

4.14 TRANSPORTATION/CIRCULATION AND PARKING

4.14.1 INTRODUCTION

This section analyzes the potential impacts of the proposed project on transportation/circulation and parking, and is based on the *Transportation Impact Analysis* technical report (March 2017) (TIA), prepared by the Linscott Law and Greenspan engineering firm. The technical report is included in **Appendix K** of this EIR.

4.14.2 METHODOLOGY

4.14.2.1 ANALYSIS APPROACH

Effective evaluation of the traffic impacts associated with the proposed Project requires an understanding of the existing transportation system within the Project area. **Figure 4.14-1, Project Area Map**, illustrates the Project site and surrounding roadways, and **Figure 4.14-2, Existing Conditions Diagram**, illustrates the existing road conditions in the Project study area, including signalized intersections and lane configurations. The study area was determined based on those intersections and street segments to which the Project would add 50 or more peak hour trips, and includes the intersections and street segments listed below based on the anticipated distribution of the Project traffic and area of potential impact. Of particular note, based on the SANDAG traffic model, the distribution of Project traffic would be primarily to the east on Remington Road towards 55th Street or on Canyon Crest Drive. Specifically, the model showed that approximately 98% of Project generated traffic would drive east on Remington Road or Canyon Crest Drive while approximately 2% would drive west on Remington, into the College View Estates neighborhood. (See **Figure 4.14-2**.) As a result, the proposed Project would add less than 50 peak hour trips to the roads located in the College View Estates; 50 peak hour trips is the City of San Diego threshold for inclusion in a traffic analysis. Therefore, given the low traffic volumes, a LOS analysis of the neighborhood roads is not required as it is certain the proposed Project would not result in significant traffic capacity impacts in the Community View Estates community. Nonetheless, the analysis presented in this report does consider the Project's potential impacts relative to traffic flow and congestion on Remington Road entering and exiting the neighborhood, as well as the proposed Project's potential parking-related impacts on the neighborhood.

The following intersections and street segments comprise of the Project Study area:

Intersections

1. Montezuma Road / Collwood Blvd
2. Montezuma Road / Yerba Santa Drive
3. 55th St / Canyon Crest Drive
4. 55th Street / Remington Road
5. 55th Street / Hardy Avenue
6. 55th St / Montezuma Road
7. Montezuma Rd / Campanile Drive
8. College Avenue / I-8 WB Ramps
9. College Avenue / I-8 EB Ramps
10. College Avenue / Canyon Crest Avenue
11. College Avenue / Zura Way
12. College Avenue / Montezuma Way

Street Segments

Montezuma Road

- Collwood Boulevard to 55th Street
- 55th Street to College Avenue
- East of College Avenue

Remington Road

- West of 55th Street

55th Street

- Remington Road to Montezuma Road

College Ave

- Canyon Crest Drive to Zura Way

- Zura Way to Montezuma Road
- Montezuma Road to Arosa Street

The study area roadways are analyzed under the following scenarios:

- Existing Conditions
- Existing + Total Project Conditions+
- Existing + Cumulative Projects Conditions
- Existing + Cumulative Projects + Project Phase I Conditions
- Existing + Cumulative Projects + Project Phase I + Phase II Conditions
- Existing + Cumulative Projects + Total Project Conditions
- Horizon Year without Project Conditions
- Horizon Year with Project Conditions

4.14.2.2 ANALYSIS METHODOLOGY

The primary analysis was conducted utilizing a level of service, or LOS, approach - is the LOS term used to denote the different operating conditions that occur on a given roadway segment under various traffic volume loads. It is a qualitative measure used to describe a quantitative analysis taking into account factors such as roadway geometries, signal phasing, speed, travel delay, freedom to maneuver, and safety. LOS provides an index to the operational qualities of a roadway segment or an intersection. LOS designations range from A to F, with LOS A representing the best operating conditions and LOS F representing the worst operating conditions. LOS designation is reported differently for signalized and unsignalized intersections, as well as for roadway segments.

4.14.2.3 INTERSECTIONS

Signalized intersections were analyzed under AM and PM peak hour conditions. Average vehicle delay was determined utilizing the methodology found in Chapter 18 of the 2010 Highway Capacity Manual (HCM), with the assistance of the Synchro 9 computer software.

The delay values (represented in seconds) were qualified with a corresponding intersection LOS. A more detailed explanation of the methodology is provided in **Appendix K**.

Unsignalized intersections also were analyzed under AM and PM peak hour conditions. Average vehicle delay and LOS was determined based upon the procedures found in Chapter 19 and

Chapter 20 of the *2010 HCM*, with the assistance of the *Synchro 9* computer software. A more detailed explanation of the methodology is provided in **Appendix K**.

4.14.2.4 STREET SEGMENTS

Street segment analysis is based upon the comparison of daily traffic volumes (ADTs) to the City of San Diego's *Roadway Classification, Level of Service, and ADT Table*. This table provides segment capacities for different street classifications, based on traffic volumes and roadway characteristics. The City of San Diego's *Roadway Classification, Level of Service, and ADT Table* is provided in **Appendix K**.

4.14.2.5 CUMULATIVE PROJECTS

There are other planned projects in the areas adjacent to the Project site that will add traffic to the roadways surrounding the Project location. Based on correspondence with the City of San Diego and SDSU staff, a total of forty-two (42) cumulative projects were identified. TIA Table 7-1 contains the list of cumulative projects (**Appendix K**). TIA Figure 7-1 shows the existing + cumulative projects traffic volumes. **Appendix K** contains more detailed cumulative projects information.

4.14.2.6 TRIP GENERATION

Trip generation rates were researched in the SANDAG and City of San Diego trip generation manuals for a student housing use such as the proposed Project. Neither source has published rates for student housing. As a result, several student housing traffic studies were reviewed to determine an appropriate trip generation rate for the proposed Project.

In April 2015, a traffic impact analysis was prepared for the University of California, San Diego's (UCSD) Mesa Housing Project. Mesa Housing, like this Project, proposed construction of on-campus student housing. To determine the trip generation rate, a specific trip generation study was performed at the One Miramar Apartments, which is considered a comparable use to the proposed Project since this site also provides on-campus student housing. To calculate the site-specific rate generated from the One Miramar Apartments, daily traffic volumes were collected over a three-day period. Based on the data collected, a daily trip generation rate of 1.34 trips per bed was calculated.

In *The Paseo at San Diego State University EIR* (2005), City of San Diego staff approved the use of a daily trip generation rate of 3.1 trips per dwelling unit (DU) for high density student housing. The average number of beds per dwelling unit in The Paseo project was 2.5. Therefore, the daily trip generation rate of 3.1 per DU converts to 1.24 trips per bed.

Lastly, a student residence hall trip generation study conducted during the Fall 2009 at Chapman University resulted in a daily trip generation rate of 1.46 trips per bed.

Based on the three potential trip generation rates determined in connection with these three student housing projects (1.24, 1.34, and 1.46), LLG determined to utilize the most conservative of the three, a trip generation rate of 1.46 per bed.

As previously noted, the SDSU Transit Center, which serves as a hub for trolley and bus service, is located in close proximity (approximately 0.5 miles) to the site of the proposed Project. Based on this close location and the fact that about 2/3 of students who reside on campus do not bring a vehicle to campus¹, a 10% transit (trolley and bus) mode split was determined appropriate; that is, of the total number of vehicle trips that potentially would be generated by the proposed Project, 10% of the trips would be made via transit (trolley and bus) instead of by automobile, while the remaining 90% would be made via automobile. A separate pedestrian and bicycle mode split percentage was not applied in the trip generation calculations since the trip generation rate utilized is based on a campus with similar ped and bike opportunities on SDSU.

As described in EIR Section 2.0, Project Description, the proposed Project would be constructed in three separate phases:

- Phase I: up to 850 beds
- Phase II: up to an additional 850 beds (1,700 beds total)
- Phase III: up to an additional 866 beds (2,566 beds total)

As a result, the traffic analysis presented here addresses the three phases individually, with trip generation for each phase calculated separately. **Table 4.14-1** tabulates the Project Phase I trip generation. Phase I would generate approximately 1,117 ADT with 12 inbound / 10 outbound trips during the AM peak hour and 39 inbound / 33 outbound trips during the PM peak hour. The peak hour percentage assignments were determined based on the Chapman University Residence Halls Trip Generation Survey.

¹ SDSU Office of Housing Administration, March 1, 2017 (pers. Comm.)

Table 4.14-1
Project Phase I Trip Generation

Land Use	Size	Daily Trip Ends (ADTs)		AM Peak Hour				PM Peak Hour			
		Rate	Volume	% of ADT	In:Out	Volume		% of ADT	In:Out	Volume	
					Split	In	Out		Split	In	Out
Student Housing	850 beds	1.46/bed	1,241	1.98%	52:48	13	12	6.39%	54:46	43	37
Mode Split - Transit	10%		(124)			(1)	(2)			(4)	(4)
Total		—	1,117	—	—	12	10	—	—	39	33

Table 4.14-2 tabulates the Project Phase I in combination with Phase II trip generation. The Phases I + II would generate approximately 2,233 ADT with 23 inbound / 22 outbound trips during the AM peak hour and 77 inbound / 66 outbound trips during the PM peak hour.

Table 4.14-2
Project Phase I + Phase II Trip Generation

Land Use	Size	Daily Trip Ends (ADTs)		AM Peak Hour				PM Peak Hour			
		Rate	Volume	% of ADT	In:Out	Volume		% of ADT	In:Out	Volume	
					Split	In	Out		Split	In	Out
Student Housing	1,700 beds	1.46/bed	2,481	1.98%	52:48	26	24	6.39%	54:46	86	73
Mode Split - Transit	10%		(248)			(3)	(2)			(9)	(7)
Total		—	2,233	—	—	23	22	—	—	77	66

Table 4.14-3 tabulates the total Project trip generation. As shown, the total Project would generate approximately 3,370 ADT with 35 inbound / 32 outbound trips during the AM peak hour and 117 inbound / 99 outbound trips during the PM peak hour.

Table 4.14-3
Total Project Trip Generation

Land Use	Size	Daily Trip Ends (ADTs)		AM Peak Hour				PM Peak Hour			
		Rate	Volume	% of ADT	In:Out	Volume		% of ADT	In:Out	Volume	
					Split	In	Out			Split	In
Student Housing	2,566 beds	1.46/bed	3,744	1.98%	52:48	39	36	6.39%	54:46	130	110
Mode Split - Transit	10%		(374)			(4)	(4)			(13)	(11)
Total		—	3,370	—	—	35	32	—	—	117	99

4.14.2.7 TRIP DISTRIBUTION/ASSIGNMENT

The traffic that would be generated by the Project was distributed and assigned to the street system based on several factors, including a Select Zone Assignment (SZA) plot obtained from SANDAG, existing traffic counts, and site access parameters.

With respect to access and trip distribution, the Project site will provide limited parking and most of these spaces would be reserved for Americans with Disability Act (ADA) needs, housing complex staff, and personnel. Therefore, students residing at the Project who choose to bring cars to campus would not park on-site but would be free to park in any of the student designated parking facilities on campus. The lots nearest the Project site are Parking Lot 10A (located west of the Project site) and Parking Structure 12 (located east of the Project site). Because Lot 10A contains a limited number of parking spaces (33), for the purpose of this study, Parking Structure 12 on Canyon Crest Drive was assumed to be the origin/destination of the majority of Project traffic. Based on the expected distribution, 5% of the Project-generated traffic would travel to and from the Project site directly, while the other 95% would travel to and from Parking Structure 12. Based on the SZA plot, 2% of the Project-generated traffic would access the Project from the west, through the College View Estates area, via Remington Road. See **Figures 4.14-3, Project Traffic Distribution, 4.14-4, Project Traffic Phase I Traffic Volumes, 4.14-5, Project Traffic Phase I + Phase II Traffic Volumes, and 4.14-6, Total Project Traffic Volumes**.

4.14.2.8 REGIONAL TRAFFIC BENEFIT

Figure 4.14-7, Vicinity Map, depicts the Project site in the context of the regional road network. An important consideration when analyzing student housing land uses is that while they do add traffic

to the area in the immediate vicinity of campus, they significantly shorten or eliminate much longer (i.e. regional) trips. For instance, if the Project were not built, students would live in other areas of San Diego, including locales such as Pacific Beach or Mission Valley and, as a result, they would need to drive to the university from there distant locales. These distances likely would be greater than the distances they would drive on a daily basis as students residing on-campus. In addition, the area surrounding the SDSU campus provides a variety of resources for personal needs such as grocery stores, recreational facilities, etc., further reducing the need to travel longer distances. These characteristics associated with the location of the Project result in substantially reducing the number of vehicle miles traveled, as well as impacts on regional roads such as I-8. Therefore, the proposed Project is considered to leave a net benefit in terms of regional traffic impacts.

4.14.3 EXISTING CONDITIONS

4.14.3.1 EXISTING STREET NETWORK

The principal roadways in the Project study area are described briefly below. Roadway classification was determined from a review of the *City of San Diego General Plan*, *City of San Diego Street Design Manual* and information gathered from field observations. The following is a description of the primary roads that comprise the existing street network in the study area.

Montezuma Road is classified as a 4-Lane Major Arterial in the *City of San Diego General Plan*. It is currently constructed as a divided four lane roadway from Collwood Boulevard to 55th Street, an undivided four lane roadway between 55th Street and a divided four-lane roadway east of College Avenue. Bike lanes are provided on Montezuma Road from Collwood Boulevard to 55th Street and east of College Ave. Montezuma has a posted speed limit of 40 MPH (miles per hour) from Collwood Boulevard to 55th Street in the westbound direction and 45 MPH in the eastbound direction with a speed limit of 35 MPH from 55th Street to east of College Avenue. Montezuma Road is serviced by the San Diego Metropolitan Transit System (MTS) Bus Routes 11 and 955. Parking is generally prohibited on Montezuma Road with the exception of the segment between 55th Street and Campanile Drive.

Remington Road is classified as a 2-Lane Collector (no fronting property) and is currently constructed as a two lane undivided roadway with a speed limit of 30 MPH. Bike lanes are provided and parking is prohibited.

55th Street is classified as a 4-Lane Collector and is currently constructed as a four lane undivided roadway with a speed limit of 25 MPH. Parking is generally prohibited. Bike lanes are provided on 55th Street.

College Avenue is classified as a 4-Lane Major Arterial from the I-8 Ramps to Montezuma Road and as a 4-Lane Collector with a TWLTL (Two-Way Left-Turn Lane) south of Montezuma Road. College Avenue is currently constructed as a four lane undivided roadway from the I-8 Ramps to Montezuma Road and as a four lane undivided roadway south of Montezuma Road. College Avenue has a speed limit of 40 MPH from the I-8 Ramps to Zura Way and a 35 MPH from Zura Way to south of Montezuma Road. College Avenue is serviced by MTS Bus Routes 14 and 115.

4.14.3.2 EXISTING BICYCLE NETWORK

Currently, there is a Class II bike lane on Montezuma Road between Collwood Boulevard and 55th Street that continues east of College Ave. There is also a Class II Bike lane along Remington Road east of 55th Street and along 55th Street from Remington Road to Montezuma Road.

4.14.3.3 EXISTING PEDESTRIAN CONDITIONS

Sidewalks are provided along the northern side of Montezuma Road in the entirety of the study area. Sidewalks also are provided along both sides of Remington Road and 55th Street in the entirety of the study area as well. Continuous sidewalks are provided on the eastern side of College Avenue from the I-8 ramps to south of Montezuma Road.

4.14.3.4 EXISTING TRANSIT CONDITIONS

The study area is serviced by the San Diego Metropolitan Transit System via both bus and light rail. Montezuma Road from Collwood Boulevard to Campanile Drive is serviced by Bus Routes 11 and 955. In addition, a bus stop on Montezuma Road between Campanile Drive and College Drive serves as a hub for Bus Routes 11, 15, 115, 856, 936, and 955. College Avenue is serviced by Bus Routes 14 and 115.

