COMMUNITY IMPACT ASSESSMENT TECHNICAL MEMORANDUM

I-215/University Parkway Interchange Improvement Project

San Bernardino, CA

08-SBd-215-PM 11.35/11.95
EA 0E4200
Project No. 0800000083

Caltrans

January 2019

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

M e m o r a n d u m

Flex your power!
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To:

Date:

File: 08-SBD-215-PM
11.35/11.95
EA 0E4200

From:

Subject: COMMUNITY IMPACT ASSESSMENT MEMORANDUM FOR THE INTERSTATE 215/UNIVERSITY PARKWAY INTERCHANGE IMPROVEMENT PROJECT IN THE CITY OF SAN BERNARDINO

Project Description

The San Bernardino County Transportation Authority (SBCTA), in cooperation with the California Department of Transportation (Caltrans) and the City of San Bernardino (City), is proposing to improve the Interstate 215 (I-215)/University Parkway Interchange in the City of San Bernardino, California (Attachment A - Figure 1). Caltrans is the lead agency under the California Environmental Quality Act (CEQA). Caltrans is also the lead agency under the National Environmental Policy Act (NEPA), as assigned by the Federal Highway Administration (FHWA), in accordance with NEPA (42 United States Code [USC] 4321 et seq.) and the Council on Environmental Quality (CEQ) regulations implementing NEPA (40 Code of Federal Regulations [CFR] 1500 1508).

A single build alternative and a No Build alternative are being evaluated as part of the I-215/University Parkway Interchange Improvement Project (Project). The proposed Project limits (Attachment A - Figure 2) are located within Caltrans and City right-of-way (ROW). The areas within and immediately adjacent to the proposed Project limits are predominately developed and generally consist of commercial/retail land uses. The existing interchange serves as a main point of access for students, faculty, and visitors of California State University, San Bernardino (CSUSB).

Alternatives

Alternative 1 - No Build

Alternative 1 - No Build would maintain the facility in its current condition. No improvements would be implemented at this time and therefore, no capital cost is associated with this alternative. As traffic demand increases due to the planned growth in the area, specifically at CSUSB, traffic operational characteristics would further deteriorate. The Alternative 1 - No Build would not address or alleviate the forecasted operational and existing safety issues attributed to the severe congestion within the University Parkway Interchange and would not satisfy the purpose and need.

Alternative 2 - Diverging Diamond Interchange

Alternative 2 - Diverging Diamond Interchange (DDI) would provide operational improvements to traffic flow associated with the I-215/University Parkway interchange. Alternative 2 proposes to replace the

existing University Parkway tight diamond interchange configuration with a DDI configuration. The existing undercrossing would remain in place. This alternative would improve both ramp intersections of the current interchange, as well as directional movement through the system. Using the DDI configuration, the interchange would allow more efficient left-turn and right-turn movements at ramp terminals.

A DDI is the proposed design configuration for the I-215/University Parkway Interchange because of its ability to eliminate multiple traffic signal phases, which would reduce delay and improve traffic flow for multiple movements within the constrained area. A DDI would alleviate congestion within the interchange, along University Parkway and both ramp intersections.

Improvements under the proposed Project (Alternative 2) would occur within areas of previously disturbed soils located in the general vicinity of the existing I-215/University Parkway Interchange. No building structures would be disturbed as part of the proposed Project, including the existing University Parkway undercrossing and I-215 bridge structure. ROW requirements would potentially include temporary construction easements (TCE). Although no property relocations are anticipated as part of the proposed Project, changes to vehicular access at two areas along University Parkway are anticipated. These access changes are described below in Table 1.

Table 1. Changes to Driveway Access on Adjacent Properties

Property	Location	Changes to Access
Scottish Rite Property	4400 N Varsity Avenue	Primary driveway access for the Scottish Rite property exists off of North Varsity Avenue. A secondary driveway for the property is located off of University Parkway. This secondary driveway access will be relocated just north of the existing secondary driveway on University Parkway, as part of the proposed Project.
Retail Plaza	4004-4020 University Parkway	The southern driveway for this retail plaza located off of University Parkway will be modified to improve vehicular access. The northern driveway, which currently serves as the main point of access for the Jack in the Box restaurant within this retail strip plaza off of University Parkway, would be removed after modifications to the southern driveway are complete.

As discussed in Table 1, above, two driveways currently serve the Scottish Rite property, located at 4400 N Varsity Ave. The primary driveway for regular access to this property exists off of North Varsity Avenue, and a secondary driveway access that is gated and not used regularly for property access exists off of University Parkway, just north of the I-215 northbound (NB) on-ramp. The secondary driveway access for the Scottish Rite property, would be relocated north of its current location along University Parkway. Removal of the existing secondary driveway off of University Parkway would occur after the relocated secondary driveway is complete.

A retail plaza located at 4004 – 4020 University Parkway would also experience changes to vehicular and pedestrian access. This retail plaza currently includes a standalone Jack in the Box restaurant and a retail

strip mall that currently includes the following four retail business: Verizon Wireless, Mimi's Donuts and Ice Cream, Honey's Fashion, and a dental office.

Two driveways located off of University Avenue currently serve this retail plaza. The northern driveway serving this retail plaza that is closest to the SB I-215 off-ramp, would be removed as part of the proposed Project. Prior to removal of the northern driveway, the southern driveway (also located on University Parkway) would be modified to improve vehicular access to the retail plaza. Parking within the retail plaza would be modified as part of the proposed Project. However, at a minimum, the number of parking spaces that would be temporarily impacted would be replaced in kind.

Additional improvements as part of the proposed Project include the provision of street lighting; traffic signal modifications; minor paving; minor utility relocations; signage changes; restriping, turn lanes; and bicycle, pedestrian, and median streetscape improvements. Bicycle and pedestrian access within the proposed Project limits will be maintained throughout construction activities. No transmission towers are located within the proposed Project limits.

The areas where temporary construction-related signage and temporary delineation for traffic lanes are expected to occur are identified in Attachment A - Figure 2. Construction-related signage would require ground disturbance of approximately 2 feet below ground surface (bgs), with the disturbance area measuring 8 inches in diameter for temporary construction area sign posts. The construction staging is anticipated to occur within the existing ROW and the limits shown in Attachment A - Figure 2.

Purpose and Need

Purpose of the Project

The purpose of the proposed Project is to plan for the projected regional population growth, CSUSB enrollment increases, and increase traffic demands at the existing I-215/University Parkway interchange for the planning design year of 2040. The proposed Project proposes to reconfigure the interchange to improve traffic operations. The proposed Project objectives are to:

- Support planned regional growth and proposed local-area projects
- Relieve traffic congestion and related GHG emissions by providing improved signalized intersection operational efficiency through the interchange area
- Improve vehicular, bicycle, pedestrian and transit access through the freeway ramp intersections accommodating all modes of transportation (Complete Street).

Need for the Project

Ongoing growth and development in the area has increased commuter traffic at the I-215/University Parkway interchange. The interchange is the primary freeway access for CSUSB, as well as a number of businesses and area residents. This has caused inadequate interchange queuing capacity and existing geometric deficiencies, including the following:

- Southbound I-215 entrance and exit ramps are operating near or over the design capacity during peak period traffic volumes
- Northbound I-215 entrance and exit ramps are operating near or over the design capacity during peak period traffic volumes
- Intersection delays attributable to excessive traffic and deficient traffic signal operations

The accident analysis provided in the Project Study Report (PSR) (dated October 2016) indicates the collision rates at the northbound exit and southbound entrance interchange ramps have higher than state average accident rates. Improvements at these locations would alleviate traffic collisions related to congestion by making the intersection operations more efficient for commuters.

To accommodate the anticipated increase in traffic vehicular volumes and future operational needs within the corridor, the existing interchange would require improved operational efficiency and employ improved vehicular, bicycle, and pedestrian access. The proposed Project would address these local circulation issues.

