therefore, there is no Project-related growth.

- If there is Project-related growth, how, if at all, will that impact resources of concern?

As discussed above, because the Project would not change the rate, type, or amount of growth, the reasonably foreseeable growth in the Cities of Grand Terrace and Colton is not Project-related.

4.7 Cumulative Impacts

The RSA for cumulative community impacts is the City of Grand Terrace and the portion of the City of Colton east of the Santa Ana River and south of the I-215/Mount Vernon/Washington Street interchange because the communities in this area are most likely to use the I-215/Barton Road interchange as their regional access due to proximity to this interchange. Communities outside of this boundary would use other interchanges along I-215/State Route 91 (SR-91) or I-10 for regional access. Over several decades, the RSA has transformed from ranchland to semiurban development. As seen in the list of reasonably foreseeable projects (Table B), current development trends are for infill since the majority of the RSA is built out. Reasonably foreseeable projects in the RSA include commercial, residential, and transportation projects (Table B).

There are three major transportation projects in the RSA. The I-215 Bi-County HOV Gap Closure Project is currently under construction and involves construction of an HOV lane in each direction. Also, the I-215/Newport Avenue Overcrossing Project is

¹ Press Enterprise, November 25, 2010 (<http://www.pe.com/local-news/local-news-headlines/20101126-stalled-development-plans-draw-landowner-ire.ece>. Accessed February 29, 2012).

a minor project that involves replacement of the bridge and is being constructed as part of the I-215 Bi-County HOV Gap Closure Project.

In addition, the I-215/Mount Vernon Avenue/Washington Street Interchange Improvement Project and the I-215 Bi-County Improvement Project are also proposed for completion by 2020 and 2035, respectively. These improvements in the RSA would increase capacity and reduce freeway and interchange congestion.

4.7.1 Project Impacts that Contribute to Cumulative Impacts

4.7.1.1 Direct Project Impacts

The Build Alternatives would displace several businesses and a few residences that are adjacent to the interchange. The residences that would be displaced are in isolated areas or directly adjacent to I-215, which is not an ideal location for a residential community. Based on available housing identified in the DRIS, residential displacements could be relocated within the two Cities.

The DRIS also determined that the business displacements could be accommodated in the Cities of Grand Terrace and Colton and the City of San Bernardino (for the second gasoline station displacement associated with Alternative 3); however, displaced businesses would suffer a loss of income during the relocation period. Based on the types of businesses to be displaced, it was determined that the majority of these businesses are not primarily reliant on neighborhood business; likewise, these businesses are not primarily neighborhood-serving. Sales tax loss for the Cities would be minimal if most of the displaced businesses are relocated within their respective Cities. Property tax would be lost due to the change in land use to the freeway ramps and roadway modifications. Displaced residents, business owners, and property owners will be compensated consistent with the Uniform Act (Public Law 91-646, 84 Statutes 1894).

Although separated by a proposed sound barrier, Terrace Village RV Park and Grand Terrace Mobile Home Park would be adjacent to the I-215 southbound off-ramp; currently, this area is separated from the freeway by a commercial strip mall.

During construction, adjacent neighborhoods would be impacted by noise, dust, traffic detours, and construction of adjacent structural facilities such as ramps, sound barriers, and retaining walls. Standard avoidance and minimization measures, including implementation of a TMP and public outreach program, would be implemented to reduce construction impacts.

4.7.1.2 Indirect Project Impacts

The Project is consistent with applicable goals and policies of the City of Grand Terrace and City of Colton General Plans, as well as applicable transportation plans. The Project would improve operations and reduce congestion at an existing interchange, relocate the majority of displaced residences and businesses within the two Cities, and would not influence growth in the area. No indirect community impacts are anticipated.

4.7.2 Cumulative Impacts

4.7.2.1 Direct Cumulative Impacts

Many of the projects in Table B have been constructed, are infill projects, or would develop vacant land; therefore, displacements associated with these projects would be minimal. With exception of the transportation projects, construction impacts would be restricted to the area directly surrounding the project site. The TMPs for the transportation projects with overlapping construction periods such as the I-215/Barton Interchange Project and the I-215 Bi-County HOV Gap Closure Project would be coordinated to minimize impacts to the community.

Based on available information, it is not anticipated that the planned freeway projects would result in permanent substantial community impacts. The I-215/Mount Vernon Avenue/Washington Street Interchange Improvement Project would displace several businesses. Based on available locations discussed in the DRIS, it is anticipated that displaced businesses in the City of Colton could be relocated within this City. There are no residences in the interchange vicinity, so residential displacements are not expected. The I-215 Bi-County Improvement Project would displace businesses and residents adjacent to the freeway within the limits for this project. However, the preliminary engineering for this project is planned for at least 10 years in the future; therefore, neighborhood and business impacts cannot be reasonably assessed. Because these two projects would involve expansion of existing transportation facilities, the acquisitions would impact freeway-adjacent properties. Therefore, it is not expected that these projects would fragment cohesive neighborhoods or impact businesses that are reliant on neighborhood demand. Likewise, it is not expected that the surrounding neighborhoods would be overly dependent on these businesses for day-to-day needs. Businesses that rely on high visibility would need to be relocated to areas that maintain that visibility. The CIA memorandum for the I-215 Bi-County HOV Gap Closure Project (March 2011) determined that “there is not a substantial environmental justice population in the overall study area. As such, there would be no potential for a disproportionately high or substantial effect to be borne by a minority,

low-income, or otherwise disadvantaged population.” The I-215 Bi-County HOV Gap Closure Project would not result in displacements; therefore, no permanent neighborhood, environmental justice, or business impacts would occur.