In addition to these bus routes, the SDSU Transit Center is located approximately $\frac{1}{2}$ mile from the Project area. The SDSU Transit Center has a trolley stop for the Green Line, which runs roughly parallel to Interstate 8 with a western terminus at Old Town San Diego and an eastern terminus at Santee, California. The SDSU Transit Center also includes a bus stop for Bus Routes 11, 14, 115, 215, 856, 936, and 955. Bus Route 215 is a Bus Rapid Transit (BRT) service that provides a quick and easy way to travel to and from SDSU and Downtown San Diego.

4.14.3.5 EXISTING TRAFFIC VOLUMES

Table 4.14-1 summarizes available average daily traffic volumes (ADTs) from counts conducted in April and December 2016. Counts at all study area intersections, including bicycle and pedestrian counts, were conducted between the hours of 7:00-9:00 AM and 4:00-6:00PM while SDSU and all local schools were in session.

See **Figure 4.14-8, Study Area Existing Traffic Volumes**. Appendix K contains the manual count sheets.

Table 4.14-4
Existing Traffic Volumes

Street Segment	ADT ^a	Date
<i>Montezuma Road</i>		
Collwood Blvd to 55th St	28,950	April 2016
55th St to College Ave	32,570	April 2016
East of College Ave	21,500	April 2016
<i>Remington Avenue</i>		
East of 55th St	3,110	Dec 2016
<i>55th Street</i>		
Remington Rd to Montezuma Rd	18,110	Dec 2016
<i>College Avenue</i>		
Canyon Crest Drive to Zura Way	35,850	April 2016
Zura Way to Montezuma Rd	29,790	April 2016
Montezuma Rd to Arosa St	27,500	April 2016

Footnotes:

a Average Daily Traffic Volumes.

4.14.4 RELEVANT STATUTES, PLANS, AND POLICIES

The following is an overview of federal, state and regional statutes, plans and policies relevant to transportation-related issues.

Federal

Americans with Disabilities Act

The Americans with Disabilities Act (ADA) (1990) is a wide-ranging civil rights law that prohibits, under certain circumstances, discrimination based on disability. Pedestrian facility design must comply with the accessibility standards identified in the ADA, which applies to all projects involving new or altered pedestrian facilities. The scoping and technical provisions for new

construction and alterations identified in the ADA Accessibility Guidelines (Sections 4.3, 4.7, and 4.8) can be used to help design pedestrian facilities that are ADA compliant. For example, Title II-6.600 of the Technical Assistance Manual states, “When streets, roads, or highways are newly built or altered, they must have ramps or sloped areas whenever there are curbs or other barriers to entry from a sidewalk or path.” Certain facilities, such as historic buildings, may be exempt from ADA requirements (County of San Diego 2011c).

Highway Capacity Manual

The 2010 HCM, prepared by the federal Transportation Research Board, is the result of a collaborative multiagency effort between the Transportation Research Board, Federal Highway Administration, and American Association of State Highway and Transportation Officials. The 2010 HCM contains concepts, guidelines, and computational procedures for computing the capacity and quality of service of various highway facilities, including freeways, signalized and unsignalized intersections, rural highways, and the effects of transit, pedestrian, and bicycles on the performance of these systems.

State

California Department of Transportation

Caltrans is the public agency responsible for designing, building, operating, and maintaining California’s State highway system, which consists of freeways, highways, expressways, toll roads, and the area between the roadways and property lines. Caltrans is also responsible for permitting and regulating the use of State roadways. Caltrans’ construction practices require temporary traffic control planning during any activities that interfere with the normal function of a roadway.

Statewide Transportation Improvement Program

The California 2007 Statewide Transportation Improvement Program, approved by the U.S. Department of Transportation in October 2006, is a multiyear, Statewide, intermodal program of transportation projects consistent with the Statewide transportation plan and planning processes, metropolitan plans, and Title 23 of the Code of Federal Regulations. The Statewide Transportation Improvement Program is prepared by Caltrans in cooperation with the Metropolitan Planning Organizations and the Regional Transportation Planning Agencies. In San Diego County, the Metropolitan Planning Organization and Regional Transportation Agency is SANDAG. The Statewide Transportation Improvement Program contains all capital and non-capital transportation

projects or identified phases of transportation projects for funding under the Federal Transit Act and Title 23 of the U.S. Code, including federally funded projects.

Regional

Regional Transportation Plan

The Regional Transportation Plan (RTP) is a 25-year long-range transportation plan that focuses on improving the balance between land use and current and future transportation systems throughout the region. RTPs are developed to provide a clear vision of the regional transportation goals, objectives, and strategies. In addition, RTPs must reflect Senate Bill 375 (Steinberg, Statutes of 2008), which targets regional greenhouse gas emissions reductions from passenger vehicles and light-duty trucks through changes in land use and transportation development patterns.

The responsible Regional Transportation Planning Agency in Southern California is SANDAG. Therefore, SANDAG is required to adopt and submit an updated RTP to the California Transportation Commission and Caltrans every 4 or 5 years, depending on air quality attainment within the region. SANDAG, in partnership with local governments, is required by federal law to create an RTP that determines the needs of the transportation system and prioritizes proposed transportation projects.

2050 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS)

The 2050 RTP lays out a plan for investing an estimated \$214 billion in local, state, and federal transportation funds expected to come to the region over the next 40 years. The 2050 RTP is the blueprint for a regional transportation system that further enhances quality of life, promotes sustainability, and offers more mobility options for people and goods. The plan outlines projects for transit, rail and bus service, express or managed lanes, highways, local streets, bicycling, and walking to provide an integrated, multimodal transportation system by mid-century. Pursuant to Senate Bill 375, the 2050 RTP also includes the SCS, which details how the region will reduce greenhouse gas emissions to state-mandated levels over time. The 2050 RTP and SCS are components of *San Diego Forward: The Regional Plan*, which was adopted by the SANDAG Board of Directors on October 9, 2015.

Regional Transportation Improvement Program (RTIP)

The RTIP is a multi-billion dollar, 5-year program of major transportation projects funded by federal, state, TransNet local sales tax, and other local and private funding. The RTIP is a prioritized

program designed to implement the region's overall strategy for providing mobility and improving the efficiency and safety of the transportation system, while reducing transportation-related air pollution in support of the efforts to attain federal and state air quality standards for the region. The RTIP also incrementally implements the 2050 RTP, which is the long-range transportation plan for the San Diego region. The RTIP covers multiple fiscal years and is amended frequently to reflect near term priorities and expenditures.

Congestion Management Program (CMP)

State Proposition 111, passed by voters in 1990, established a requirement that urbanized areas prepare and regularly update a CMP, which is a part of SANDAG's RTP. The purpose of the CMP is to monitor the performance of the region's transportation system, develop programs to address near-term and long-term congestion, and better integrate transportation and land use planning. SANDAG provided regular updates to the State CMP from 1991 through 2008. In October 2009, the San Diego region elected to be exempt from the State CMP and, since this decision, SANDAG has been abiding by 23 CFR 450.320 to ensure the region's continued compliance with the federal congestion management process. *San Diego Forward: The Regional Plan*, the region's long-range transportation plan and SCS, meets the requirements of 23 CFR 450.320 by incorporating the following federal congestion management process: performance monitoring and measurement of the regional transportation system, multimodal alternatives and non-single-occupancy vehicle (SOV) analysis, land use impact analysis, the provision of congestion management tools, and integration with the RTIP process.

Local

City of San Diego Bicycle Master Plan

The 2013 City of San Diego Bicycle Master Plan, which updates the City's 2002 plan, presents a bicycle network, projects, policies, and programs for improving bicycling through 2030 and beyond, consistent with the City's 2008 General Plan mobility, sustainability, health, economic, and social goals. The goals of the Bicycle Master Plan are to create: a city where bicycling is a viable travel choice, particularly for trips of less than five miles; a safe and comprehensive local and regional bikeway network; and environmental quality, public health, recreation and mobility benefits through increased bicycling. These goals are supported by twelve key policies that will help bicycling become a more viable transportation mode for trips of less than five miles, to connect to transit and for recreation.

The Master Plan addresses existing bicycling conditions, the relationship of the Plan to other plans and policies, a bicycle needs analysis, bicycle facility recommendations, bicycle program recommendations, and implementation and funding issues.

City of San Diego Pedestrian Master Plan

The City of San Diego is developing a Pedestrian Master Plan to guide the planning and implementation of pedestrian improvement projects in the City. The Master Plan will help the City enhance neighborhood quality and mobility options by facilitating pedestrian improvement projects. The Plan will identify and prioritize improvement projects based on technical analysis and community input, as well as improve the City's ability to receive grant funding for implementation of pedestrian projects.

The City currently is in Phase 4 of the planning process. During Phase 1, the City developed the Master Plan Citywide Framework Report, which provides a foundation for identifying and prioritizing projects in each community. Phases 2 and 3 inventoried seven communities in the city to understand pedestrian needs, identify problems, and create a prioritized list of pedestrian projects specific to each community. Phase 4 continues the inventory process and focuses on seven additional communities, including the College Area. For additional information, please see www.sandiego.gov/planning/programs/transportation/mobility/pedestrian.shtml.

4.14.5 THRESHOLDS OF SIGNIFICANCE

The significance criteria used to evaluate the Project's impacts to traffic and circulation are based on Appendix G of the CEQA Guidelines. According to Appendix G, a significant impact related to traffic and circulation would occur if the project would:

- a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance or the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
- b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

- d) Substantially increase hazards due to a design feature (e.g., sharp curves, or dangerous intersections) or incompatible uses (e.g., farm equipment).
- e) Result in inadequate emergency access.
- f) Conflict with adopted policies, plans, or programs regarding public transit, bicycles, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

In considering the Appendix G criteria, the California State University (CSU) *Transportation Impact Study Manual* (November 2012) provides the following guidance in assessing whether a project's transportation-related impacts are significant:

Off-Site Traffic Operations

- A roadway segment or intersection operates at LOS D or better under a no project scenario and the addition of project trips causes overall traffic operations on the facility to operate at LOS E or F.
- A roadway segment or intersection operates at LOS E or F under a no project scenario and the project adds both 10 or more peak hour trips and 5 seconds or more of peak hour delay, during the same peak hour.
- If an intersection operates at a very poor LOS F (control delay of 120 seconds or more), the significance criterion shall be an increase in v/c ratio of 0.02 or more.

Bicycle Facilities

- A project significantly disrupts existing or planned bicycle facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.

Pedestrian Facilities and Americans with Disabilities Act (ADA) compliance

- A project fails to provide safe pedestrian connections between campus buildings and adjacent streets and transit facilities.
- A project significantly disrupts existing or planned pedestrian facilities or significantly conflicts with applicable non-automotive transportation plans, guidelines, policies, or standards.

Transit

- A project significantly disrupts existing or planned transit facilities and services or significantly conflicts with applicable transit plans, guidelines, policies, or standards.

Intersection Traffic Control

- The addition of project traffic causes an all-way stop-controlled or side street stop-controlled intersection to meet Caltrans signal warrant criteria.

Transportation Plan Consistency

- A project significantly conflicts or creates significant inconsistencies with applicable transportation policies or the Campus Master Plan transportation policies.

Safety

- Directly or indirectly cause or expose all users (motorists, pedestrians, bicyclists, and bus riders) to a permanent and substantial transportation hazard due to a new or existing physical design feature or incompatible uses.

Construction Period (Temporary)

- The construction of a project creates a temporary but prolonged significant impact due to lane closures, need for temporary signals, emergency vehicles access, traffic hazards to bikes/pedestrians, damage to roadbed, truck traffic on roadways not designated as truck routes, etc.

On-Site Circulation

- Project designs for on-site circulation, access, and parking areas are inconsistent with the circulation and parking plans in the Campus Master Plan or with applicable roadway design standards.
- A project fails to provide adequate accessibility for service and delivery trucks on-site, including access to truck loading areas.
- A project fails to provide adequate accessibility for buses accessing appropriate drop-off areas on-campus.
- A project fails to provide adequate accessibility for pedestrians and bicyclists.

In addition, while SDSU as a state agency is not subject to local planning regulations such as the City of San Diego traffic guidelines, the City's thresholds of significance also are utilized in this case to evaluate the Project impacts as additional information relative to criteria a) and b). According to the City's Significance Determination Thresholds dated July 2016, a project is considered to have a

significant impact if project traffic would decrease the operations of surrounding roadways by a defined threshold. For projects deemed complete on or after January 1, 2007, the City defined thresholds are shown in **Table 4.14-5**.

The impact is designated either a “direct” or “cumulative” impact. According to the City’s Significance Determination Thresholds,

“Direct traffic impacts are those projected to occur at the time a proposed development becomes operational, including other developments not presently operational but which are anticipated to be operational at that time (near term).”

“Cumulative traffic impacts are those projected to occur at some point after a proposed development becomes operational, such as during subsequent phases of a project and when additional proposed developments in the area become operational (short-term cumulative) or when affected community plan area reaches full planned buildout (long-term cumulative).”

It is possible that a project’s near term (direct) impacts may be reduced in the long term, as future projects develop and provide additional roadway improvements (for instance, through implementation of traffic phasing plans). In such a case, the project may have direct impacts but not contribute considerably to a cumulative impact.”

For intersections and roadway segments affected by a project, level of service (LOS) D or better is considered acceptable under both direct and cumulative conditions.”

If the project exceeds the thresholds in **Table 4.14-5**, then the project is considered to have a significant “direct” or “cumulative” project impact. A significant impact can also occur if a project causes the Level of Service to degrade from D to E, even if the allowable increases in **Table 4.14-5** are not exceeded. A feasible mitigation measure will need to be identified to return the impact within the City thresholds, or the impact will be considered significant and unmitigated.

Table 4.14-5
City Of San Diego Traffic Impact Significant Thresholds

Level of Service with Project ^b	Allowable Increase Due to Project Impacts ^a					
	Freeways		Roadway Segments		Intersections	Ramp Metering ^c
	V/C	Speed (mph)	V/C	Speed (mph)	Delay (sec.)	Delay (min.)
E	0.010	1.0	0.02	1.0	2.0	2.0
F	0.005	0.5	0.01	0.5	1.0	1.0

Footnotes:

- a. If a proposed project's traffic causes the values shown in the table to be exceeded, the impacts are determined to be significant. The project applicant shall then identify feasible improvements (within the Traffic Impact Study) that will restore/and maintain the traffic facility at an acceptable LOS. If the LOS with the proposed project becomes unacceptable (see note b), or if the project adds a significant amount of peak-hour trips to cause any traffic queues to exceed on- or off-ramp storage capacities, the project applicant shall be responsible for mitigating the project's direct significant and/or cumulatively considerable traffic impacts.
- b. All LOS measurements are based upon Highway Capacity Manual procedures for peak-hour conditions. However, V/C ratios for roadway segments are estimated on an ADT/24-hour traffic volume basis (using Table 2 of the City's Traffic Impact Study Manual). The acceptable LOS for freeways, roadways, and intersections is generally "D" ("C" for undeveloped locations). For metered freeway ramps, LOS does not apply. However, ramp meter delays above 15 minutes are considered excessive.
- c. The allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS E is 2 minutes. The allowable increase in delay at a ramp meter with more than 15 minutes delay and freeway LOS F is 1 minute.

General Notes:

1. Delay=Average control delay per vehicle measured in seconds for intersections or minutes for ramp meters
2. LOS=Level of Service
3. V/C=Volume to Capacity ratio
4. Speed =Arterial speed measured in miles per hour

Also, according to the City of San Diego's *Significance Determination Thresholds*, other possible significant impacts that are not accounted for in **Table 4.14-5** include the following:

- If a project would increase traffic hazards to motor vehicles, bicyclists or pedestrians due to proposed non-standard design features (e.g., poor sight distance, proposed driveway onto an access-restricted roadway), the impact would be significant.
- If a project would result in the construction of a roadway which is inconsistent with the General Plan and/or a community plan, the impact would be significant if the proposed roadway would not properly align with other existing or planned roadways.
- If a project would result in a substantial restriction in access to publicly or privately owned land, the impact would be significant.