Affected Environment /Existing Conditions

The Community Impact Resource Study Area (Study Area) is comprised of the census blocks that intersect the Project limits. The Study Area encompasses the following Census Tract- Block Groups: Census Tract 41.01 – Block Group 2, Census Tract 41.04 – Block Group 2, and Census Tract 46.01 – Block Group 3 and 5 (see Attachment A – Figure 3). The Study Area includes a mix of residential, light industrial and commercial land uses along I-215 and University Parkway such as gas stations, restaurants, motels, retail stores, self storage, and a tutoring center. A major business retailer includes a Walmart, located just west of the proposed Project limits. A Dollar Tree warehouse and distribution center is located just south of the proposed Project limits. Local bus route and stops are located along University Parkway. There are no schools, libraries, law enforcement or emergency responders located along University Parkway or I-215 within the proposed Project limits. However, CSUSB is located outside the Study Area, northwest of the Project limits.

As described previously, areas immediately around the existing interchange consist primarily of commercial land uses. However, the I-215 University Parkway interchange serves an array of communities with distinct differences in community character within and adjacent to the Study Area. For example, areas to the north of the Study Area consist of tract homes and apartments located immediately adjacent to freeway facilities. Whereas, areas to the south of the Study Area, specifically southwest of Cajon Boulevard, are more spread out and rural in character, but also consists of single family homes. These areas are broken up by multiple parcels that appear to be vacant or underdeveloped and light industrial and commercial land uses. These are areas served predominately by smaller corner stores and local restaurants.

Observations from a field visit conducted on December 28, 2017 included large berms along both sides of all four on and off-ramps, and along either side of University Parkway. Additionally, University Parkway transitions from four-lanes of traffic with a striped median south of I-215, to six-lanes of traffic with a raised median north of I-215.

According to the City's 2005 General Plan[1] – Circulation Element, University Parkway is classified as a Major Arterial which is defined as a roadway that can accommodate six to eight travel lanes and may have raised medians. Major Arterials carry high traffic volumes and serve as the primary thoroughfares linking the City of San Bernardino with adjacent cities and the regional highway system. Driveway access to Major Arterials is typically limited to provide efficient high-volume traffic flow. The Circulation Element of the City's General Plan identifies I-215 as a freeway that provides controlled access and separate roadways that allow for high volumes of traffic at high speeds. I-215 provides north-south freeway access to Riverside and San Diego counties to the south and the high desert communities to the north.

[1] http://www.sbcity.org/cityhall/community_development/planning/planning_documents.asp, accessed January 22, 2018.

According to the Parks, Recreation, and Trails Element of the City's General Plan and SBTCA's 2015 San Bernardino County Non-Motorized Transportation Plan[2], a Class II bike lane is proposed along University Parkway between North Varsity Avenue/North State Street and Cajon Boulevard. There is an existing Class II bike lane along southbound (SB) and northbound (NB) University Parkway that begins north of the North Varsity Avenue/North State Street and University Parkway intersection and connects to the entrance of CSUSB, which is approximately one mile north of the proposed Project limits.

Environmental Consequences/Impacts

Land Use

Table 2 below provides a consistency analysis of the proposed Project and the applicable goals and policies of regional and local planning documents.

Table 2. Consistency with Regional and Local Plans

Goals and Policies	Project Consistency
Federal Transportation Improvement Program[3]	
The Federal Transportation Improvement Program (FTIP) is a federally managed four-year program of all the proposed surface transportation projects that will receive federal funding or are subject to a federally required action over a six-year period. The FTIP is prioritized to implement the region's overall strategy for providing mobility and improving the efficiency and safety of the transportation system, while supporting efforts to attain federal and state air quality standards for the region by reducing transportation related air pollution. FTIP includes projects related to highway improvements, transit, rail and bus facilities, high occupancy vehicle lanes, high occupancy toll lanes, signal synchronization, intersection improvements, freeway ramps, and non-motorized projects-bicycle and pedestrian.	**Consistent.** The proposed Project is listed in the Final 2017 FTIP (Project No. SBD59204). Implementation of the proposed Project will alleviate traffic collisions related to congestion by making the intersection operations more efficient for commuters; as well as, improve operational efficiency for bicycle and pedestrian access. Therefore, the proposed Project is consistent with the FTIP program.
Southern California Association of Governments – 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy[4]	
Goal 2: Maximize mobility and accessibility for all people and goods in the region.	**Consistent.** The purpose of the proposed Project is to plan for the projected regional population growth, relieve traffic congestion and related GHG emissions by providing an improved and efficient signalized intersection, and improve vehicular, bicycle, and pedestrian access. Although no existing bus stops are located within the project limits, the overall improved connectivity within the interchange for both pedestrians and bicyclists would allow transit riders to access these bus stops adjacent to the project limits more safety and
Goal 3: Ensure travel safety and reliability for all people and goods in the region.	

[2] http://www.gosbcta.com/plans-projects/plans/NMTP-RevisedMay2015.pdf, accessed January 22, 2018.
[3] http://ftip.scag.ca.gov/Pages/2017/approved.aspx, accessed March 25, 2018.
[4] http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS.pdf, accessed June 25, 2018.

Table 2. Consistency with Regional and Local Plans

Goals and Policies	Project Consistency
	efficiently. Therefore, the proposed Project is consistent with these goals.
Caltrans Complete Streets	
Increased transportation choices.	**Consistent.** The DDI at University Parkway will provide options to avoid traffic congestion, and increase the overall capacity of the transportation network by providing accessible and efficient operations through the interchange. These operational improvements include the following and can be seen in Attachment A - Figure 4: • Increase the overall capacity by providing up to three lanes and turn lanes of efficient operations through the interchange consistent with the University Corridor Specific Plan. • The DDI design will make the surrounding community and the local interchange more livable by improving the transportation facility and reducing congestion. • The design eliminates several vehicular crossing conflicts and reduces the potential of crashes and the severity of crashes. With the implementation of these improvements to transportation options, the proposed Project is consistent with this goal.
Improve return on infrastructure investments	**Consistent.** The integration of sidewalks, bike lanes, and safe crossings into the initial design of the project will not only provide better and safer operations but spare the expense of retrofits for complete streets elements at a later date. Therefore, the proposed Project is consistent with this goal.
Livable communities	**Consistent.** The DDI design will make the surrounding community and university campus more livable by improving the transportation facility and reducing accidents and congestion. Therefore, the proposed Project is consistent with this goal.
Improved safety	**Consistent.** The design accommodates bicyclists, pedestrians, and reduces the potential of crashes and the severity of crashes. Therefore, the proposed Project is consistent with this goal.
Improved air quality.	**Consistent.** Greenhouse gas emissions will be reduced by integrating complete streets elements in the DDI design by encouraging more efficient vehicular trips and the use of non-motorized and public transit trips through the addition of the signalized intersection, and improved bicycle and pedestrian access. Although no existing bus stops are located within the project limits, the overall improved connectivity for pedestrians and bicyclists

Table 2. Consistency with Regional and Local Plans

Goals and Policies	Project Consistency
	within the interchange would allow transit riders to access these bus stops adjacent to the project limits more safely and efficiently. Therefore, the proposed Project is consistent with this goal.
Increase in walking and bicycling. Bicycle facilities. Pedestrian facilities.	**Consistent.** Active elements inherent to the DDI design will encourage walking and bicycling by providing room for these activities and transportation options. These improvements include: • 4.5-foot wide Class II bike lane proposed on the inside lane through the interchange core to connect bicyclists to bike lanes on each side of the interchange. • Conformance with California MUTCD 9B-California Guide Signs for Bicycle Facilities. • Provide California MUTCD 9C-1 Intersection Pavement markings; Designated Bicycle Lane with Left Turn on a Divided Highway. • Loop detection for bikes at signalized intersections. • Use of sharrows where bike lanes and vehicle crossings occur. • Recommendation for Bikes May Use Full Lane Regulatory Sign in interchange. • Lighting to provide accommodations for pedestrians, including access to businesses and adjacent shopping centers: o Contrasting crosswalks o Conflict awareness; using green striping to increase visibility o Conflict on the driveway/parking and bike/pedestrian access at the Verizon building/Jack in the Box. • Cross walks will be as close to 90 degrees to the curb where possible. • Height of safety shape barriers and material-concrete will allow adequate sight distance for pedestrians. • Provide off-set stop limit lines where appropriate. • Stop controls at crosswalks with unsignalized intersections as appropriate. • Off-ramps at I-215 NB and I-215 SB will be signalized for pedestrians. • Recommendation for Bike & Pedestrian Warning Signs at all interchange crossings. With the implementation of these improvements to bicycle and pedestrian infrastructure, the proposed Project is consistent with these goals.
San Bernardino County Non-Motorized Transportation Plan	
Goal 1: Increased bicycle and pedestrian access - Expand bicycle and pedestrian facilities and access within and between neighborhoods, to employment centers, shopping areas, schools, and recreational sites.	**Consistent.** As previously discussed under the Project's consistency with Complete Streets, the proposed Project would implement a Class II bike lane in both the NB and SB directions of the interchange core which allows