Overall, the planned projects are expected to result in minimal displacements, and the two projects’ transportation projects that would displace several businesses and residents would be constructed more than 20 years apart, based on current schedules. Each project would be required to avoid, minimize, or mitigate community impacts consistent with CEQA and/or NEPA requirements. In addition, the cumulative community impacts that have occurred due to past and present projects are consistent with the development of incorporated Cities and were consistent with local plans and policies. For these reasons, direct cumulative community impacts are not considered substantial.

4.7.2.2 Indirect Cumulative Impacts

Many of the development projects listed in Table B are approved or constructed; therefore, the City of Grand Terrace has already determined that these projects are consistent with the City’s goals and policies. As a result, no indirect community impacts due to land use consistencies are anticipated for past and present projects. The projects planned for construction on currently vacant land (i.e., Tentative Tract Map 16912 and Pellisier Ranch) will be reviewed by the City for land use inconsistencies that could result in indirect community impacts, and appropriate avoidance, minimization, and/or mitigation measures will be required. The I-215/ Mount Vernon Avenue/Washington Street Interchange Improvement Project would improve this interchange, but like the proposed Project, it is not expected to induce growth. Similarly, the HOV Project and the Overcrossing Project were found not to induce growth. The I-215 Bi-County Improvement Project would add regional freeway capacity, and this is one factor that could influence growth because it would accommodate planned growth identified in the local jurisdictions’ General Plans. Considering the nature of the RSA as a mostly built-out area, development trends consistent with what is expected in incorporated Cities, and the limited growth influence expected by the planned projects, cumulative indirect community impacts are not considered substantial.

Chapter 5 Avoidance, Minimization, and/or Mitigation Measures

The proposed I-215/Barton Road Interchange Improvement Project would not result in substantial permanent impacts related to land use, relevant plans, or recreation resources. Measures are required to address temporary construction impacts to public facilities and services and neighborhoods and permanent impacts with regard to relocations.

5.1 Transportation Management Plan

The following requirements will be incorporated into the TMP for the Project:

- During construction, the contractor will be required to coordinate all temporary ramp closures and detour plans with the Colton Joint Unified School District, as well as with applicable fire, emergency, medical, and law enforcement providers, to minimize temporary delays in school trips and provider response times.
- The TMP will include construction staging, detours, and road closures for the I-215/Barton Road Interchange Improvement Project and the I-215 Bi-County HOV Lane Gap Closure Project during any overlapping construction periods. The TMP will be reviewed and approved by Caltrans.
- The TMP will develop and implement a construction management program that maintains access to and from the Project area through signage, detours, flagmen, etc.
- Access to the parking area and gate for Grand Terrace Fitness Park will be provided at all times from Grand Terrace Road.

5.2 Utilities

Coordination with the utility providers for relocation of utility lines will be planned, informing the utility users in advance regarding dates and timing of service disruption.

5.3 Public Outreach

During completion of the Project's design (during the Final Design phase), consistent with all applicable design and construction standards and requirements, every effort to avoid or minimize temporary or permanent impacts from the Project to Grand

Terrace Elementary School will be incorporated and implemented to the maximum extent feasible.

- a. A community outreach and public involvement program to inform the community about Project construction activities will be developed and implemented.

5.4 Relocations

As set forth in the DRIS, the following measures will be implemented to minimize relocations and displacement impacts.

1. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (Uniform Act) (Public Law 91-646, 84 Statutes 1894) mandates that certain relocation services and payments be made available to eligible residents, businesses, and nonprofit organizations displaced by its projects.
2. The Uniform Act provides for uniform and equitable treatment by federal or federally assisted programs of persons displaced from their homes, businesses, or farms, and establishes uniform and equitable land acquisition policies.
3. The San Bernardino Associated Governments (SANBAG) will provide all affected property owners with a copy of the Uniform Act. SANBAG will comply with the Uniform Act.

Where acquisition and relocation are unavoidable, the provisions of the Uniform Act would be followed. An independent appraisal of the affected property will be obtained, and an offer for the full appraisal would be made.

The Uniform Act requires that comparable, decent, safe, and sanitary replacement housing that is within a person's financial means be made available before that person may be displaced. In the event that such replacement housing is not available for persons displaced by the Project within the statutory limits for replacement housing payments, last resort housing may be provided in a number of prescribed ways.

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