4.14.6 IMPACTS ANALYSIS

Would the project conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance or the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Would the project conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

4.14.6.1 ANALYSIS OF NEAR-TERM SCENARIOS

The scenarios analyzed below provide an assessment of the impact of the Project traffic volumes in relation to the existing and near-term “with Project” conditions. Specifically, this section includes the analysis results of the intersection and street segment operations under the following scenarios: Existing + Project, Existing + Cumulative + Project Phase I, Existing + Cumulative + Project Phases I and II, and Existing + Cumulative + Total Project.

Existing + Total Project

The Existing + Total Project traffic analysis is an assessment of the impact of the total Project (i.e. the Project at buildout) in relation to the existing conditions. Because the Project will be developed over the long-term, an “Existing + Total Project” analysis is not an accurate scenario for which to determine significant impacts. This is because the scenario does not account for the growth in background or cumulative traffic and, as a result may underestimate impacts; nor does this scenario account for future road improvements that may be constructed and, as a result the analysis may overestimate impacts. For these reasons, the Existing + Total Project analysis is presented for informational purposes only; significant impacts were assessed against the Near-Term and Horizon Year scenarios, each of which accounts for cumulative traffic growth and future infrastructure improvements. See **Figure 4.14-9 Existing + Total Project Traffic Volumes**.

Intersection Analysis

Table 4.14-6 summarizes the peak hour intersection operations under Existing + Total Project conditions. As shown in **Table 4.14-6**, with the addition of Total Project traffic, the study area

intersections would continue to operate acceptably at LOS D or better during the AM and PM peak hours with the exception of the following intersections:

- 55th Street / Montezuma Road (LOS E during the PM peak hour); and College Avenue / Zura Way (LOS F during the PM peak hour).

Please see TIA Appendix G for the Existing + Total Project peak hour intersection analyses worksheets.

Segment Operations

Table 4.14-7 summarizes the Existing + Total Project street segment operations. As shown in Table 4.14-7, with the addition of Total Project traffic, the study area street segments would continue to operate acceptably at LOS D or better with the exception of the following segments:

- Montezuma Road: 55th Street to College Avenue (LOS F);
- College Avenue: Canyon Crest Drive to Zura Way (LOS E); and
- College Avenue: Montezuma Road to Arosa Street (LOS E).

Table 4.14-6
Near-Term Intersection Operations (Existing + Project)

Intersection	Control Type	Peak Hour	Existing		Existing + Total Project		Δ^c
			Delay ^a	LOS ^b	Delay	LOS	
1. Montezuma Road / Collwood Blvd	Signal	AM	21.5	C	21.5	C	0.0
		PM	25.3	C	27.0	C	1.7
2. Montezuma Road / Yerba Santa Dr	Signal	AM	9.4	A	9.5	A	0.1
		PM	9.2	A	9.4	A	0.2
3. 55th St / Canyon Crest Dr	AWSC ^d	AM	17.1	C	20.7	C	3.6
		PM	11.6	B	14.4	B	2.8
4. 55th Street / Remington Rd	Signal	AM	9.1	A	9.8	A	0.7
		PM	10.9	B	11.5	B	0.6
5. 55th Street / Hardy Ave	Signal	AM	27.4	C	27.4	C	0.0
		PM	36.5	D	36.5	D	0.0
6. 55th St / Montezuma Rd	Signal	AM	33.5	C	39.3	D	5.8
		PM	50.0	D	60.0	E	10.0
7. Montezuma Rd / Campanile Dr	Signal	AM	31.0	C	31.0	C	0.0
		PM	29.5	C	29.6	C	0.1
8. College Ave / I-8 WB Ramps	Signal	AM	7.2	A	7.3	A	0.1
		PM	11.2	B	11.5	B	0.3

Table 4.14-6
Near-Term Intersection Operations (Existing + Project)

Intersection	Control Type	Peak Hour	Existing		Existing + Total Project		Δ^c
			<i>Delay^a</i>	<i>LOS^b</i>	<i>Delay</i>	<i>LOS</i>	
			AM	B	19.2	B	
9. College Ave / I-8 EB Ramps	Signal	PM	15.7	B	15.7	B	0.0
		AM	38.4	D	38.5	D	0.1
10. College Ave / Canyon Crest Ave	Signal	PM	50.0	D	50.0	D	0.0
		AM	16.2	C	16.2	C	0.0
11. College Ave / Zura Way	OWSC ^e	PM	>100	F	>100	F	0.0
		AM	46.5	D	46.5	D	0.0
12. College Ave / Montezuma Way	Signal	PM	45.7	D	45.9	D	0.2

Footnotes:

- a. Average delay expressed in seconds per vehicle.
- b. Level of Service.
- c. Δ denotes an increase in delay due to project.
- d. AWSC – All-Way Stop Controlled intersection
- e. OWSC – One-Way Stop Controlled

Table 4.14-7
Near-Term Segment Operations (Existing + Project)

Street Segment	Near Term Capacity (LOS E) ^a	Existing			Existing + Total Project			Δ^e
		<i>ADT^b</i>	<i>V/C^c</i>	<i>LOS^d</i>	<i>ADT</i>	<i>V/C</i>	<i>LOS</i>	
<i>Montezuma Road</i>								
Collwood Boulevard to 55th Street	40,000	28,950	0.724	C	30,871	0.772	D	0.048
55th Street to College Avenue	30,000	32,570	1.086	F	33,244	1.108	F	0.022
East of College Ave	30,000	21,500	0.717	D	21,803	0.727	D	0.010
<i>Remington Rd</i>								
East of 55th St	10,000	3,110	0.311	A	3,279	0.328	A	0.017
<i>55th St</i>								
Remington Rd to Montezuma Rd	30,000	18,110	0.604	C	20,705	0.690	D	0.087
<i>College Ave</i>								
Canyon Crest Drive to Zura Way	40,000	35,850	0.896	E	35,850	0.896	E	0.000
Zura Way to Montezuma Rd	40,000	29,790	0.745	C	29,790	0.745	C	0.000
Montezuma Rd to Arosa St	30,000	27,500	0.917	E	27,871	0.929	E	0.012

Footnotes:

- a. Capacities based on the City of San Diego's Roadway Classification & LOS table (See Appendix K).
- b. Average Daily Traffic
- c. Volume to Capacity ratio

- d. Level of Service
- e. Δ denotes a project-induced increase in the Volume to Capacity ratio

Existing + Cumulative Projects (Without Project)

Intersection Analysis

Table 4.14-8 summarizes the peak hour intersection operations under Existing + Cumulative Projects (Without Project) conditions. As shown in **Table 4.14-8**, under this scenario the study area intersections would operate acceptably at LOS D or better during the AM and PM peak hours with the exception of the following intersections:

- College Avenue / Canyon Crest Avenue (LOS E during the PM peak hour);
- College Avenue / Zura Way (LOS F during the PM peak hour); and
- College Avenue / Montezuma Road (LOS E during the PM peak hour).

Please see **Appendix K** for the Existing + Cumulative Projects (Without Project) peak hour intersection analyses worksheets.

Segment Operations

Table 4.14-9 summarizes the Existing + Cumulative Projects (Without Project) street segment operations. As shown in **Table 4.14-9**, the study area street segments would operate acceptably at LOS D or better with the exception of the following segments:

- Montezuma Road: 55th Street to College Avenue (LOS F);
- College Avenue: Canyon Crest Drive to Zura Way (LOS E); and
- College Avenue: Montezuma Road to Arosa Street (LOS E).

Existing + Cumulative Projects + Project Phase I

Intersection Analysis

Table 4.14-8 summarizes the peak hour intersection operations under Existing + Cumulative Projects + Project Phase I conditions. As shown in **Table 4.14-8**, with the addition of Project Phase I traffic, the study area intersections would all operate acceptably at LOS D or better during the AM and PM peak hours with the exception of the following intersections:

- College Avenue / Canyon Crest Avenue (LOS E during the PM peak hour);

- College Avenue / Zura Way (LOS F during the PM peak hour); and
- College Avenue / Montezuma Road (LOS E during the PM peak hour).

Based on both the CSU and City of San Diego significance criteria, the proposed Project would not result in significant impacts at the above intersections as the Project's traffic contribution to these intersections would not exceed the allowable thresholds. See **Figure 4.14-10, Existing + Cumulative Projects + Phase I Traffic Volumes**. Please also see **Appendix K** for the Existing + Cumulative Projects + Project Phase I peak hour intersection analyses worksheets.

Segment Operations

Table 4.14-9 summarizes the Existing + Cumulative Projects + Project Phase I street segment operations. As shown in **Table 4.14-9**, with the addition of Project Phase I traffic, the study area street segments would all operate acceptably at LOS D or better with the exception of the following segments:

- Montezuma Road: 55th Street to College Avenue (LOS F);
- College Avenue: Canyon Crest Drive to Zura Way (LOS E); and
- College Avenue: Montezuma Road to Arosa Street (LOS E).

Based on both the CSU and City of San Diego significance criteria, the proposed Project would not result in significant impacts on the above street segments as the Project's traffic contribution to these intersections would not exceed the allowable thresholds.

Figure 4.14-10, shows the Existing + Cumulative Projects + Project Phase I traffic volumes.

Existing + Cumulative Projects + Project Phase I + Project Phase II

Intersection Analysis

Table 4.14-8 summarizes the peak hour intersection operations under Existing + Cumulative Projects + Project Phase I + Phase II conditions. As shown in **Table 4.14-8**, with the addition of Project Phase I + Phase II traffic, the study area intersections would all operate acceptably at LOS D or better during the AM and PM peak hours with the exception of the following intersections:

- 55th Street / Montezuma Road (LOS E during the PM peak hour);
- College Avenue / Canyon Crest Avenue (LOS E during the PM peak hour);
- College Avenue / Zura Way (LOS F during the PM peak hour); and

- College Avenue / Montezuma Road (LOS E during the PM peak hour).

Based on both the CSU and City of San Diego significance criteria, with the addition of Phase II traffic the proposed Project would result in a significant impact at the 55th Street / Montezuma Road intersection as the Project's traffic contribution would exceed the allowable thresholds. Mitigation for this impact is discussed in Section 4.14.7. See **Figure 4.14-11, Existing + Cumulative Projects + Project Phases I and II Traffic Volumes**. Please also see **Appendix K** for the Existing + Cumulative Projects + Project Phase I + Phase II peak hour intersection analyses worksheets.

Segment Operations

Table 4.14-9 summarizes the Existing + Cumulative Projects + Project Phase I + Phase II street segment operations. As shown in **Table 4.14-9**, with the addition of Project Phase I + Phase II traffic, the study area street segments would all operate acceptably at LOS D or better with the exception of the following segments:

- Montezuma Road: 55th Street to College Avenue (LOS F);
- College Avenue: Canyon Crest Drive to Zura Way (LOS E); and
- College Avenue: Montezuma Road to Arosa Street (LOS E).

Based on both the CSU and City of San Diego significance criteria, with the addition of Phase II traffic the proposed Project would result in a significant impact on Montezuma Road between 55th Street and College Avenue as the Project's traffic contribution would exceed the allowable thresholds. Mitigation for this impact is discussed in Section 4.14.7.

Figure 4.14-11 shows the Existing + Cumulative Projects + Project Phase I + Project Phase II volumes.

Existing + Cumulative Projects + Total Project

Intersection Analysis

Table 4.14-8 summarizes the peak hour intersection operations under Existing + Cumulative Projects + Total Project conditions. As shown in **Table 4.14-8**, with the addition of Total Project traffic, the study area intersections would all operate acceptably at LOS D or better during the AM and PM peak hours with the exception of the following intersections:

- 55th Street / Montezuma Road (LOS E during both the AM and PM peak hours);
- College Avenue / Canyon Crest Avenue (LOS E during the PM peak hour);

- College Avenue / Zura Way (LOS F during the PM peak hour); and
- College Avenue / Montezuma Road (LOS E during the PM peak hour).

Based on both the CSU and City of San Diego significance criteria, with the addition of Phase III traffic the proposed Project would result in a significant impact at the 55th Street / Montezuma Road intersection as the Project's traffic contribution would exceed the allowable thresholds. Mitigation for this impact is discussed in Section 4.14.7. See **Figure 4.14-12, Existing + Cumulative Projects + Total Project Traffic Volumes**. Please also see **Appendix K** for the Existing + Cumulative Projects + Total Project peak hour intersection analyses worksheets.

Segment Operations

Table 4.14-9 summarizes the Existing + Cumulative Projects + Total Project street segment operations. As shown in **Table 4.14-9**, with the addition of Total Project traffic, the study area street segments would all operate acceptably at LOS D or better with the exception of the following segments:

- Montezuma Road: 55th Street to College Avenue (LOS F);
- College Avenue: Canyon Crest Drive to Zura Way (LOS E); and
- College Avenue: Montezuma Road to Arosa Street (LOS E).

Based on both the CSU and City of San Diego significance criteria, with the addition of Phase III traffic, the proposed Project would result in a significant impact on Montezuma Road between 55th Street and College Avenue as the Project's traffic contribution would exceed the allowable thresholds. Mitigation for this impact is discussed in Section 4.14.7.

Table 4.14-8
Near-Term Intersection Operations (Existing + Project + Cumulative Projects)

Intersection	Control Type	Peak Hour	Existing + Cumulative Projects		Existing + Cumulative Projects + Project Phase I		Δ^c	Existing + Cumulative Projects + Project Phase I + Project Phase II		Δ	Existing + Cumulative Projects + Total Project		Δ
			<i>Delay^a</i>	<i>LOS^b</i>	<i>Delay</i>	<i>LOS</i>		<i>Delay</i>	<i>LOS</i>		<i>Delay</i>	<i>LOS</i>	
1. Montezuma Rd / Collwood Blvd	Signal	AM	21.9	C	21.9	C	0.0	21.9	C	0.0	21.9	C	0.0
		PM	27.1	C	27.9	C	0.8	28.6	C	1.5	29.5	C	2.4
2. Montezuma Rd / Yerba Santa Dr	Signal	AM	9.7	A	9.7	A	0.0	9.7	A	0.0	9.7	A	0.0
		PM	9.3	A	9.5	A	0.2	9.6	A	0.3	9.7	A	0.4
3. 55th St / Canyon Crest Dr	AWSC ^d	AM	18.2	C	19.4	C	1.2	20.7	C	2.5	22.1	C	3.9
		PM	12.0	B	12.7	B	0.7	13.6	B	1.6	14.7	B	2.7
4. 55th St / Remington Rd	Signal	AM	9.2	A	9.8	A	0.6	9.9	A	0.7	9.9	A	0.7
		PM	11.1	B	11.4	B	0.3	11.5	B	0.4	11.5	B	0.4
5. 55th St / Hardy Ave	Signal	AM	27.4	C	27.4	C	0.0	27.5	C	0.1	27.6	C	0.2
		PM	36.7	D	36.7	D	0.0	36.8	D	0.1	36.9	D	0.2
6. 55th St / Montezuma Rd	Signal	AM	34.0	C	35.5	D	1.5	38.0	D	4.0	39.8	D	5.8
		PM	51.8	D	54.9	D	3.1	58.3	E	6.5	62.1	E	>10
7. Montezuma Rd / Campanile Dr	Signal	AM	33.2	C	33.2	C	0.0	33.2	C	0.0	33.2	C	0.0
		PM	31.1	C	31.1	C	0.0	31.2	C	0.1	31.2	C	0.1
8. College Ave / I-8 WB Ramps	Signal	AM	7.7	A	7.7	A	0.0	7.7	A	0.0	7.8	A	0.1
		PM	11.3	B	11.5	B	0.2	11.5	B	0.2	11.7	B	0.4
9. College Ave / I-8 EB Ramps	Signal	AM	20.0	B	20.0	B	0.0	20.0	B	0.0	20.0	B	0.0
		PM	16.4	B	16.4	B	0.0	16.4	B	0.0	16.5	B	0.1
10. College Ave / Canyon Crest Ave	Signal	AM	44.4	D	44.4	D	0.0	44.5	D	0.1	44.5	D	0.1
		PM	69.0	E	69.0	E	0.0	69.1	E	0.1	69.1	E	0.1
11. College Ave / Zura Way	OWSC ^e	AM	18.7	C	18.7	C	0.0	18.7	C	0.0	18.7	C	0.0
		PM	>100	F	>100	F	0.0	>100	F	0.0	>100	F	0.0
12. College Ave / Montezuma Way	Signal	AM	53.5	D	53.5	D	0.0	53.5	D	0.0	53.5	D	0.0
		PM	58.1	E	58.1	E	0.0	58.1	E	0.0	58.1	E	0.0

Footnotes:

a. Average delay expressed in seconds per vehicle.

b. Level of Service.