Table 2. Consistency with Regional and Local Plans

Goals and Policies	Project Consistency
Goal 4: Improved bicycle and pedestrian safety - Encourage local and statewide policies and practices that improve bicycle and pedestrian safety.	bicyclists to safely travel along University Parkway through the DDI. This would create a more complete bicycle network within the City by providing a continuous bike lane from CSUSB to the southwestern border of the City. The proposed Project will also include improvements to pedestrian access at this interchange. Therefore, the proposed Project is consistent with these goals.
City of San Bernardino General Plan - Land Use Element	
Goal 2.7: Provide for the development and maintenance of public infrastructure and services to support existing and future residents, businesses, recreation, and other uses.	**Consistent.** The purpose of the proposed Project is to provide improvements to accommodate for the projected regional population growth in the study area, increases in enrollment at CSUSB, and an increase in traffic demand at the existing I-215/University Parkway interchange for the horizon year of 2040. The proposed Project will improve vehicular, bicycle, and pedestrian access through the freeway ramp intersections; therefore, the proposed Project is consistent with this goal.
City of San Bernardino General Plan - Economic Development Element	
Policy 4.8.2: Fund key surface transportation improvements including new interchanges along 1-215 and access from the 1-10 to the San Bernardino International Airport and Trade Center along Waterman, Mountain View, Tippecanoe, and Mill.	**Consistent.** The proposed Project will provide operational improvements to traffic flow associated with the I-215/University Parkway interchange. These operational improvements will improve all four legs of the current interchange, as well as directional movement through the freeway system. Therefore, the proposed Project is consistent with this policy.
City of San Bernardino General Plan – Community Design Element	
Policy 5.3.3: A well-integrated network of bike and pedestrian paths should connect residential areas to schools, parks, and shopping centers.	**Consistent.** As previously discussed under the Project's consistency with Complete Streets, the proposed Project would implement 4.5-foot wide Class II bike lane in both the NB and SB directions of the interchange core which allows for bicyclists to safely travel along University Parkway through the DDI. This would create a more complete bicycle network within the City by providing a continuous bike lane from CSUSB to the southeastern border of the City. The proposed Project would also include improvements for pedestrian access at this interchange. Therefore, the proposed Project is consistent with this policy.
City of San Bernardino General Plan - Circulation Element	
Goal 6.1: Provide a well-maintained street system	**Consistent.** Sustained growth and development in the area has increased commuter traffic at the I-215/

Table 2. Consistency with Regional and Local Plans

Goals and Policies	Project Consistency
Policy 6.1.1: Maintain and rehabilitate all components of the circulation system, including roadways, sidewalks, bicycle facilities and pedestrian facilities.	University Parkway interchange. This interchange serves as the primary freeway access for CSUSB and a number of surrounding businesses and area residents. This has caused inadequate interchange queuing capacity and existing geometric deficiencies which have resulted in higher than state average collision rates at both the NB exit and SB entrance ramps. Extensive commercial and industrial developments, as well as the expansion of CSUSB, which is expected to increase its student population from 15,000 to 25,000 in the next 10 years, have contributed to the growth in the Project area. Existing (2017) traffic conditions indicate that both the northbound and southbound ramp intersections currently operate at Level of Service (LOS) E or F during PM peak hours. The results of the traffic analysis indicate that all study intersections and freeway mainline segments are forecasted to operate at LOS D or better under the Opening Year 2020 Build conditions. Therefore, the proposed Project would not result in a deterioration in level of service within and immediately adjacent to the University Parkway interchange. Implementation of the DDI system would allow more efficient left-turn and right-turn movements at ramp terminals and reduce delay and improve traffic flow for multiple movements within the constrained area. The Project proposes to reconfigure the interchanges to improve traffic operations which may include additional street lighting, traffic signal modifications, minor paving, minor utility relocations, signage changes, re-striping, turn lanes, and median streetscape improvements to improve circulation and access through the freeway ramp intersection. Therefore, the proposed Project is consistent with these goals and policies.
Goal 6.2: Maintain efficient traffic operations on City streets.	
Policy 6.2.1: Maintain a peak hour level of service D or better at street intersections.	
Policy 6.2.5: Design roadways, monitor traffic flow, and employ traffic control measures (e.g. signalization, access control, exclusive right and left turn-turn lanes, lane striping, and signage) to ensure City streets and roads continue to function safely within our Level of Service standards.	
Goal 6.3: Provide a safe circulation system.	**Consistent.** As previously discussed under the Project's consistency with Complete Streets, the proposed Project would also include 4.5-foot wide Class II bike lane in both the NB and SB directions of the interchange core which allows bicyclists to safely travel along University Parkway through the DDI. This would create a more complete bicycle network within the City by providing continuous bike access from CSUSB to the southeastern border of the City. The proposed Project would also include improvements for pedestrian access at this interchange and allow for pedestrians to traverse the interchange core of the DDI by a protected pedestrian pathway. Crossing distances would
Policy 6.3.1: Promote the principle that streets have multiple uses and users, and protect the safety of all users.	

Table 2. Consistency with Regional and Local Plans

Goals and Policies	Project Consistency
	be shortened for pedestrians since pedestrians would be crossing to the protected pedestrian pathway which is located in the middle of the DDI, instead of crossing the entire width of the street at a typical street intersection. Therefore, the proposed Project is consistent with these goals and policies.
Goal 6.6: Promote a network of multi-modal transportation facilities that are safe, efficient, and connected to various points of the City and the region.	**Consistent.** As previously discussed under the Project's consistency with Complete Streets, the proposed Project would also include 4.5-foot wide Class II bike lane in both the NB and SB directions of the interchange core which allows bicyclists to safely travel along University Parkway through the DDI. This would assist in creating a more complete bicycle network within the City by providing a continuous bike lane from CSUSB to the southwestern border of the City. Therefore, the proposed Project is consistent with this policy.
Policy 6.6.4: Ensure accessibility to public transportation for seniors and persons with disabilities.	**Consistent.** The proposed Project will reconfigure this interchange by implementing a DDI which would improve safety and traffic flow for multiple movements. Accessibility to public transportation along University Parkway for all people utilizing public transportation facilities, include seniors and persons with disabilities, will be maintained. Therefore, the proposed Project is consistent with this policy.
City of San Bernardino General Plan - Public Facilities and Services Element	
Goal 7.4: Maintain and enhance the cultural quality of life for the City's residents.	**Consistent.** The I-215/University Parkway interchange is considered a gateway into the City as well as the University District. Currently, along the abutment walls of the bridge are twin murals welcoming users into the City of San Bernardino and the University District. The proposed Project would not widen the existing bridge. The Project team has coordinated with CSUSB throughout the design process; as such, the Project team has learned that CSUSB will be repainting the twin murals with a new design. Repainting of the twin murals may occur prior to construction of the proposed Project. If this occurs, the Project will preserve the twin murals throughout construction to ensure the scenic resource is maintained. If repainting occurs after the construction of the proposed Project, CSUSB has agreed to repaint the murals which will then include the new concrete barrier. Therefore, the proposed Project is consistent with this goal.

Table 2. Consistency with Regional and Local Plans

Goals and Policies	Project Consistency
City of San Bernardino University Specific Plan	
Physical Connectivity: Develop a seamless connection between the community and University through access, tailored street naming, and physical improvements such as landscaping, streetscape, signage, and public art.	**Consistent.** As previously discussed under the Project's consistency with Complete Streets, the proposed Project would also include 4.5-foot wide Class II bike lane in both the NB and SB directions of the interchange core which allows bicyclists to safely travel along University Parkway through the DDI. This would assist in creating a more complete bicycle network within the City by providing a continuous bike lane from CSUSB to the southwestern border of the City. The proposed Project would also include improvements for pedestrian access at this interchange and allow for pedestrians to traverse the interchange core of the DDI by a protected pedestrian pathway. Crossing distances would be shortened for pedestrians since pedestrians would be crossing to the protected pedestrian pathway which is located in the DDI's interchange core, instead of crossing the entire width of the street at a typical street intersection. Other improvements, such as striping, signage, and maintaining the murals on the bridge abutment walls will also be implemented in order to guide all users through the DDI safely. Although improvements to public transit within the Project limits is not proposed, physical improvements through the implementation of signage, signals, and the DDI, will help develop seamless vehicular connectivity through University Parkway, which would benefit transit traversing the project site. Therefore, the proposed Project is consistent with this goal.

Source: Caltrans Complete Streets Program (October 2014); City of San Bernardino General Plan (November 2005); City of San Bernardino University District Specific Plan (November 2005); San Bernardino County Transportation Authority Non-Motorized Transportation Plan (May 2015); SCAG 2016-2040 RTP/SCS (April 2016); SCAG Final 2017 FTIP (May 2016).

As demonstrated above in Table 2, the proposed Project is consistent with applicable regional and local plans, goals, and policies.

The proposed Project will require three TCEs identified in Table 3, below, and shown in Attachment A-Figure 4.

Table 3. Right-Of-Way Acquisition and Temporary Construction Easements

Property	Assessor Parcel Number (APN)	Location	Type of Impact
Retail Plaza	0266-072-33	4000-4016 N University Parkway	TCE
Jack in the Box	0266-072-32	4020 N University Parkway	TCE
Scottish Rite Property	0266-591-08	4400 N Varsity Avenue	TCE

As previously referenced in Table 3, there are TCEs required as a result of two driveways along University Parkway that will be removed and relocated. One driveway that serves the Scottish Rite property (APN 0266-591-08) and another driveway that serves an existing retail plaza (APNs 0266-072-32 and 0266-072-33). The retail plaza contains a Jack in the Box, Verizon Wireless retailer, and three local businesses.

The Scottish Rite property driveway on University Parkway is currently unused since it serves as a secondary form of access. The primary driveway to access the property is located along North Varsity Avenue. A replacement (secondary) driveway along University Parkway, will be constructed just north of the existing secondary driveway that will be removed. The removal of the existing gated secondary driveway off of University Parkway would occur after the relocated secondary driveway is complete to provide uninterrupted secondary access to the property.

As seen in Attachment A – Figure 4, the existing driveway near the Jack in the Box restaurant and a portion of the landscaped buffer closest to University Parkway and the I-215 Southbound off-ramp intersection will be removed. Access to the retail plaza will not be impacted as there is a secondary driveway located just south along University Parkway that will provide access to this retail plaza during and after construction activities. Thus, no temporary or permanent impacts to access as a result of the relocation of these driveways would occur as a result of the proposed Project. In addition, the proposed Project would result in temporary impacts to some of the parking spaces near the drive way that is being removed; however, at a minimum, these parking spaces will be replaced in kind.

Based on the information above, no short-term or long-term impacts related to land use, or consistency with regional and local plans, goals, and policies, are anticipated. Therefore, no avoidance, minimization, or mitigation measures are required.

Growth

According to the Southern California Association of Governments (SCAG) 2016-2040 Regional Transportation Plan/ Sustainable Communities Strategy (2016 RTP/SCS)[5], growth of population and employment will trend towards Riverside and San Bernardino Counties. Growth projections for the City area as follows in Table 4.

[5] http://scagrtpscs.net/Documents/2016/final/f2016RTPSCS_DemographicsGrowthForecast.pdf, accessed May 21, 2018.

Table 4. Growth Projections

2040 Growth Forecast	2012	2040	Percent (%) Change
Population (Persons)	211,900	257,400	21%
Household (Units)	59,300	77,100	30%
Employment (Jobs)	88,900	128,900	45%

Source: SCAG 2016 RTP/SCS

The proposed Project is not capacity enhancing and thus, is not growth inducing. The purpose of the proposed Project is to provide improvements to the existing circulation system to accommodate for the projected regional population growth in the area, increases to CSUSB enrollment, and an increase in traffic demand at the existing I-215/University Parkway interchange for the horizon year of 2040. Therefore, there are no short-term or long-term impacts related to growth as a result of the proposed Project.

Community Character and Cohesion

Demographic information for the Study Area was collected from the American Service Community Survey 2016 5-Year Estimate. The data collected was used to describe the community characteristics. According to Table 5, the total population within the Study Area is 8,349. 77% of the total population within the Study Area is Hispanic or Latino and 15% is White.

Approximately 28 percent of the population is under the age of 18 and 66 percent of the population is between the age of 18 and 64; and, as seen in Table 5, household size varies from 2.24 to 5.30 across the Block Groups. According to the United States Department of Health and Human Services (DHHS), the 2016 poverty guideline[6] is $20,160 for a family of three, $24,300 for a family of four; $28,440 for a family of five; and $32,580 for a family of six. All Block Groups' median incomes are higher than the poverty guidelines for each Block Groups' average household size, rounded up to the next whole number.

Table 5. Community Characteristics

	Study Area						
Census Data	**Census Tract 41.01 – Block Group 2**	**Census Tract 41.04 – Block Group 2**	**Census Tract 46.01 – Block Group 3**	**Census Tract 46.01 – Block Group – 5**	**Totals**	**City Of San Bernardino**	**County of San Bernardino**
Total Population	3,109	3,459	1,098	683	8,349	214,581	2,106,754
Age							
Population <18 Years	1,023	919	285	149	2,376	64,977	576,482
Population ≥ 18 Years	1,861	2,310	813	489	5,473	131,444	1,312,067
Population ≥ 65 Years	225	230	0	45	500	18,160	201,323

[6] https://aspe.hhs.gov/computations-2016-poverty-guidelines, accessed May 21, 2018.

Table 5. Community Characteristics

Census Data	Study Area					City Of San Bernardino	County of San Bernardino
	Census Tract 41.01 – Block Group 2	Census Tract 41.04 – Block Group 2	Census Tract 46.01 – Block Group 3	Census Tract 46.01 – Block Group – 5	Totals		
Median Age	27.6	27.2	25.9	47.5	32[a]	28.9	32.7
Race and Ethnicity							
White	392	169	409	262	1,232	33,769	642,786
African American	23	188	147	53	411	28,726	170,376
American Indian and Alaska Native	0	7	0	7	14	555	6,840
Asian	0	109	0	4	113	9,810	138,751
Native Hawaiian and Other Pacific Islander	0	0	0	0	0	537	6,368
Some other race	0	0	0	0	0	455	4,417
Two or more races (of total population)	15	22	127	0	164	4,859	48,112
Hispanic or Latino	2,679	2,964	415	357	6,415	135,870	1,089,104
Household Characteristic							
Total Housing	661	658	527	281	2,127	62,089	708,442
Owner Occupied (%)	56%	55%	0%	88%	46%	43%	52%
Renter Occupied (%)	40%	36%	93%	12%	48%	49%	36%
Vacancy Rate (%)	4%	9%	7%	0%	6%	8%	13%
Average Household Size	4.83	5.3	2.24	2.41	3.69[a]	3.56	3.32
Household Tenure							
Moved in 2015 or later	52	25	78	16	171	31,507	3,405
Moved in 2010 to 2014	184	191	332	67	774	230,172	23,561
Moved in 2000 to 2009	124	158	80	32	394	197,518	16,935

Table 5. Community Characteristics

Census Data	Study Area					City Of San Bernardino	County of San Bernardino
	Census Tract 41.01 – Block Group 2	Census Tract 41.04 – Block Group 2	Census Tract 46.01 – Block Group 3	Census Tract 46.01 – Block Group – 5	Totals		
Moved in 1990 to 1999	215	137	0	53	405	86,165	6,563
Moved in 1980 to 1989	48	18	0	102	168	43,685	3,373
Moved in 1979 or earlier	12	73	0	11	96	29,875	3,486
Income							
Median Household Income	$33,050	$42,551	$41,989	$86,161	$50,938[a]	$38,456	$54,469

Source: American Service Community Survey 2016 5-Year Estimate

[a] Average of all census blocks.