- c. Δ denotes an increase in delay due to project.
- d. AWSC – All-Way Stop Controlled intersection
- e. OWSC – One-Way Stop Controlled intersection.

Table 4.14-9
Near-Term Street Segment Operations (Existing + Project + Cumulative Projects)

Street Segment	Near Term Capacity (LOS E) ^a	Existing + Cumulative Projects			Existing + Cumulative Projects + Project Phase I			Δ^e	Existing + Cumulative Projects + Project Phase I + Project Phase II			Δ	Existing + Project + Cumulative Projects			Δ			
		Existing + Cumulative Projects			Existing + Cumulative Projects + Project Phase I				Existing + Cumulative Projects + Project Phase I + Project Phase II				Existing + Project + Cumulative Projects						
		ADT ^b	V/C ^c	LOS ^d	ADT	V/C	LOS		ADT	V/C	LOS		ADT	V/C	LOS				
<i>Montezuma Road</i>																			
Collwood Boulevard to 55th Street	40,000	30,400	0.760	D	31,037	0.776	D	0.016	31,673	0.792	D	0.032	32,321	0.808	D	0.048			
55th Street to College Avenue	30,000	34,130	1.138	F	34,353	1.145	F	0.007	34,577	1.153	F	0.015	34,804	1.160	F	0.022			
East of College Avenue	30,000	22,460	0.749	D	22,561	0.752	D	0.003	22,661	0.755	D	0.007	22,763	0.759	D	0.010			
<i>Remington Rd</i>																			
East of 55th Street	10,000	3,180	0.318	A	3,236	0.324	A	0.006	3,292	0.329	A	0.011	3,349	0.335	A	0.017			
<i>55th St</i>																			
Remington Road to Montezuma Road	30,000	18,550	0.618	C	19,410	0.647	C	0.029	20,269	0.676	D	0.057	21,145	0.705	D	0.087			
<i>College Ave</i>																			
Canyon Crest Drive to Zura Way	40,000	39,010	0.975	E	39,010	0.975	E	0.000	39,010	0.975	E	0.000	39,010	0.975	E	0.000			
Zura Way to Montezuma Road	40,000	31,980	0.800	D	31,980	0.800	D	0.000	31,980	0.800	D	0.000	31,980	0.800	D	0.000			
Montezuma Road to Arosa St	30,000	28,880	0.963	E	29,003	0.967	E	0.004	29,126	0.971	E	0.008	29,251	0.975	E	0.012			

Footnotes:

- a. Capacities based on the City of San Diego's Roadway Classification & LOS table (See Appendix K).
- b. Average Daily Traffic
- c. Volume to Capacity ratio
- d. Level of Service
- e. Δ denotes a project-induced increase in the Volume to Capacity ratio

General Notes:

1. Bold and shaded typeface indicates a potentially significant impact.

4.14.6.2 ANALYSIS OF HORIZON YEAR SCENARIOS

This section presents analysis of a long-range, Horizon Year scenario, under conditions with and without full buildout Project traffic volumes. The analysis was conducted to assess the potential impact of the total Project traffic volumes in relation to Horizon Year (circa 2035) conditions.

Horizon Year without Project

Intersection Analysis

Table 4.14-10 summarizes the peak hour intersection operations under Horizon Year without Project conditions. As shown in **Table 4.14-10**, the following study area intersections would operate at LOS E or F during either the AM or PM peak hours under this scenario:

- 55th Street / Montezuma Road (LOS F during the PM peak hour);
- Montezuma Road / Campanile Drive (LOS F during the AM peak hour);
- College Avenue / Canyon Crest Avenue (LOS F during both the AM and PM peak hours);
- College Avenue / Zura Way (LOS F during both the AM and PM peak hours); and
- College Avenue / Montezuma Road (LOS F during both the AM and PM peak hours).

Please see **Appendix K** for the Horizon Year without Project peak hour intersection analyses worksheets.

Segment Operations

Table 4.14-11 summarizes the Horizon Year without Project street segment operations. As shown in **Table 4.14-11**, the following study area street segments would operate at LOS E or F under this scenario:

- Montezuma Road: Collwood Boulevard to 55th Street (LOS F);
- Montezuma Road: 55th Street to College Avenue (LOS F);
- Montezuma Road: East of College Avenue (LOS E);
- College Avenue: Canyon Crest Drive to Zura Way (LOS F);
- College Avenue: Zura Way to Montezuma Road (LOS E); and
- College Avenue: Montezuma Road to Arosa Street (LOS E).

Please see **Figure 4.14-13, Horizontal Year without Project Traffic Volumes**.

Horizon Year + Total Project

Intersection Analysis

Table 4.14-10 summarizes the peak hour intersection operations under Horizon Year + Total Project conditions. As shown in **Table 4.14-10**, with the addition of total Project traffic, the following study area intersections would operate at LOS E or F during either the AM or PM peak hours under this scenario:

- 55th Street / Montezuma Road (LOS E during the AM and LOS F during the PM peak hours);
- Montezuma Road / Campanile Drive (LOS F during the AM peak hour);
- College Avenue / Canyon Crest Avenue (LOS F during both the AM and PM peak hours);
- College Avenue / Zura Way (LOS F during both the AM and PM peak hours); and
- College Avenue / Montezuma Road (LOS F during both the AM and PM peak hours).

Based on both the CSU and City of San Diego significance criteria, the proposed Project would result in a significant impact at the 55th Street / Montezuma Road intersection as the Project's traffic contribution would exceed the allowable thresholds. Mitigation for this impact is discussed in Section 4.14.7. See **Figure 4.14-14, Horizon Year + Total Project Traffic Volumes**. Please also see **Appendix K** for the Horizon Year + Project peak hour intersection analyses worksheets.

Segment Operations

Table 4.14-11 summarizes the Horizon Year + Project street segment operations. As shown in **Table 4.14-11**, with the addition of total Project traffic, the following study area street segments would operate at LOS E or F under this scenario:

- Montezuma Road: Collwood Boulevard to 55th Street (LOS F);
- Montezuma Road: 55th Street to College Avenue (LOS F);
- Montezuma Road: East of College Avenue (LOS E);
- College Avenue: Canyon Crest Drive to Zura Way (LOS F);
- College Avenue: Zura Way to Montezuma Road (LOS E); and
- College Avenue: Montezuma Road to Arosa Street (LOS E).

Based on the CSU significance criteria, the proposed Project would result in significant impacts on the following two street segments as the Project's traffic contribution would exceed the allowable thresholds:

- Montezuma Road: Collwood Boulevard to 55th Street (LOS F); and
- Montezuma Road: 55th Street to College Avenue (LOS F).

Based on the City of San Diego's significance criteria, the proposed Project also would result in significant impacts on the two segments of Montezuma Road identified above, as well as significant impacts on the following segment of College Avenue as the Project's traffic contribution would exceed the allowable thresholds:

- College Avenue: Montezuma Road to Arosa Street (LOS E).

Mitigation for these impacts is discussed in Section 4.14.7.

Table 4.14-10
Horizon Year Intersection Operations

Intersection	Peak Hour	Horizon Year without Project		Horizon Year with Project		Delay Increase	Sig? ^c
		Delay ^a	LOS ^b	Delay	LOS		
1. Montezuma Road / Collwood Blvd	AM	24.2	C	24.4	C	0.2	No
	PM	49.4	D	54.4	D	5.0	No
2. Montezuma Road / Yerba Santa Dr	AM	11.4	B	11.6	B	0.2	No
	PM	11.5	B	12.1	B	0.6	No
3. 55th St / Canyon Crest Dr	AM	20.6	C	24.6	C	4.0	No
	PM	14.4	B	18.9	C	4.5	No
4. 55th Street / Remington Rd	AM	10.6	B	12.1	B	1.5	No
	PM	11.0	B	12.7	B	1.7	No
5. 55th Street / Hardy Ave	AM	30.4	C	30.5	C	0.1	No
	PM	40.5	D	40.9	D	0.4	No
6. 55th St / Montezuma Rd	AM	52.9	D	61.0	E	8.1	Yes
	PM	88.6	F	>100	F	>10	Yes
7. Montezuma Rd / Campanile Dr	AM	93.1	F	88.2	F	-4.9	No
	PM	51.7	D	53.2	D	1.5	No
8. College Ave / I-8 WB Ramps	AM	19.6	B	20.4	C	0.8	No
	PM	46.4	D	50.8	D	4.4	No
9. College Ave / I-8 EB Ramps	AM	53.5	D	54.1	D	0.6	No
	PM	40.5	D	42.6	D	2.1	No

Table 4.14-10
Horizon Year Intersection Operations

Intersection	Peak Hour	Horizon Year without Project		Horizon Year with Project		Delay Increase	Sig? ^c
		Delay ^a	LOS ^b	Delay	LOS		
10. College Ave / Canyon Crest Ave	AM	91.4	F	91.4	F	0.0	No
	PM	>100	F	>100	F	0.4	No
11. College Ave / Zura Way	AM	>100	F	>100	F	0.0	No
	PM	>100	F	>100	F	0.0	No
12. College Ave / Montezuma Rd	AM	99.6	F	>100	F	0.5	No
	PM	>100	F	>100	F	0.9	No

Table 4.14-11
Horizon Year Street Segment Operations

Street Segment	Capacity (LOS E) ^a	Horizon Year without Project			Horizon Year With Project			Δ^e	Sig? ^f
		ADT ^b	LOS ^c	V/C ^d	ADT	LOS	V/C		
<i>Montezuma Road</i>									
Collwood Blvd to 55th St	40,000	41,100	F	1.028	43,021	1.076	F	0.044	Impact
55th St to College Ave	30,000	39,120	F	1.304	39,794	1.326	F	0.021	Impact
East of College Ave	30,000	25,660	E	0.855	25,963	0.865	E	0.009	None
<i>Remington Rd</i>									
East of 55th St	10,000	7,680	D	0.768	7,849	0.785	D	0.015	None
<i>55th St</i>									
Hardy Ave to Montezuma	30,000	22,250	D	0.742	24,845	0.828	D	0.079	None
<i>College Ave</i>									
Canyon Crest Drive to Zura Way	40,000	67,000	F	1.675	67,000	1.675	F	0.000	None
Zura Way to Montezuma Rd	40,000	38,020	E	0.951	38,020	0.951	E	0.000	None
Montezuma Rd to Arosa St	30,000	33,470	F	1.116	33,841	1.128	F	0.011	Impact

Footnotes:

^a Capacities based on the City of San Diego's Roadway Classification & LOS table (See Appendix K).

^b Average Daily Traffic.

^c Level of Service.

^d Volume to Capacity.

^e Δ denotes a project-induced increase in the Volume to Capacity (V/C) ratio.

^f Sig = Significant project impact based on Significance Criteria.

4.14.6.3 TRANSIT ANALYSIS

This section presents an analysis of the Project's impact on those transit facilities that serve the Project area.

Existing Transit Setting

The SDSU Transit Center is located on the SDSU campus north of Hardy Avenue, between College Avenue and Campanile Drive, approximately 0.5 miles from the site of the proposed Project. The Transit Center currently is served by the below grade MTS Green Line trolley, as well as several MTS bus routes including Routes 11, 15, 115, 856, 936, and 955. A brief description of the trolley line and bus routes that serve SDSU is provided below.

MTS Trolley

The MTS Trolley Green Line connects Downtown San Diego to Santee. There currently are a total of 27 stops along the Green Line with a dedicated stop at the SDSU Transit Center serving the campus. Trolley hours of operation are from 3:53 AM until 12:30 AM. The trolley headways are typically 15 minutes during the AM and PM peak hours, with headways increasing to 30 minutes during the off-peak times.

To adequately conduct a trolley ridership analysis, LLG coordinated extensively with SANDAG and MTS to obtain information on trolley car specifications such as vehicle type, passenger capacity, and the number of cars per train.

The Green Line trolley operates the S70 and S70US trolley models manufactured by Siemens USA. Each trolley car has a commute capacity of 120 passengers with 3 cars per train.

MTS Bus Routes

There currently are seven (7) bus routes serving the SDSU Transit Center. Each is described below.

Route 11 runs west and south from the SDSU Transit Center to Downtown San Diego, and then travels east to Paradise Valley Road in the Paradise Hills community. Within the College Area community, Route 11 runs east along Montezuma Road and south along Fairmount Avenue, except after 10 PM, when Route 11 runs north along Fairmount Avenue to Interstate 8. Route 11 has 104 stops along its route, and currently operates between 4:29 AM and 11:38 PM on weekdays, between 4:40 AM and 11:38 PM on Saturdays, and between 5:21 AM and 9:42 PM on Sundays. Route 11 runs at 15-minute headways between 6:00 AM and 6:30 PM on weekdays, and at 30-minute headways

during the remaining hours of service. Route 11 operates with standard 40-foot buses, with an average capacity of 37 passengers.

Route 14 runs east from the Grantville Trolley Station in the Navajo community to the Lake Murray Village Shopping Center in the City of La Mesa. Within the College Area community, Route 14 runs south along College Avenue to the SDSU Transit Center, and then east along Montezuma Road. Route 14 has 35 stops along its route, and currently operates between 5:45 AM and 7:24 PM on weekdays, with headways of 60 minutes for all hours of service. Route 14 operates with minibuses, with a capacity of 26 passengers.

Route 115 runs east from the SDSU Transit Center to the El Cajon Transit Center in the City of El Cajon. Within the College Area community, Route 115 runs north along College Avenue towards Interstate 8. Route 115 has 33 stops along its route. Trips after 4:25 PM on Saturday and all trips on Sunday bypass the Grossmont College stop. Route 115 currently operates between 6:09 AM and 10:34 PM on weekdays, between 6:36 AM and 9:06 PM on Saturdays, and between 6:38 AM and 6:52 PM on Sundays. Route 115 runs at 30-minute headways on weekdays before 5:56 PM, and at 60-minute headways on weekdays after 5:56 PM and on weekends. Route 115 operates with standard 40-foot buses, with an average capacity of 37 passengers.

Route 215 runs south and west from the SDSU Transit Center to Downtown San Diego and is one of eight (8) bus rapid transit lines currently operated by MTS. Within the College Area community, Route 215 runs south along College Avenue, then travels west along El Cajon Boulevard towards North Park. Route 215 has 18 stops along its route, and currently operates between 4:30 AM and 1:39 AM on weekdays and between 4:50 AM and 1:39 AM on weekends. Route 215 runs at 10-minute headways during weekday peak hours, at 30-minute headways on weekdays after 9:00 PM, and at 15-minute headways during other weekday off-peak hours and weekends. Route 215 operates with 60-foot articulated buses, with a capacity of 59 passengers.