The vacancy rate in the Study Area is less than the City or the County; meanwhile the percentage of owner and renter occupancy rate varies across the block groups. Census Tract 46.01 – Block Group 3 is predominately renter occupied while Census Tract 41.01 – Block Group 2, Census Tract 41.04 – Block Group 2, and Census Tract 46.01 – Block Group 5 are predominately owner occupied.

For residential tenure within the Study Area, a total of 171 residents moved in from 2015 or later, 774 residents moved in from 2010 to 2014, 394 moved in from 2000 to 2009, and 405 moved in from 1990 to 1999. Approximately half of the residents that reside in the Study Area have been there since before 2009, and the other half moved in after 2009. Although a little over half of the residents have resided in the area for more than 10 years, which would denote a large portion of the community as having strong community character and cohesion, most of the housing as seen in Attachment A - Figure 3, is located north of I-215 and south of the City and County jurisdiction boundary. The area immediately adjacent to the I-215/University Parkway interchange is mostly retail and commercial uses. Therefore, impacts to community cohesion and character are not anticipated to be high.

Since the proposed Project is an improvement to an existing roadway facility and would provide for more safe and effective bicycle and pedestrian connections throughout the reconfigured interchange, the proposed Project would not create a barrier that divides the existing neighborhood. Continuous access along the roadways and to adjacent businesses will be maintained throughout construction. Implementation of the proposed Project will construct 4.5-foot wide Class II bike lane in both the NB and SB directions of the interchange core. This would allow bicyclists to travel safely along University Parkway through the DDI from the existing Class II bike lane located north of the proposed Project, further south. The proposed Project would also include improvements for pedestrian access at this interchange and allow for pedestrians to traverse the DDI's interchange core by a protected pedestrian pathway. Crossing distances would be shortened for pedestrians since pedestrians would be crossing to the protected pedestrian pathway within the DDI's interchange core, instead of crossing the entire width of the street at a typical street intersection. This

will provide increased connectivity and safety for pedestrians, bicyclists, and motorists. Although there are no existing bus stops within the project limits, connectivity within the interchange would be improved for pedestrians and bicyclists so that transit riders can access bus stops adjacent to the project limits more safely and efficiently.

Both abutment walls of the I-215 overcrossing showcase murals spelling "University" with a picture of a howling coyote at the end of the word "University" in bright white letters with bright blue background. These twin murals identify the interchange area as the gateway entrance to the University District. Due to the proposed Project design under Alternative 2, protective concrete barriers that will not exceed 4 feet in height, may be placed adjacent to the existing abutment walls to protect the overcrossing's structural integrity and supporting abutment walls from potential collisions. These concrete barriers may partially cover some of the lower lettering of the existing mural showcasing the howling coyote. However, as stated above, CSUSB will repaint the twin murals within the space left after the addition of the concrete barriers. Repainting of the twin murals may occur prior to construction of the proposed Project. If this occurs, the Project will preserve the twin murals throughout construction to ensure this community element is preserved.

With the Project's improvements to the roadway and to bicycle and pedestrian connections, and with the implementation of the project design feature pertaining to the preservation of the twin murals at the I-215 overcrossing bridge, no short-term nor long-term impacts related to community character and cohesion would occur as a result of the proposed Project.

Economy

According to the Economic Development Element of the City's General Plan, the Inland Empire as a whole has undergone a tremendous transformation over the last 15 to 20 years and has become a major industrial center for the Southern California region. Most of the commercial and industrial markets along the I-10 freeway corridor have matured and are now expanding east. San Bernardino is in a position to take advantage of these shifts in the market since the City has access to I-10, I-215 and I-15 freeways. Additionally, with a shortage of industrial space in Orange County, the Inland Empire has experienced a growth in firms taking advantage of available land at affordable prices. As for trends in other market sectors, retail has decreased, while office development has increased. Office development has increased due to the affordability of housing relative to Los Angeles and Orange Counties; however, both the retail and office markets are over-built.

The I-215/University Parkway interchange is considered a gateway into the City as well as the University District. Furthermore, as discussed earlier under *Growth*, the purpose of the proposed Project is to provide improvements to accommodate the projected regional population growth in the Study Area, the projected increase in CSUSB enrollment, and the increase to traffic demands at the existing I-215/University Parkway interchange for the horizon year of 2040. As stated previously, a major business retailer Walmart, is located just west of the proposed Project limits. A Dollar Tree warehouse and distribution center is located just south of the proposed Project limits. Continued access would be provided to these businesses serving the adjacent neighborhoods throughout construction. Impacts to the parking lot of the retail plaza containing a Jack in the Box, Verizon Wireless retailer, Mimi's Donuts and Ice Cream, Honey's Fashion, and a dental office would arise due to temporary losses of parking spaces during construction; however, these parking spots will be replaced in kind; and thus, no permanent impacts to parking spaces would occur. Since no relocations to

nearby businesses are anticipated, no long term impacts to existing jobs, tax base; and thus no economic impacts would occur as a result of proposed Project implementation.

Relocations and Environmental Justice

As specified above under *Community Character and Cohesion,* low-income is defined based on the DHHS 2016 poverty guideline. The DHHS 2016 poverty guideline was used to be consistent with data gathered from the American Service Community Survey 2016 5-Year Estimate used for this memorandum. As shown in Table 6, the Study Area is not considered low-income when compared to the average household size, which was rounded up to compare with the DHHS 2016 poverty guideline thresholds. However, there is an elevated level of minority populations (the Study Area residents are predominantly of Hispanic or Latino origin at 77 percent), which constitutes the criteria for potential environmental justice impacts. However as seen in Table 6, it is not anticipated that the proposed Project would result in disproportionately high or adverse impacts to these populations because the proposed Project would not result in any resident or business displacements, nor would it divide a minority population. The proposed Project would provide an overall benefit to the Study Area by accommodating for projected growth and increased congestion projected for the future and providing improved bike and pedestrian connections throughout the improved interchange.

Table 6. Community Characteristics

	Minority Population			**Low-Income Populations**			
Geographic Area	**% Non-White/ Minority**	**% Minority in Affected Community > 110% of Community of Concern (92.69%)**	**Minority EJ Population**	**Median Household Income ($)**	**Average Household Size**	**2016 Median Household Income Below DHHS Poverty Income[1,2]**	**Low-Income EJ Population**
Community of Comparison							
City of San Bernardino	84.26%	Not Applicable	Not Applicable	$38,456	4	Not Applicable	Not Applicable
Affected Community							
Census Tract 41.01 – Block Group 2	87.39	No	No	$33,050	4.83	No	No
Census Tract 41.01 – Block Group 2	95.11	Yes	Yes	$42,551	5.3	No	No
Census Tract 41.01 – Block Group 2	62.75	No	No	$41,989	2.24	No	No
Census Tract 41.01 – Block Group 2	61.64	No	No	$86,161	2.41	No	No

Resource: American Service Community Survey 2016 5-Year Estimate

[1] According to the United States Department of Health and Human Services, the 2016 poverty guideline:

- Family of three = $20,160
- Family of four = $24,300
- Family of five =$28,440

Table 6. Community Characteristics

Geographic Area	Minority Population			Low-Income Populations			
	% Non-White/ Minority	% Minority in Affected Community > 110% of Community of Concern (92.69%)	Minority EJ Population	Median Household Income ($)	Average Household Size	2016 Median Household Income Below DHHS Poverty Income[1,2]	Low-Income EJ Population

- Family of six = $32,580

[2] 2016 DHHS thresholds are used to be consistent with census data gathered which is the 5-year (2012-2016) estimate.

As shown previously in Table 3, three TCEs would be required as part of the proposed Project. No building structures will be impacted; and no residential units, businesses, or personal property would be relocated as a result of the proposed Project.

Based on information from the Draft Air Quality Report (AQR)[7] prepared for the proposed Project, construction is planned to last approximately 2 years. During construction, short-term degradation of air quality is expected from the release of particulate emissions (airborne dust) generated by activities related to construction. Emissions from construction equipment powered by gasoline and diesel engines are also anticipated and would include carbon monoxide (CO), nitrogen oxide (NO_X), and volatile organic compounds (VOCs), directly emitted particulate matter 10 micrometers or less in diameter (PM_{10}) and particulate matter 2.5 micrometers or less in diameter ($PM_{2.5}$), and toxic air contaminants (TACs) such as diesel exhaust particulate matter. Construction activities are expected to increase traffic congestion in the Study Area, resulting in increases in emissions from traffic during the delays. These emissions would be temporary and limited to the immediate area surrounding the construction site. Minimization measures AQ-1 through AQ-10 from the AQR, included under *Avoidance, Minimization and/or Mitigation Measures*, will be implemented to reduce impacts during the construction phase.