Route 856 runs south and east from the SDSU Transit Center to Cuyamaca College in Rancho San Diego. Within the College Area community, Route 856 runs south along College Avenue towards El Cajon Boulevard. Route 856 has 51 stops along its route. On weekends, Route 856 does not operate between SDSU and College Grove Shopping Center, nor between Jamacha Boulevard and Rancho San Diego Village. Route 856 currently operates between 4:28 AM and 11:13 PM on weekdays, between 5:27 AM and 10:06 PM on Saturdays, and between 6:27 AM and 7:15 PM on Sundays. Route 856 runs at 30-minute headways on weekdays, and at 60-minute headways on weekends. Route 856 operates with standard 40-foot buses, with an average capacity of 37 passengers.

Route 936 runs south from the SDSU transit Center to Spring Valley Shopping Center in La Presa. Within the College Area community, Route 936 runs south along College Avenue towards El Cajon Boulevard. Route 936 has 36 stops along its route, and currently operates between 4:58 AM and 10:14 PM on weekdays, between 5:15 AM and 10:41 PM on Saturdays, and between 5:15 AM and 7:53 PM on Sundays. Route 936 runs at 30-minute headways on weekdays, Saturdays, and between 11:30 AM and 4:30 PM on Sundays, and at 60-minute headways for the remaining hours of service. Route 936 operates with standard 40-foot buses, with an average capacity of 37 passengers.

Route 955 runs south from the SDSU Transit Center to the 8th Street Trolley Station in National City. Within the College Area community, Route 955 runs west along College Avenue and south along Collwood Boulevard. Route 955 has 48 stops along its route, and currently runs between 4:55 AM and 11:40 PM on weekdays, between 5:34 and 11:40 PM on Saturdays, and between 5:58 AM and 9:41 PM on Sundays. Route 955 runs at 15-minute headways during its weekday peak and midday periods, 20-minute headways on Saturdays, and 30-minute headways during the remaining hours of service. Route 955 operates with standard 40-foot buses, with an average capacity of 37 passengers.

Analysis Approach and Methodology

Neither the City of San Diego nor SANDAG specifies a methodology for the preparation of quantitative trolley analyses and associated impact determination in its published guidelines for the preparation of traffic studies. Therefore, LLG has prepared the following quantitative analysis based on passenger capacity methodology published in *Chapter 8* of the *Transit Capacity and Quality of Service Manual, 3rd Edition*, which evaluates rail transit capacities.

The Manual includes passenger capacity calculations based on several rail vehicle parameters. The design passenger capacity for rail transit is then compared against the forecasted ridership to determine if future demand can be met with the available capacity. The analysis below provides details of the design passenger capacity calculations for trolleys, and existing and proposed ridership projections.

Trolley Capacity

The passenger capacity of a trolley route is determined based on the following equation:

$$P = TN_c P_c(PHF)$$

where:

P = design person capacity (p/h),

T = line capacity (4 trains/h),

N_c = number of cars per train (3 cars/train),

P_c = maximum schedule load per car (120 p/car), and

PHF = peak-hour factor – obtained from Spring 2016 ridership counts conducted by SANDAG (included in **Appendix K**):

- 0.88 Eastbound direction – AM peak hour,
- 0.86 Westbound direction – AM peak hour,
- 0.95 Eastbound direction – PM peak hour,
- 0.82 Westbound direction – PM peak hour.

Trolley Ridership

Existing trolley and bus ridership counts (Spring 2016) were obtained from SANDAG. SANDAG utilizes Automatic Passenger Counting (APC) technology to compile the data.

As discussed in Section 4.14.2.6, due to the proximity of the SDSU Transit Center to the site of the proposed Project and the fact that students who reside on campus are less likely to bring a vehicle to campus, a 10% transit mode split was utilized as part of the transportation analysis. Although the 10% transit mode split includes both trolley and bus trips, to be conservative the 10% transit mode split was applied to trolley trips only. Therefore, as shown in **Table 4.14-12**, LLG expects that 374 Project ADT would actually be trolley trips rather than vehicle trips. Further, it is forecasted that Project trolley trips would comprise 5% of the total ADT in the AM peak hour, and 7% of the total ADT in the PM peak hour. Therefore, 5% of 374 ADT, which equates to 20 AM Project trolley trips, and 7% of 374 ADT, which equates to 27 PM Project trolley trips, are forecasted. The in/out split is consistent with 52:48 (AM) and 54:46 (PM) per the trip generation calculation in **Table 4.14-3**. As to directional split, existing trolley ridership data at the SDSU Transit Center station shows 60% of trolley riders travel to/from the west and 40% of trolley riders to/from the east.

Table 4.14-12 shows the projected Project trolley ridership based on the mode, peak hour, and directional splits explained above.

Table 4.14-12
Project Trolley Ridership Calculations

Direction	Peak Hour	Daily Project Ridership (Riders/day)	Peak Hour Project Ridership (Riders/hr) ^a		
			IN	OUT	TOTAL
Eastbound	AM	374	6	6	12
	PM		9	7	16
Westbound	AM		4	4	8
	PM		6	5	11

Footnotes:

a The in/out split is consistent with 52:48 (AM) and 54:46 (PM) per trip generation calculation. For EB and WB splits, 60%/40% was calculated based on existing trolley ridership data.

To estimate future trolley ridership levels, past trolley ridership data was reviewed. Trolley ridership data obtained from SANDAG shows a *decrease* in Green Line ridership of approximately 3.5 percent per year between 2013 and 2015. However, for purposes of this analysis, recognizing that the decrease may be an aberration, a 2 percent per year *increase* in ridership was assumed. Specifically, a 2 percent annual increase for 4 and 19 years was assumed as part of the Near-Term and Horizon Year scenarios, respectively. **Appendix K** contains the detailed calculations sheets.

Transit Capacity Analyses

Green Line Trolley Analysis

Tables 4.14-13, 4.14-14, and 4.14-15 report the results of the Green Line trolley analysis under Existing + Total Project, Near-Term + Project, and Horizon Year + Project conditions, respectively. As shown on the tables, in each case, projected ridership volumes (V) would be lower than projected capacity (C). Thus, even with the addition of trolley riders from the Project, sufficient capacity is projected to be available to accommodate the increased demand. Therefore, no trolley capacity constraints are identified.

Table 4.14-13
Trolley Analysis – Existing + Project

Direction	Peak Hour	Calculated Capacity (Riders/hr)	Existing Volume (Riders/hr) ^a		Project Ridership (Riders/hr) ^b		Existing + Project Volume (Riders/hr)		V>C?	
			IN	OUT	IN	OUT	IN	OUT	IN	OUT
Eastbound	AM	1,268	261	144	6	6	267	150	No	No
	PM	1,368	473	446	9	7	482	453	No	No

Table 4.14-13
Trolley Analysis – Existing + Project

Direction	Peak Hour	Calculated Capacity (Riders/hr)	Existing Volume (Riders/hr) ^a		Project Ridership (Riders/hr) ^b		Existing + Project Volume (Riders/hr)		V>C?	
			IN	OUT	IN	OUT	IN	OUT	IN	OUT
Westbound	AM	1,239	443	413	4	4	447	417	No	No
	PM	1,181	225	289	6	5	231	294	No	No

Footnotes:

- a Existing trolley ridership data obtained from SANDAG Assistance to Transit Operations and Planning (ATOP) program, Year 2016.
- b Project trolley ridership is calculated as shown in Table 4.14-12, which shows 20 total AM trips and 27 total PM trips. The in/out split is consistent with 52:48 (AM) and 54:46 (PM) per trip generation calculation. For EB and WB splits, 60%/40% was calculated based on existing trolley ridership data.

Table 4.14-14
Trolley Analysis – Near-Term + Project

Direction	Peak Hour	Calculated Capacity (Riders/hr)	Near-Term Volume (Riders/hr) ^a		Project Ridership (Riders/hr) ^b		Near-Term + Project Volume (Riders/hr)		V>C?	
			IN	OUT	IN	OUT	IN	OUT	IN	OUT
Eastbound	AM	1,268	366	162	6	6	372	168	No	No
	PM	1,368	551	543	9	7	560	550	No	No
Westbound	AM	1,239	535	456	4	4	539	460	No	No
	PM	1,181	270	403	6	5	276	408	No	No

Footnotes:

- a Trolley ridership data obtained from SANDAG shows a decrease in Green Line ridership of approximately 3.5%/year between 2013 and 2015. However, to be conservative, a 2%/year increase in ridership for 4 years was assumed for the Near-Term scenario.
- b Project trolley ridership is calculated as shown in Table 4.14-12, which shows 20 total AM trips and 27 total PM trips. The in/out split is consistent with 52:48 (AM) and 54:46 (PM) per trip generation calculation. For EB and WB splits, 60%/40% was calculated based on existing trolley ridership data.

Table 4.14-15
Trolley Analysis – Horizon Year + Project

Direction	Peak Hour	Calculated Capacity (Riders/hr)	Horizon Year Volume (Riders/hr) ^a		Project Ridership (Riders/hr) ^b		Horizon Year + Project Volume (Riders/hr)		V>C?	
			IN	OUT	IN	OUT	IN	OUT	IN	OUT
Eastbound	AM	1,268	676	232	6	6	682	238	No	No

Table 4.14-15
Trolley Analysis – Horizon Year + Project

Direction	Peak Hour	Calculated Capacity (Riders/hr)	Horizon Year Volume (Riders/hr) ^a		Project Ridership (Riders/hr) ^b		Horizon Year + Project Volume (Riders/hr)		V>C?	
			IN	OUT	IN	OUT	IN	OUT	IN	OUT
	PM	1,368	827	864	9	7	836	871	No	No
Westbound	AM	1,239	842	635	4	4	846	639	No	No
	PM	1,181	419	742	6	5	425	747	No	No

Footnotes:

- a Trolley ridership data obtained from SANDAG shows a decrease in Green Line ridership of approximately 3.5%/year between 2013 and 2015. However, to be conservative, a 2%/year increase in ridership for 19 years was assumed for the Horizon Year scenario.
- b Project trolley ridership is calculated as shown in Table 4.14-12, which shows 20 total AM trips and 27 total PM trips. The in/out split is consistent with 52:48 (AM) and 54:46 (PM) per trip generation calculation. For EB and WB splits, 60%/40% was calculated based on existing trolley ridership data.

MTS Bus Analysis

Based on existing bus ridership data at the SDSU Transit Center, bus ridership is less than trolley ridership. Additionally, student bus ridership is dispersed throughout the day due to the varying schedules of students. Because there currently is sufficient bus capacity on the MTS bus routes serving SDSU, and it is forecasted that the proposed Project would add a minimal number of additional riders, the proposed Project is not expected to result in significant impacts related to bus capacity.

Conclusion

Based on the design passenger capacity of the trolley serving the SDSU Transit Center, sufficient capacity would be available to accommodate the forecasted increase in trolley riders that would result from the Project. Sufficient capacity also would be available to accommodate the minimal forecasted increase in bus riders that would result from the Project. Therefore, no significant transit capacity impacts are identified with the Project.

4.14.6.4 PARKING ASSESSMENT

Campus Parking

While the CEQA Guidelines no longer require that an EIR assess a project's potential parking related impacts, in response to comments raised by residents of the College View Estates residential

neighborhood, which is located directly to the west of the SDSU campus and the site of the proposed Project, an analysis of parking-related issues has been conducted.

Project Parking Demand

The proposed Project consists of the development of on-campus student housing, which would increase the number of resident students. Because the Project would not result in an increase in student enrollment above existing levels, the effect of the Project would be a shift in students presently living off-campus to on-campus.

Based on Fall 2015 SDSU parking permit sales, approximately 32% of on-campus resident students bring a vehicle to campus. Based on this percentage, the proposed Project would generate a parking demand for 822 vehicles/parking spaces ($32\% \times 2,566$ students). Additionally, based on Fall 2015 parking permit sales, approximately 46% of off-campus students bought a student parking permit and, therefore, presumably drive to campus. Based on this percentage, the proposed Project would reduce parking demand attributable to the 2,566 students who would now be living on campus in the amount of approximately 1,180 vehicles/parking spaces ($46\% \times 2,566$ students). Therefore, the net parking demand would decrease as a result of the Project from approximately 1,180 parking spaces to approximately 822 spaces.

Removal of Lot 9

Phase I of the proposed Project would be constructed on Parking Lot 9 and, as a result, Lot 9 would be permanently removed from the SDSU parking inventory. Parking Lot 9 currently provides 139 parking spaces for students, 6 spaces for housing-related activities, 3 spaces for loading/unloading, 4 special permit parking spaces, and 4 motorcycle spaces.

Therefore, the proposed Project would result in the removal of approximately 150 parking spaces from the campus inventory. However, as explained above, the Project also would result in a reduction in demand for parking in the amount of 358 spaces ($1,180 - 822$). Therefore, even with the loss of Lot 9 parking, the proposed Project would result in a net increase in supply of approximately 200 spaces ($358 - 150 = 208$).

Additionally, based on parking occupancy surveys conducted by LLG in February 2017 and previous parking occupancy surveys conducted by SDSU, Parking Structure 12 and Parking Lot 7, which are near the site of the proposed Project, can reach full capacity by mid-morning. However, at the same time, the parking occupancy for the campus as a whole is approximately 80%. This means that approximately 1,900 parking spaces remain available for student parking, which is more

than enough to accommodate the approximate 800-space parking demand that would be generated by the Project, as well as the removal of Parking Lot 9. Finally, it should be noted that since construction of the SDSU Transit Center, the demand for on-campus parking has decreased and this trend could continue as more students shift from driving to riding the trolley or taking the bus to/from campus.

Construction Staging

During the construction of all Project phases, construction staging will be conducted in Parking Lot 11, which currently provides 16-20 parking spaces. Additional laydown space for all phases, if necessary, would be available in Parking Lot 17C. As noted above, parking spaces will be available in other parking lots campuswide for the small amount of vehicles that normally park in Parking Lot 11 when the lot is used for construction staging.

Conclusion

Based on the shift of students presently residing off-campus to on-campus as a result of the proposed Project, in combination with the excess parking supply on campus, the proposed Project would not result in a significant impact related to parking.

College View Estates Spillover Parking

The College View Estates (CVE) neighborhood can be accessed from the SDSU campus via Remington Road. The CVE neighborhood lies within the City of San Diego's Area B (SDSU/College Area) residential permit parking district, which means on-street parking is prohibited Monday through Friday from 8 AM to 7 PM, except for vehicles displaying valid permits, or valid disabled placards. SDSU students and other non-CVE residents are legally permitted to park on the streets only between the hours of 7 PM and 8AM and on weekends.

The CVE neighborhood is located within the jurisdiction of the City of San Diego Police Department, with supplemental law enforcement assistance provided by SDSU campus police as necessary. Regular enforcement of the existing residential parking permit program limits campus spillover parking during the times of enforcement (Monday through Friday from 8 AM to 7 PM). Continued enforcement following construction of the proposed Project would continue to limit campus spillover parking during these times. It also is noted that the parking demand that would be generated by the Project would be by students living on-campus. It is unlikely that these students would park in the CVE neighborhood at night, only to have to move their vehicle and park on-campus before 8 AM once the Area B enforcement begins. Changes to the existing parking permit

program that may be desired by the CVE residents are beyond the scope of the proposed Project and this analysis.

As discussed in EIR Section 2.0, Project Description, the following improvement would be incorporated as a Project feature to help curtail campus parking spillover into the CVE neighborhood:

- Placement of a permanent sign on Remington Road at the SDSU campus boundary with the College View Estates neighborhood that reads “No SDSU or Event Parking in Residential Neighborhood – Violators May be Fined and/or Towed Away.” Parking guards will continue to be posted on Remington Road at the College View Estates entrance to discourage parking in the residential neighborhood during large events, including events at Viejas Arena, and during baseball games. A temporary sandwich board sign also will be placed at the corner of 55th Street and Remington Road during such events that reads “No Event Parking Beyond This Point.”