Operational emissions take into account long-term changes in emissions due to the proposed Project (excluding the construction phase). Based on information from the AQR, the proposed Project would not increase the traffic volumes along I-215, University Parkway, or any of the highway ramps. Therefore, the proposed Project would have no effect on the regional criteria pollutant, mobile source air toxic (MSAT), or greenhouse gas (GHG) emissions.

No long-term noise impacts are anticipated within the Study Area. However, during construction the proposed Project would generate noise disturbances and be subject to noise control provisions as specified in the 2015 Standard Specifications and Special Provisions (SSP 14-8.02) per Measure N-1, included under *Avoidance, Minimization and/or Mitigation Measures*.

[7] HDR. 2018. *Air Quality Report I-215/University Parkway Interchange Improvement Project*.

Based on the discussion above, short-term and long term impacts from air quality and noise to EJ communities as a result of the proposed Project would be avoided and minimized with the implementation of Measures AQ-1 through AQ-10, and N-1.

Traffic and Transportation/Bicycle and Pedestrian

According to the Draft Traffic Operations Analysis Report (TOAR)[8] prepared for the proposed Project, the Traffic Study Area includes the four intersections along University Parkway (between Hallmark Parkway and Varsity/State Street) and I-215 freeway mainline segments and ramps (from SR-210/I-215 freeway interchange and the Palm Avenue interchange). The Traffic Study Area also includes adjacent driveways within 500 feet west of the interchange that might be impacted by the proposed design.

Traffic accident data was assembled from Caltrans' Traffic Accident and Surveillance Analysis System (TASAS) for a 36 month period, from September 2012 through August 2015. Accident data for the Traffic Study Area was also collected from Statewide Integrated Traffic Records System (SWITRS) for the same time period. Accident rates for fatal accidents along the NB and SB I-215 mainline are also 30 percent higher compared to the statewide average accident rates. The accident rates for the total number of accidents at I-215 NB University Parkway On-Ramp and Off-Ramp are 30 percent higher than the average statewide accident rates.

I-215 NB On/Off-Ramps account for the largest number of accidents with a total of 24 accidents that have occurred at University Parkway off-ramp, 21 of which have been identified as rear-ends. For the freeway mainline, similar to freeway ramps, the majority of accidents that occurred were identified as rear-ends. For both the freeway mainline and ramps, the primary collision factor of the accidents was due to unsafe speed. Along University Parkway, the intersections of North Varsity Avenue/North State Street and University Parkway and I-215 NB Ramps and University Parkway accounted for the largest number of accidents within the Traffic Study Area. A total of eight (8) collisions occurred at North Varsity Avenue/North State Street and University Parkway and a total of nine (9) collisions occurred at I-215 NB Ramps and University Parkway. The majority of accidents that occurred were identified as rear-ends and the primary collision factor of the accidents was due to unsafe speed.

According to the Traffic and Operations Analysis Report (TOAR), analysis of the Build Alternative shows that traffic operations along University Parkway will improve (reducing delays and congestion) compared to No Build conditions. The traffic operations analysis indicates that acceptable operations could be restored throughout most of the study area and maintained through the horizon year of 2040 by undertaking basic lane widening and reconfiguring the existing interchange to a DDI, as recommended by the proposed Project. Overall this proposed Project will support future growth and increased traffic demand, and relieve congestion through improved signalized intersection operational efficiency through the interchange.

There is currently continuity of sidewalk along University Parkway between Hallmark Parkway and North Varsity Avenue/North State Street at the existing interchange; specifically, in the northern portion of the proposed Project limits, between the I-215 interchange and the University Parkway and the North Varsity Avenue/North State Street intersection. The proposed Project would provide additional safe and efficient at-grade east/west pedestrian crossings north and south of the I-215 interchange which would also connect to

[8] HDR. 2018. *Draft Final Traffic Operations Analysis Report I-215 University Parkway Interchange*.

the protected pedestrian pathway between the SB and NB ramps. The proposed Project would also maintain and improve upon existing sidewalk connections within the proposed Project limits.

Dedicated bike infrastructure has been proposed as part of the Project (see Attachment A – Figure 4), connecting to existing NB and SB bike access points located just north of University Parkway and Varsity Avenue through the DDI's interchange core to Hallmark Parkway. North of University Parkway and Hallmark Parkway, sharrow markings are proposed at the outer right lanes in each direction of traffic. This design provides a protected pedestrian pathway within the interchange core, with concrete barriers for both pedestrian and bicycles between the SB and NB ramps. The DDI's interchange core which crosses under I-215 would allow bicyclists to navigate along the 4.5-foot Class II bike lane on either side of the interchange core and travel through the DDI in the same fashion as a vehicle or travel on the protected pedestrian pathway. This would allow bicyclists to leave the roadway and navigate safely through the core of the DDI in the same manner as pedestrians.

Most of the potential impacts to traffic and transportation, and bike and pedestrian facilities that would result from the implementation of the proposed Project are attributed to construction-related activities and improvements. However, all pedestrian and bicycle connections would be maintained throughout construction activities. During construction there is a potential that temporary impacts on traffic and circulation would occur which would impact existing routes utilized by emergency providers. However, with the implementation of Measure TR-1, a Transportation Management Plan, identified under *Avoidance, Minimization and/or Mitigation Measures*, impacts related to traffic and circulation would be avoided and/or minimized.

Avoidance, Minimization and/or Mitigation Measures

The following measures would reduce proposed Project impacts to the extent feasible:

AQ-1 During clearing, grading, earthmoving, and excavation operations, fugitive dust emissions will be controlled by regular watering or other dust preventive measure using the following procedures, as specified in South Coast Air Quality Management District (SCAQMD) Rule 403. All material excavated or graded will be sufficiently watered to prevent excessive amounts of dust. Watering will occur at least twice daily with complete coverage, preferably in the late morning and after work is done for the day. All material transported on site or off site will be either sufficiently watered or securely covered to prevent excessive amounts of dust. The areas disturbed by clearing, grading, earthmoving, or excavation operations will be minimized so as to prevent excessive amounts of dust. These control techniques will be indicated in project specifications. Visible dust beyond the property line emanating from the project will be prevented to the maximum extent feasible.

AQ-2 Prior to and during construction, project grading plans will show the duration of construction. Ozone precursor emissions from construction equipment vehicles will be controlled by maintaining equipment engines in good condition and in proper tune per manufacturers' specifications.

AQ-3 During construction, all trucks that are used to haul excavated or graded material on site will comply with State Vehicle Code Section 23114, with special attention to Sections 23114(b)(F),

(e)(2), and (e)(4), as amended, regarding the prevention of such material spilling onto public streets and roads.

AQ-4 During construction, the contractor will adhere to Caltrans Standard Specifications for Construction (Sections 14.9). Section 14-9-02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances.

AQ-5 During construction, water or a dust palliative will be applied to the site and equipment as often as necessary to control fugitive dust emissions.

AQ-6 During construction, soil binder will be spread on any unpaved roads used for construction purposes, and on all project construction parking areas.

AQ-7 During construction, trucks will be washed as they leave the right-of-way as necessary to control fugitive dust emissions.

AQ-8 During construction, construction equipment and vehicles will be properly tuned and maintained. All construction equipment will use low sulfur fuel as required by CA Code of Regulations Title 17, Section 93114.

AQ-9 During construction, a dust control plan will be developed documenting sprinkling, temporary paving, speed limits, and timely re-vegetation of disturbed slopes as needed to minimize construction impacts to existing communities.

AQ-10 During construction, equipment and materials storage sites will be located as far away from residential and park uses as practicable. Construction areas will be kept clean and orderly.

N-1 To minimize noise during construction, sound control will conform to Caltrans' provisions in section 14-8.02, "Noise Control," of the 2015 Standard Specifications and Special Provisions (SSP 14-8.02).