4.14.6.5 ACCESS AND OTHER ISSUES

Access

Access to the Project site is proposed via a future road to be constructed in a general east-west direction off of 55th Street, and would be located along the north edge of the Project site. Limited parking will be available at the Project site, and most of these spaces would be reserved for ADA needs and housing complex personnel, such as custodial and maintenance staff and food service. As such, traffic on the access road would be limited. Internal circulation within the proposed Project site is designed primarily around pedestrian needs.

The following access-related improvements and features would be incorporated as part of the Project:

- Sight distance and curb radius will be provided in conformance with City of San Diego standards at all Project driveways.
- Sufficient ADA compliant pedestrian access to all Project facilities will be provided.
- Adequate bicycle parking would be provided within the Project site.
- Additional lighting along Remington Road will be provided to help motorists better see bicyclists, skateboarders and pedestrians utilizing the street in the evening (see EIR Section 2.0, Project Description).

Remington Road / 55th Street

Traffic Flow/Congestion

As shown in **Tables 4.14-7, 4.14-9, and 4.14-10**, traffic operations along Remington Road and 55th Street would operate at an acceptable LOS with the addition of Project traffic.

To improve traffic flow, synchronization of the five (5) traffic signals along 55th Street between Montezuma Road and Remington Road would be incorporated as a Project feature. (See EIR Section 2.0, Project Description.) Signal synchronization is expected to improve the flow of traffic along 55th Street and Remington Road.

Based on SDSU's Fall 2015 "On Campus Move-In Guide", students moving into the Chapultepec Residence Hall are directed to park in Parking Structure 12 and to access that parking structure via College Avenue and Canyon Crest Drive rather than via 55th Street and Remington. Similar directions would be provided for move-in operations for the Project. Per the Student Housing License Agreement, students are required to move out by 8 PM on the day of their last final exam or on the last designated move-out date, whichever comes first. This move-out schedule distributes the traffic related to move-out operations over several days.

Red Zone Violations

Under existing conditions, drivers illegally stop their vehicles along Remington Road to either drop-off or pick-up students or deliveries despite the No Parking red curb. When drivers stop, the two-lane road effectively becomes one lane resulting in increased congestion and potential safety hazards. As a Project feature, the red curbs along Remington Road would be re-painted and the existing signs would be modified from "No Parking" to "No Stopping at Any Time" signs. (See EIR Section 2.0, Project Description.) Several signs would be posted at short intervals in the area. Accordingly, anyone using these areas as loading zones would be ticketed.

Additionally, the Project would include a dedicated pick-up/drop-off zone within the Project site. (See EIR Section 2.0, Project Description.) Off street delivery trucks and ride-hailing and ride-sharing vehicles could park in this area rather than idle along Remington Road and 55th Street. This would further assist in reducing congestion on Remington Road due to loading and unloading. These Project features would help prevent unsafe traffic conditions due to stopped or idling vehicles along Remington Road.

4.14.6.6 PEDESTRIAN AND BICYCLE CIRCULATION

Based on a review of the *City of San Diego Bicycle Master Plan*, the *College Area Community Plan* and field observations, bike lanes currently are provided along Remington Road/55th Street from Hewlett Drive to Montezuma Road, and along Montezuma Road from the west to east termini, with a segment of Bike Route between 55th Street and Campanile Drive. Bicycle parking facilities are provided throughout the SDSU campus. The *College Area Community Plan* recommends that bicycle parking facilities be required as part of all new commercial and multifamily residential development projects. As discussed in Section 4.14.6.5.1, the Project would provide adequate bicycle parking within the Project site.

Based on a review of the City of San Diego's *Pedestrian Master Plan Phase 4* report and field observations, sidewalks and walkways are provided throughout the SDSU campus and along study area roadways. As discussed in Section 4.14.6.5.1, the internal circulation within the proposed Project site would be designed primarily around pedestrian needs, and sufficient ADA compliant pedestrian access to all Project facilities would be provided.

Therefore, the proposed Project would be consistent with adopted policies, plans, and programs regarding bicycle and pedestrian facilities.

4.14.6.7 CONSTRUCTION TRIPS

Construction of each development phase of the proposed Project would occur in several phases. The construction phase that would generate the most traffic is the grading phase. For Phase I of the proposed Project, the duration of the grading phase would be approximately 37 days. For Phase II of the Project, the duration of the grading phase is estimated at approximately 47 days. For Phase III of the Project, the duration of the grading phase is estimated at approximately 37 days.

Construction-related traffic in the form of equipment and employee trips would be coming and going to/from the Project site throughout Project development. As a result, potentially significant construction-related traffic impacts could occur without mitigation. It is, therefore, recommended that a traffic control plan (TCP) be developed and implemented prior to beginning construction. The primary function of a TCP is to provide for the safe and effective movement of road users through or around temporary traffic control zones. The TCP in this case would institute construction traffic management controls in accordance with City standards and the Caltrans *California Manual of Uniform Traffic Control Devices* (2014 edition). These traffic management controls would include measures determined on the basis of site-specific conditions, including the use of construction signs, delineators, and lane closures. The TCP would limit peak hour

construction employee and delivery trips, and include graphics illustrating the placement of signage, striping, traffic personnel, and road cones, as applicable.

With implementation of the TCP, any potential construction traffic-related impacts would be less than significant.

4.14.6.8 VMT ANALYSIS

This section presents analysis of the Project's Vehicle Miles Traveled (VMT).

VMT's Background and Senate Bill SB 743

VMT is defined as a measurement of miles traveled by vehicles within a specified region for a specified time period and is a measure of network use or efficiency. There are multiple ways to express VMT, although generally VMT are calculated by multiplying all vehicle trips generated by a project times their associated trip lengths, or by multiplying traffic volumes on roadway links by the associated trip distance of each link. VMT is often estimated for a typical weekday.

On September 27, 2013, Governor Jerry Brown signed SB 743 into law, starting a process that is expected to change the way transportation impact analysis is conducted under CEQA. Within the State's CEQA Guidelines, these changes will include elimination of auto delay, LOS, and similar measurements of vehicular roadway capacity and traffic congestion as the basis for determining significant impacts.

In January 2016, the State Office of Planning and Research (OPR) issued the *Revised Proposal on Updates to the CEQA Guidelines on Evaluating Transportation Impacts in CEQA* (Draft Guidelines), which provided recommendations for updating the State's CEQA Guidelines in response to SB 743 and contained recommendations for VMT analysis methodology in an accompanying *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory). The Draft Guidelines, including the Technical Advisory, recommended use of automobile VMT per capita as the preferred CEQA transportation metric, along with the elimination of auto delay/LOS for CEQA purposes statewide.

Implementation Timeline on SB 743

For land use projects, the Technical Advisory recommends that automobile VMT per capita be measured by land use type for specific trip purposes or tours depending on the type of forecasting model being used. The OPR Draft Guidelines presently are being revised in response to comments and OPR plans to submit new materials to the Resources Agency for formal rulemaking sometime

during the first half of 2017. The Resources Agency will then distribute the revised CEQA Guidelines for public review and comment with formal approval expected sometime in mid- to late 2017. Based on the Draft OPR Guidelines, lead agencies will have up to two years to implement the revised CEQA Guidelines upon their formal approval.

OPR's Technical Advisory contains recommendations for VMT methodology and significance thresholds, although the Draft Guidelines provide that the lead agency, in this case The Board of Trustees of the California State University, has discretion in this regard. As previously explained, the final implementation steps for the revised Guidelines have not yet been completed and, therefore, compliance with the OPR Draft Guidelines is not mandatory. Nevertheless, an SB 743 VMT analysis compliance review has been prepared for the Project.

Determination of Significance

The Draft Guidelines Technical Advisory described above includes recommendations for how to estimate and forecast VMT. For a project with multiple land uses, such as residential, commercial, etc., the automobile VMT associated with each land use should be quantified separately. Further, the automobile VMT from specific trip purposes or travel tours should be isolated.

The OPR Draft Guidelines include a recommended significance threshold:

A development project that results in vehicle miles traveled exceeding an applicable threshold of significance may indicate a significant impact if the project is not within 15% of the existing VMT/capita.

However, and relevant to the proposed Project, the Draft Guidelines also provide that development projects that are located within one-half (1/2) mile of either an existing major transit stop or a stop along an existing high quality transit corridor are deemed to be located in "Transit Priority Areas" (TPA's) and, therefore, may be presumed to cause a less than significant transportation impact. Similarly, development projects that decrease vehicle miles traveled in the project area compared to existing conditions may be considered to have a less than significant transportation impact.

Project VMT

As previously noted, the site of the proposed Project is located approximately one-half (1/2) mile of the existing SDSU Transit Center, including the MTS trolley station and bus center. Therefore, based on OPR's Draft Guidelines, the proposed Project's transportation-related impacts are less than significant based on the Project's proximity to transit.

For information purposes, however, Project-related VMT and Average Vehicle Trip Length (ATL) data for the proposed Project were derived from a SANDAG Series 12 model run for the forecast year 2035.

Table 4.14-16 shows the results of the VMT model run under with Project conditions. The VMT, total number of trips generated, and ATL per assigned vehicle trip are shown in the table. Under the “No Project” scenario, the land use type would be a parking lot, which does not generate vehicle trips by itself and, therefore, would not have an associated VMT and ATL. The “With Project” scenario evaluates one land use type –student housing – and the ATL per assigned trip of 3.4 miles was used in the “With Project” calculations. Using the ATL from the model, the total daily VMT generated by the Project is calculated by multiplying the Project ATL by the Project trip generation.

Table 4.14-16
Vehicle Miles Traveled & Average Trip Length (With Project)

Vehicle Miles Traveled (mi)	Average Daily Vehicle Trips	Average Trip Length (mi)
11,458	3,370	3.4

Source:

¹ SANDAG Series 12 Year 2035 Select Zone Assignment, conducted January 2017.

This methodology, however, does not take into account the fact that the proposed Project actually would result in a *decrease* in VMT rather than an increase. This is because the proposed Project would provide on campus housing for 2,566 students who presently reside off-campus and, therefore, must commute to school. They commute to school by various means, including by single-occupancy vehicle, carpooling, transit, including bus and trolley, biking, and walking. To determine the amount of VMT generated by these commuting students, LLG inquired of SANDAG, the regional transportation agency. Upon inquiry, LLG learned that SANDAG does not have available to it VMT data for college students. Therefore, LLG was unable to ascertain the existing VMT generated by the 2,566 students who commute to school and, therefore, is unable to conduct a quantitative analysis.

From a qualitative perspective, based on a travel survey conducted by SDSU in April 2015, on average, off-campus students live approximately 12 miles away from campus. Based on this data, it is LLG’s professional judgment that the VMT that would be generated by the proposed Project, as illustrated in **Table 4.14-16**, is less than the VMT presently generated by the 2,566 students that would be housed by the proposed Project. As discussed in Section 8.3, an important consideration for student housing land uses is that, while they do add traffic to the area in the immediate vicinity of campus, they significantly shorten or eliminate much longer trips. For instance, if the Project were not

built, students would live in other areas of San Diego, including locales such as Pacific Beach or Mission Valley and, as a result, they would need to drive to the university. These distances likely would be greater than the distances they would drive on a daily basis as students residing on-campus. In addition, the area surrounding the SDSU campus provides a variety of resources for personal needs such as grocery stores, recreational facilities, etc., further reducing the need to travel longer distances. These characteristics associated with the location of the Project result in substantially reducing the number of vehicle miles traveled, as well as impacts on regional roads such as I-8. Therefore, the proposed Project is considered a net benefit in terms of regional traffic impacts.

4.14.6.9 AIR TRAFFIC PATTERNS

Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

The proposed project would not result in a change in air traffic patterns that results in substantial safety risks.

4.14.6.10 HAZARDS

Would the project substantially increase hazards due to a design feature (e.g., sharp curves, or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The proposed project would not substantially increase hazards due to a design feature as the project does not include modification of roadways resulting in sharp curves or dangerous intersections, or incompatible uses with the surrounding area.

4.14.6.11 EMERGENCY RESPONSE TIME

Would the project result in inadequate emergency access?

With respect to emergency response times, the proposed Project would increase vehicle traffic nominally in the vicinity of SDSU and could affect emergency response times. However, it is not expected that the increased traffic would result in significant impacts in the form of increased emergency response times. This conclusion is based on two reasons.

First, emergency response vehicles have the right-of-way and are exempted from rules of the road in emergency situations. Specifically, upon the approach of an emergency vehicle that is sounding a siren, the surrounding traffic must yield the right-of-way and immediately drive to the right-hand edge or curb of the highway, clear of any intersection, and stop until the emergency vehicle has

passed (Vehicle Code Section 21806). If required, drivers of emergency vehicles are trained to utilize center turn lanes, or travel in opposing through lanes to pass through crowded intersections. Additionally, when driven in response to an emergency call, and if the driver sounds a siren, emergency vehicles are exempted from the general rules of the road, such as right of way and speed limits (Vehicle Code Section 21055; San Diego Municipal Code Section 81.06). In addition, the roadway configuration of 55th Street and Remington Road is such that there is adequate right-of-way for emergency vehicles to maneuver around traffic, even under congested conditions. Based on field observations, 55th Street/Remington Road between Montezuma Road and Hewlett Drive is 37 feet wide. Even assuming cars are illegally parked on one side of the street, this leaves approximately 30 feet of roadway, which is a sufficient width for cars traveling in opposite directions to pull over next to the parked car and for the emergency vehicle to pass.

4.14.6.12 PEDESTRIAN AND BICYCLE CIRCULATION

Would the project conflict with adopted policies, plans, or programs regarding public transit, bicycles, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Based on a review of the *City of San Diego Bicycle Master Plan*, the *College Area Community Plan* and field observations, bike lanes currently are provided along Remington Road/55th Street from Hewlett Drive to Montezuma Road, and along Montezuma Road from the west to east termini, with a segment of Bike Route between 55th Street and Campanile Drive. Bicycle parking facilities are provided throughout the SDSU campus. The *College Area Community Plan* recommends that bicycle parking facilities be required as part of all new commercial and multifamily residential development projects. As discussed in Section 4.14.6.5.1, the Project would provide adequate bicycle parking within the Project site.

Based on a review of the City of San Diego's *Pedestrian Master Plan Phase 4* report and field observations, sidewalks and walkways are provided throughout the SDSU campus and along study area roadways. As discussed in Section 4.14.6.5.1, of this report, the internal circulation within the proposed Project site would be designed primarily around pedestrian needs, and sufficient ADA compliant pedestrian access to all Project facilities would be provided.

Therefore, the proposed Project would be consistent with adopted policies, plans, and programs regarding bicycle and pedestrian facilities.

4.14.7 MITIGATION MEASURES

Based on the CSU and City of San Diego significance criteria, the proposed Project would result in potentially significant impacts at several study area intersections and street segments in the Near-Term and Horizon Year scenarios as identified below. These significant impacts would occur with implementation of Project Phases II and III; the development of Project Phase I would not result in significant impacts requiring mitigation in the form of road improvements.

While the proposed Project would result in significant impacts, as discussed in Section 8.3, the Project would result in a net benefit in terms of regional traffic since the development of additional student housing on the SDSU campus would significantly shorten or eliminate much longer trips associated with students commuting from distant locales such as Pacific Beach or Mission Valley. In addition, the area surrounding the SDSU campus provides a variety of resources for personal needs such as grocery stores, recreational facilities, etc., further reducing the need to travel longer distances. These characteristics associated with the location of the Project result in substantially reducing the number of vehicle miles traveled, as well as impacts on regional roads such as I-8. Therefore, the proposed Project is considered a net benefit in terms of regional traffic impacts.

4.14.7.1 SIGNIFICANCE OF IMPACTS

The following is a list of the locations that would be significantly impacted with the addition of Project traffic, based on the established significance criteria. Direct and/or cumulative impacts are noted, as well as the Project phase during which the impact would occur.

Intersections

Impact – TRA-1 55th Street / Montezuma Road (Direct and Cumulative – Phases II and III)

Street Segments

Impact – TRA-2 Montezuma Road: 55th Street to College Avenue (Direct and Cumulative – Phase II only)

Impact – TRA-3 Montezuma Road: Collwood Boulevard to 55th Street (Cumulative – Phase III only)

Impact – TRA-4 College Avenue: Montezuma Road to Arosa Street (Cumulative – Phase III only)

Construction

Impact – TRA-5 Temporary Construction Impacts (Phases I, II, and III)

4.14.7.2 MITIGATION MEASURES

The improvements listed below would mitigate the identified significant impacts associated with the Project. All impacts would be mitigated to less than significant with the exception of the impact on Montezuma Road between Collwood Boulevard and 55th Street, which would result only under the Phase III, full Project buildout scenario.

Intersections

MM-TRA-1 55th Street / Montezuma Road (Phases II and III). Prior to issuance of a certificate of occupancy for the Phase II development, SDSU, or its designee, shall restripe the southbound approach to the 55th Street/Montezuma Road intersection to provide: one (1) dedicated southbound right-turn lane; one (1) shared southbound right/thru/left-turn lane; and one (1) dedicated southbound left-turn lane.

With implementation of the recommended improvements, impacts would be **less than significant**.

Street Segments

MM-TRA-2 Montezuma Road: 55th Street to College Avenue (Phases II and III). Prior to issuance of a certificate of occupancy for the Phase II development, SDSU shall pay its fair-share towards providing a raised median on Montezuma Road between 55th Street and College Avenue. Per the City of San Diego street standards, addition of a raised median would result in a roadway capacity increase of 10,000 ADT.

With implementation of the recommended improvements, impacts would be **less than significant**.

MM-TRA-3: Montezuma Road: Collwood Boulevard to 55th Street (Phase III only). Significant impacts to the segment of Montezuma Road between Collwood Boulevard and 55th Street would not occur until Phase III of the Project. The improvement necessary to mitigate the identified impact is widening the segment of Montezuma Road between Collwood Boulevard and 55th Street. However, this portion of Montezuma Road is classified and currently constructed as a 4 lane Major. Widening beyond the Community Plan classification is not feasible due to physical constraints. Because there is no other feasible mitigation that would reduce the identified significant

impact to less than significant, this impact, which would not occur until Phase III of the proposed Project, is **significant and unavoidable**.

MM-TRA-4 **College Avenue: Montezuma Road to Arosa Street (Phase III only).** Significant cumulative impacts to the segment of College Avenue between Montezuma Road to Arosa Street would not occur until Phase III of the Project. The improvement necessary to mitigate the identified impact is to install a raised median on College Avenue between Montezuma Road and Arosa Street. However, this segment of Montezuma Road is under the jurisdiction and control of the City of San Diego and the City does not have a funding plan or program in place to implement the improvements. As such, implementation of the necessary improvements is infeasible and the impacts are considered **significant and unavoidable**.

With implementation of the recommended improvements, impacts would be **less than significant**.

Construction

MM-TRA-5 **Project Vicinity.** Prior to the commencement of construction activities, SDSU, or its designee, shall prepare and implement a traffic control plan (TCP). The primary function of the TCP shall be to provide for the safe and effective movement of vehicles, pedestrians, and bicyclists through or around temporary traffic control zones. The TCP shall institute construction traffic management controls in accordance with City standards and the Caltrans *California Manual of Uniform Traffic Control Devices* (2014 edition). These traffic management controls will include measures determined on the basis of site-specific conditions, including the use of construction signs, delineators, and lane closures. The TCP will limit peak hour construction employee and delivery trips, and include graphics illustrating the placement of signage, striping, traffic personnel, and road cones, as applicable.

With implementation of the TCP, any potential construction traffic-related impacts would be **less than significant**.

4.14.7.3 POST-MITIGATION OPERATIONS

Tables 4.14-7 and 4.14-18 illustrate the results of the intersection post-mitigation analysis for the Near-Term and Horizon Year conditions, respectively. **Tables 4.14-19 and 4.14-20** illustrate the results of the street segment post-mitigation analysis for the Near-Term and Horizon Year conditions, respectively. As shown in the tables, the proposed mitigation measures would reduce

the Project impacts to less than significant with the exception of the significant impact on Montezuma Road between Collwood Boulevard and 55th Street, which would occur under Phase III Project buildout conditions.

Please see **Appendix K** for the mitigated peak hour intersection analyses worksheets.

Table 4.14-17
Near-Term Intersection Post-Mitigation Operations (Existing + Project + Cumulative Projects)

Intersection	Control Type	Peak Hour	Existing + Cumulative Projects		Existing + Cumulative Projects + Project Phase I + Project Phase II		With Mitigation		Existing + Cumulative Projects + Total Project		With Mitigation	
			<i>Delay^a</i>	<i>LOS^b</i>	<i>Delay</i>	<i>LOS</i>	<i>Delay</i>	<i>LOS</i>	<i>Delay</i>	<i>LOS</i>	<i>Delay</i>	<i>LOS</i>
6 55th St / Montezuma Rd	Signal	AM	34.0	C	38.0	D	29.0	C	39.8	D	30.0	C
		PM	51.8	D	58.3	E	43.8	D	62.1	E	45.0	D

Footnotes:

a Average delay expressed in seconds per vehicle.

b Level of Service.

Table 4.14-18
Horizon Year Intersection Post-Mitigation Operations

Intersection			Control Type	Peak Hour	Horizon Year without Project		Horizon Year with Project		With Mitigation	
					<i>Delay^a</i>	<i>LOS^b</i>	<i>Delay</i>	<i>LOS</i>	<i>Delay</i>	<i>LOS</i>
6 55th St / Montezuma Rd			Signal	AM	52.9	D	61.0	E	49.8	D
				PM	88.6	F	>100	F	83.6	F

Footnotes:

a Average delay expressed in seconds per vehicle.

b Level of Service.

Table 4.14-19
Near-Term Street Segment Post-Mitigation Operations (Existing + Project + Cumulative Projects)

Street Segment	Near Term Capacity (LOS E) ^a	Existing + Cumulative Projects			Existing + Cumulative Projects + Project Phase I + Project Phase II			Existing + Project + Cumulative Projects			Mitigated Capacity (LOS E) ^a	Existing + Cumulative Projects + Project Phase I + Project Phase II With Mitigation			Existing + Project + Cumulative Projects With Mitigation		
		<i>ADT^b</i>	<i>V/C^c</i>	<i>LOS^d</i>	<i>ADT</i>	<i>V/C</i>	<i>LOS</i>	<i>ADT</i>	<i>V/C</i>	<i>LOS</i>		<i>ADT</i>	<i>V/C</i>	<i>LOS</i>	<i>ADT</i>	<i>V/C</i>	<i>LOS</i>
<i>Montezuma Road</i>																	
55th St to College Ave	30,000	34,130	1.138	F	34,577	1.153	F	34,804	1.160	F	40,000	34,577	0.864	D	34,804	0.870	D

Footnotes:

a. Capacities based on the City of San Diego's Roadway Classification & LOS table (See Appendix K).

b. Average Daily Traffic

- c. Volume to Capacity ratio
- d. Level of Service

Table 4.14-20
Horizon Year Street Segment Post-Mitigation Operations

Street Segment	Capacity (LOS E) ^a	Horizon Year without Project			Horizon Year with Project			Mitigated Capacity (LOS E) ^a	With Mitigation		
		ADT ^b	LOS ^c	V/C ^d	ADT	LOS	V/C		ADT	LOS	V/C
<i>Montezuma Road</i>											
55th St to College Ave	30,000	39,120	F	1.304	39,794	1.326	F	40,000	39,794	E	0.995
<i>College Ave</i>											
Montezuma Rd to Arosa St	30,000	33,470	F	1.116	33,841	1.128	F	40,000	33,841	D	0.846

Footnotes:

- a Capacities based on the City of San Diego's Roadway Classification & LOS table (See Appendix K).
- b Average Daily Traffic.
- c Level of Service.
- d Volume to Capacity.

4.14.8 LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the implementation of the recommended improvements, the proposed Project's transportation-related impacts would be less than significant with the exception of impacts to the segment of Montezuma Road between Collwood Boulevard and 55th Street. These impacts, which would occur only under Phase III of the proposed project, would remain significant and unavoidable because the improvement necessary to mitigate the impact-widening Montezuma Road beyond its current classification as a 4-lane major road is infeasible due to property constraints.

4.14.9 REFERENCES

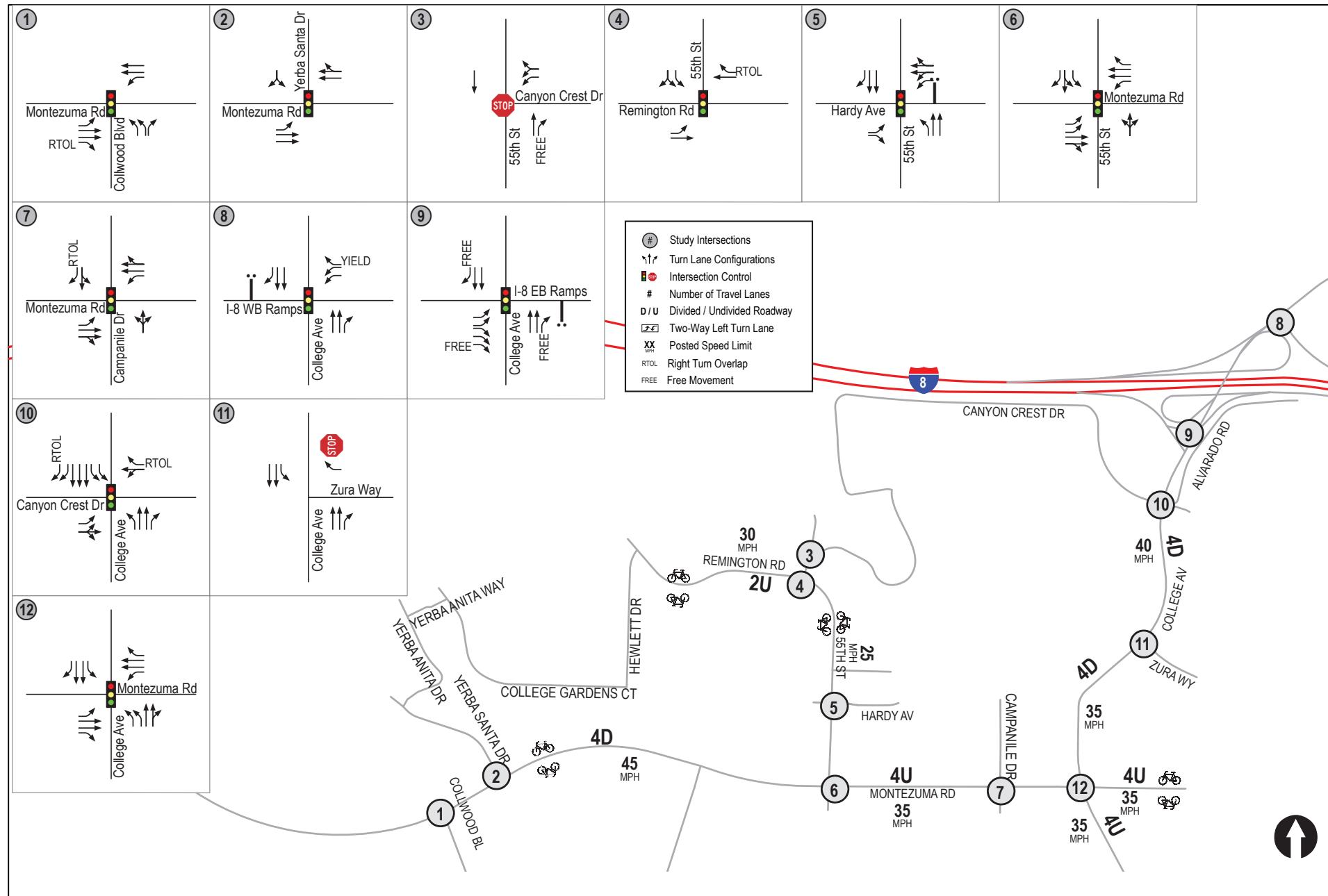
SDSU Office of Housing Administration, March 1, 2017 (pers. Comm.)



SDSU
New Student Housing Project EIR

Figure 4.14-1
Project Area Map

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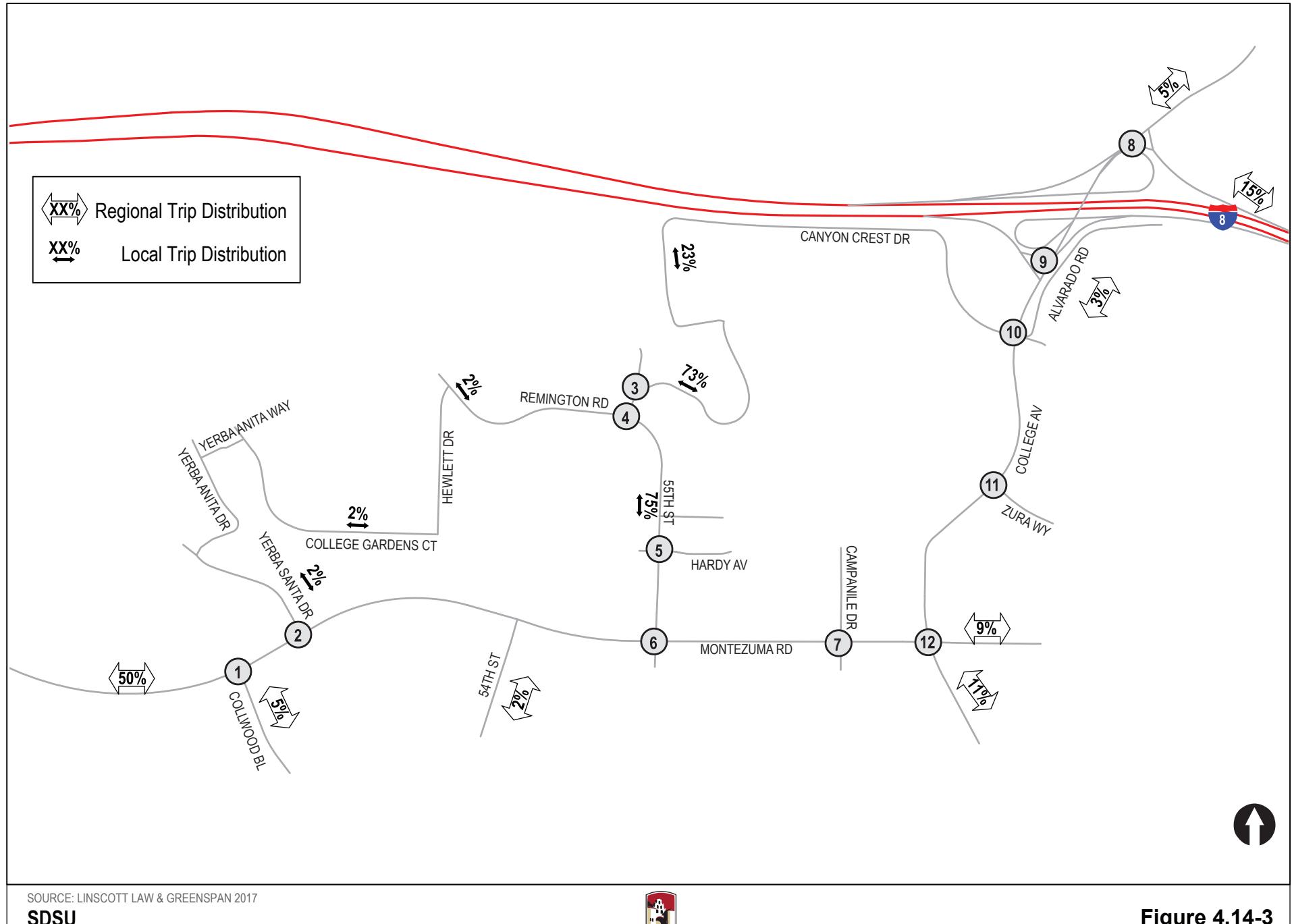
SOURCE: LINSCLIFF LAW & GREENSPAN 2017