TR-1 During the PS&E phase, a Transportation Management Plan (TMP) will be prepared for the project. Key elements to be considered in the TMP include the following:

- Public Information
- Motorist Information Strategies
- Incident Management
- Construction Strategies
- Demand Management
- Alternative Route Strategies

Conclusion

The purpose of the proposed Project is to accommodate projected regional population growth, increases in enrollment at CSUSB, and an increase in traffic demands at the existing I-215/University Parkway interchange for the planning design year of 2040. The Project would replace the existing University Parkway tight diamond interchange configuration with a DDI configuration which would include improvements in street lighting; traffic signal modifications; minor paving; minor utility relocations; additional signage; restriping, additional turn lanes; and bicycle, pedestrian, and median streetscape improvements. Based on the analysis above, the Project would not negatively impact the surrounding community, and would provide health and safety related community benefits such as improving non-motorized access through the I-215/University Parkway interchange.

Attachments:

Attachment A – Figures

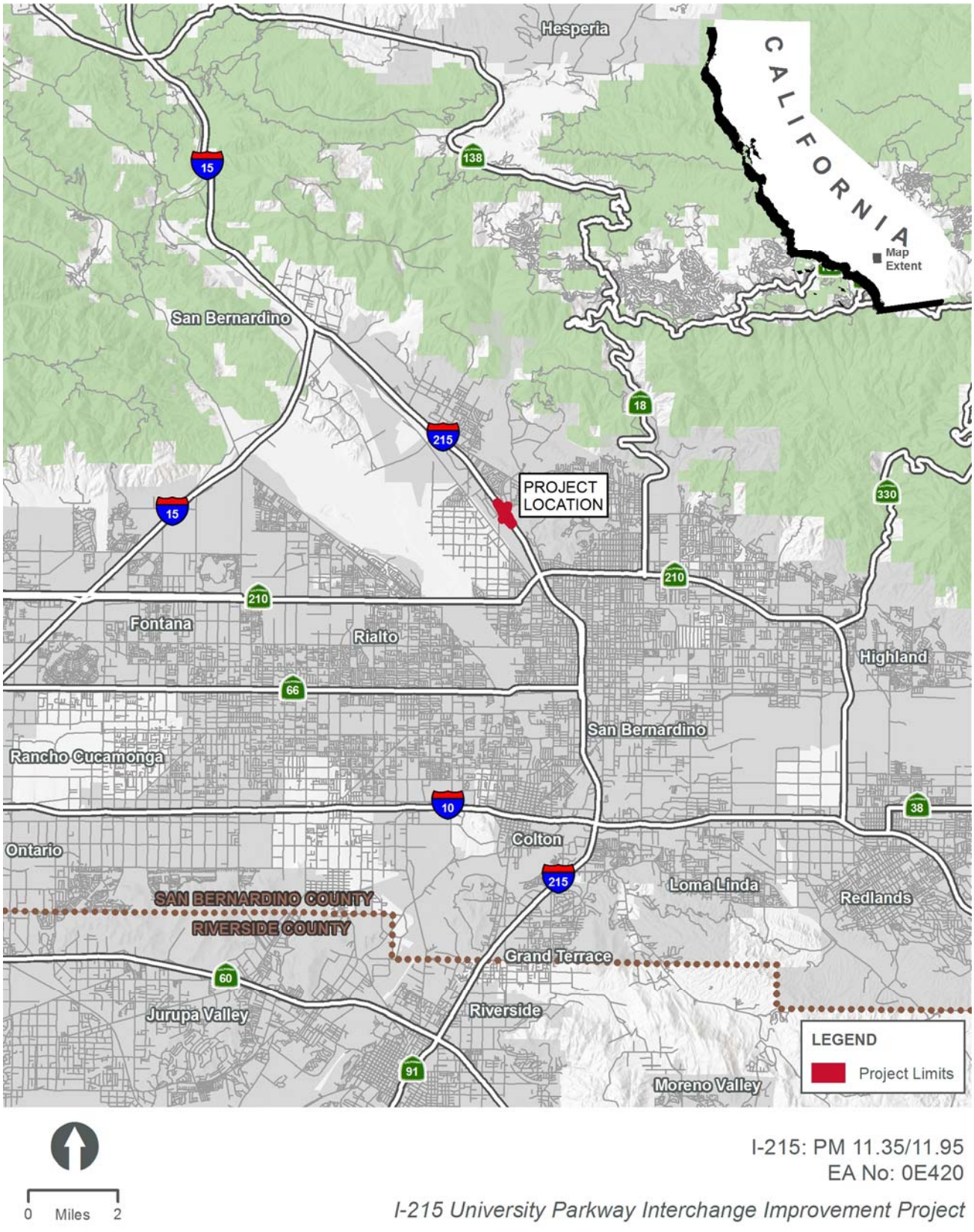
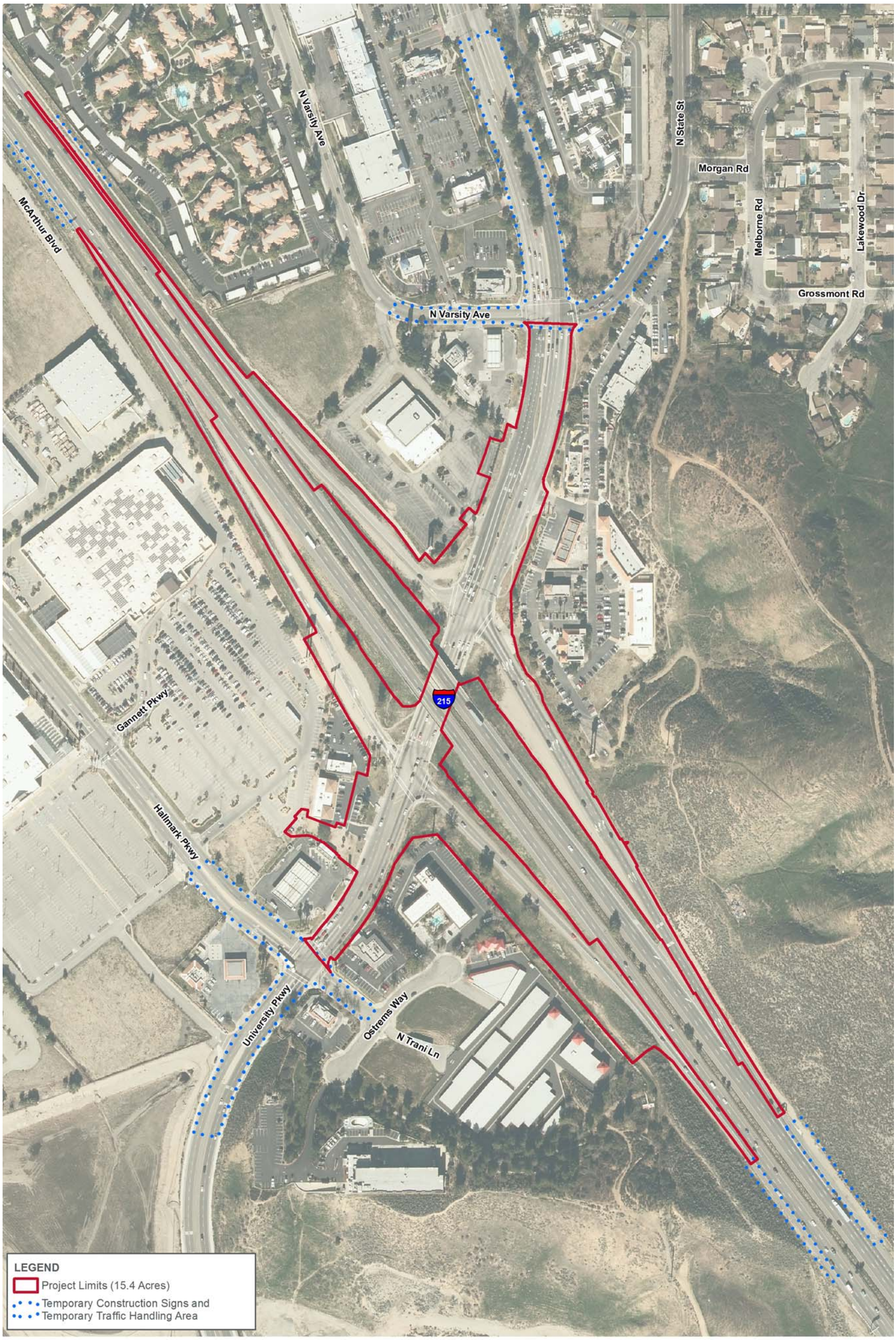


Figure 1. Regional Location and Project Vicinity



I-215: PM 11.35/11.95
EA No: 0E420

I-215 University Parkway Interchange Improvement Project

Figure 2. Project Limits

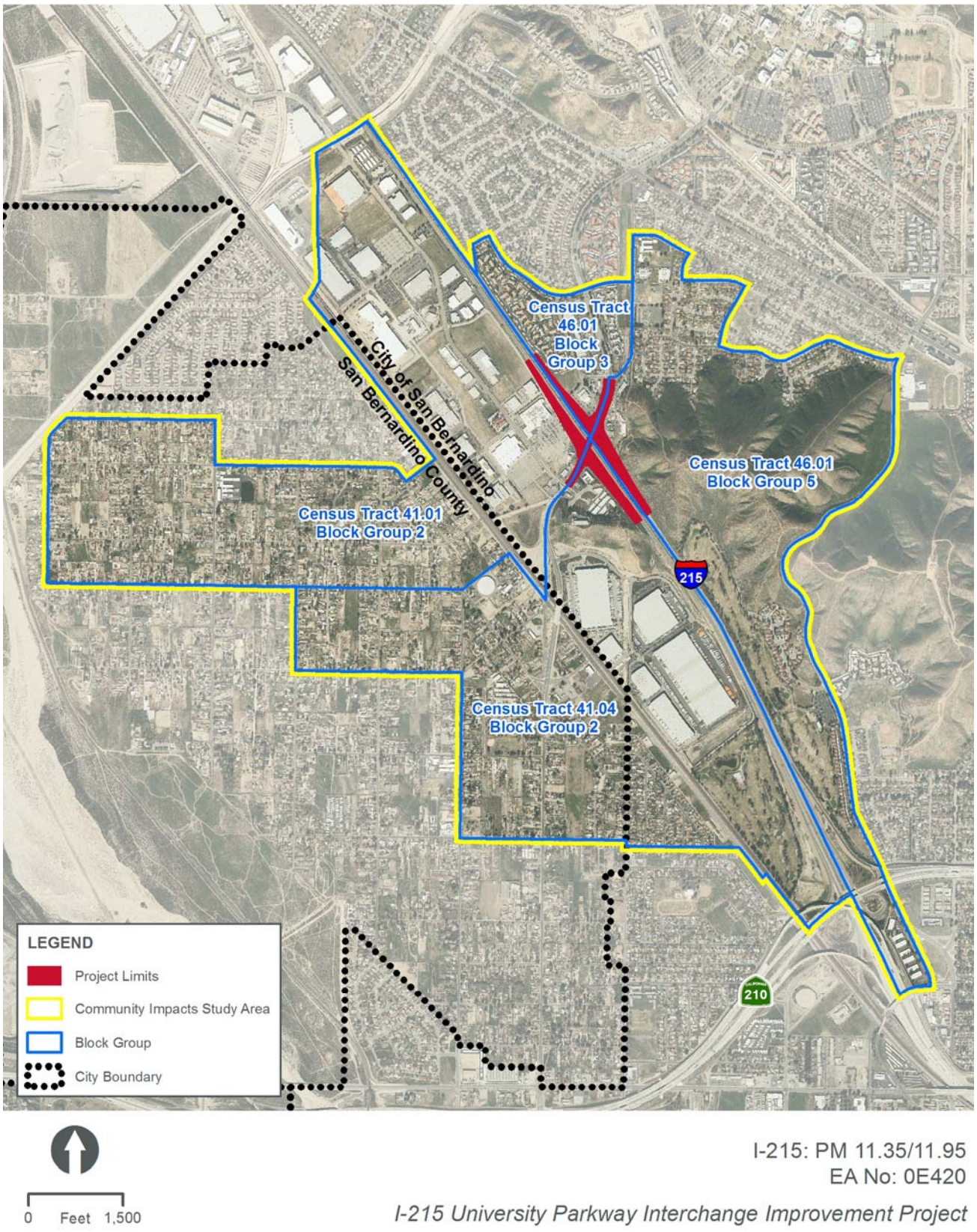
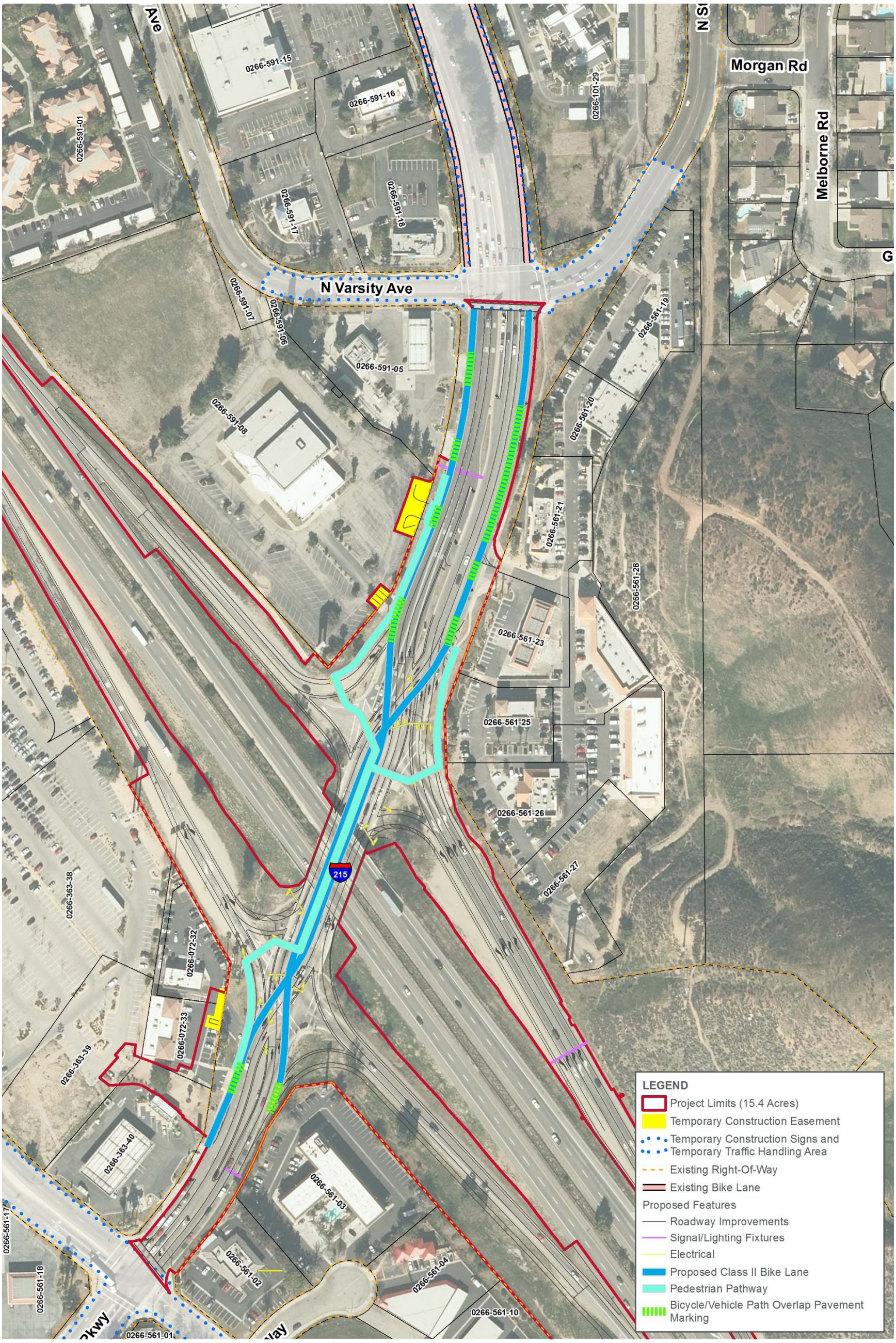


Figure 3. Community Impacts Study Area



I-215: PM 11.35/11.95
EA No: 0E420

I-215 University Parkway Interchange Improvement Project

Figure 4. Project Design