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Figure 4.14-2
Existing Conditions Diagram

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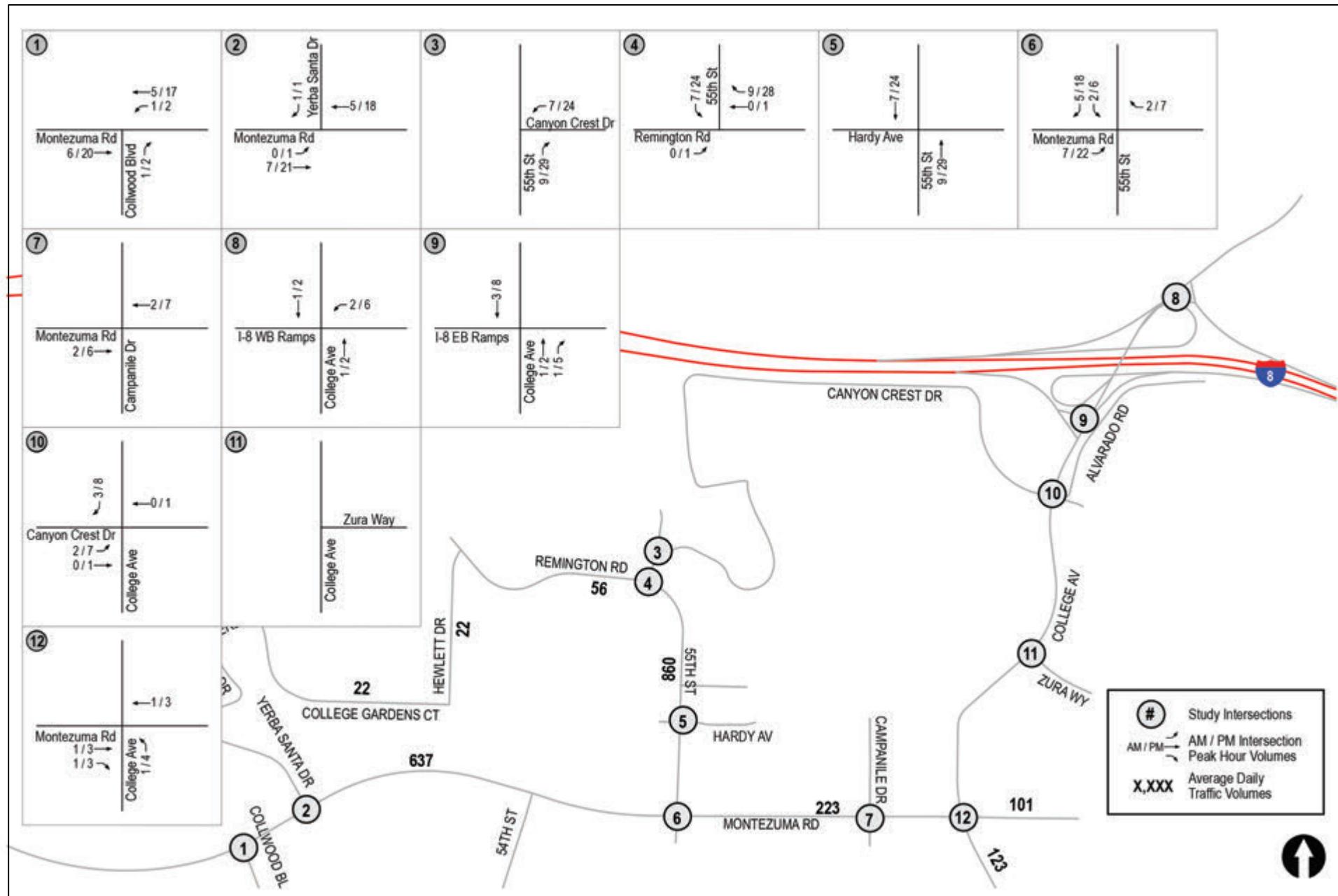
SOURCE: HINSCOTT LAW & GREENSPAN 2017

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Figure 4.14-3
Project Traffic Distribution

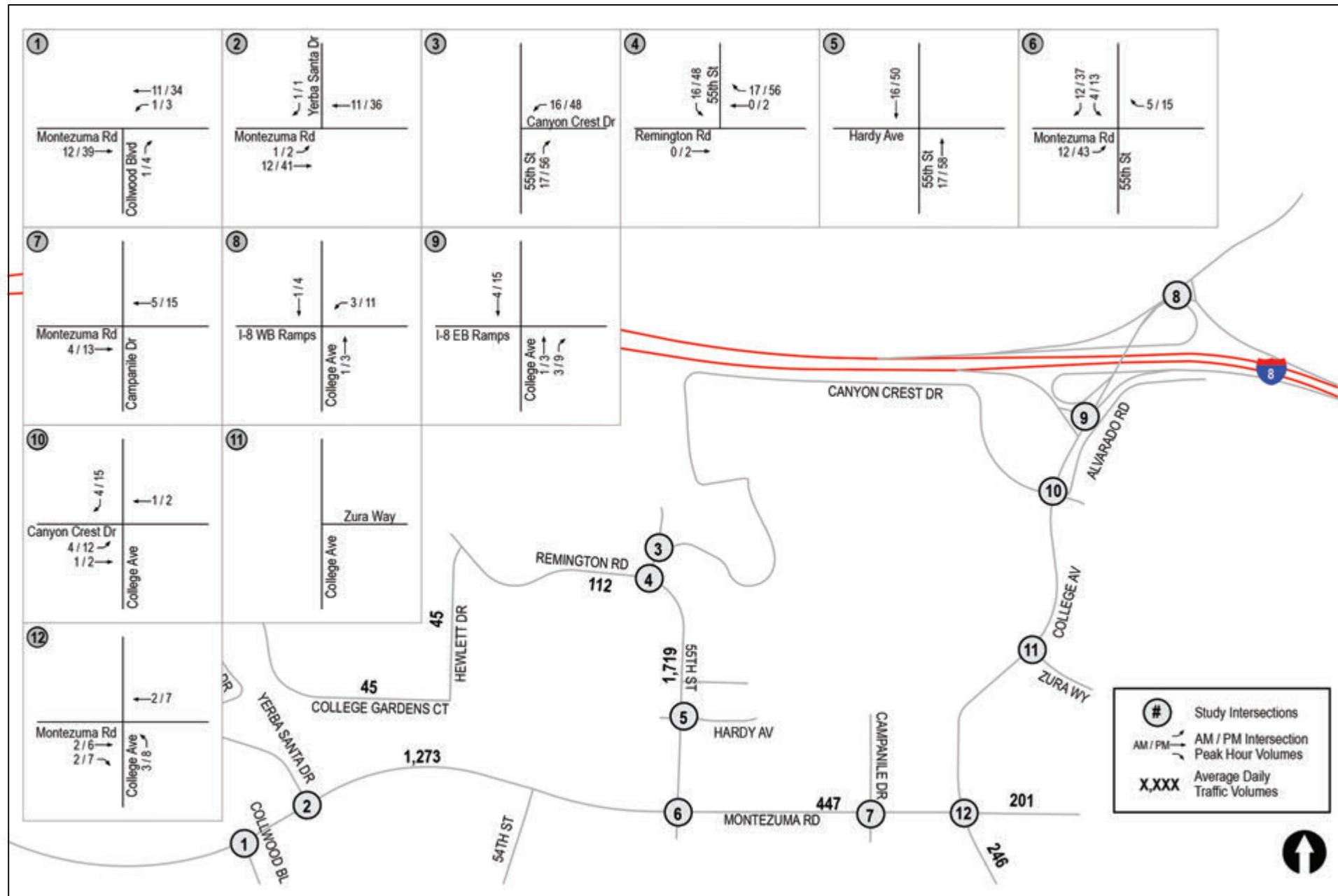
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SOURCE: LINSCLT LAW & GREENSPAN 2017

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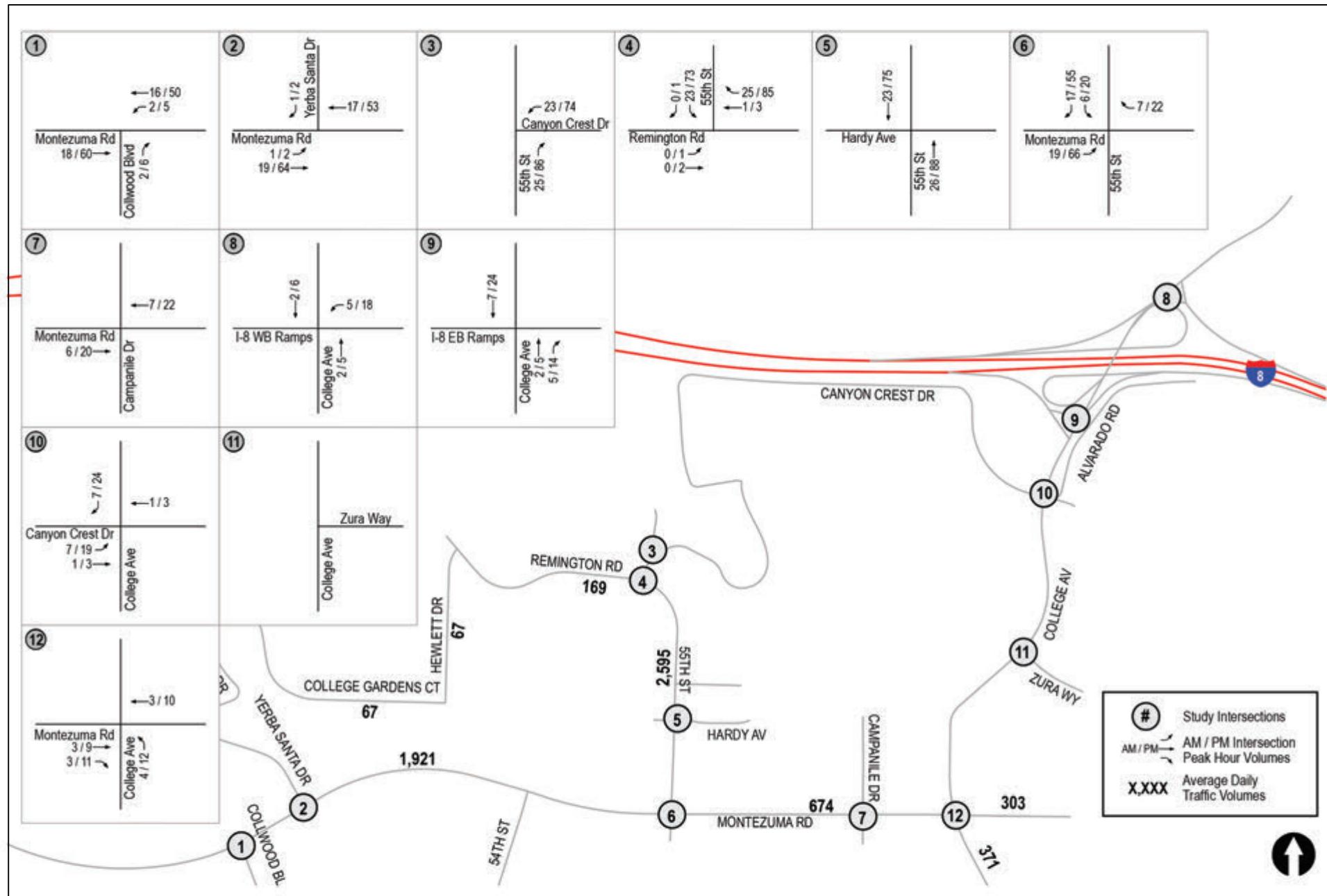


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New Student Housing Project EIR

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SOURCE: LINSOTT LAW & GREENSPAN 2017

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Figure 4.14-6
Total Project Traffic Volumes

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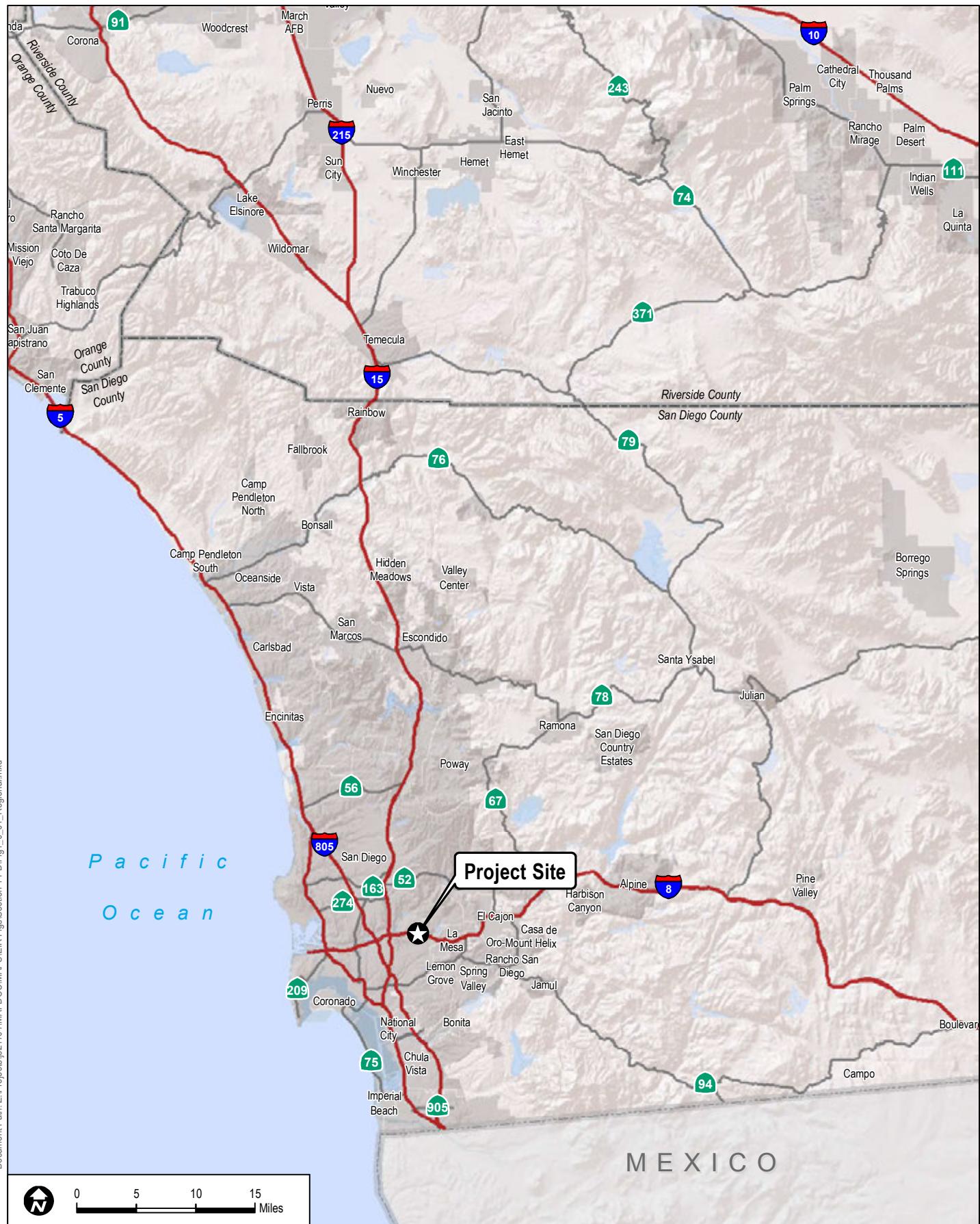
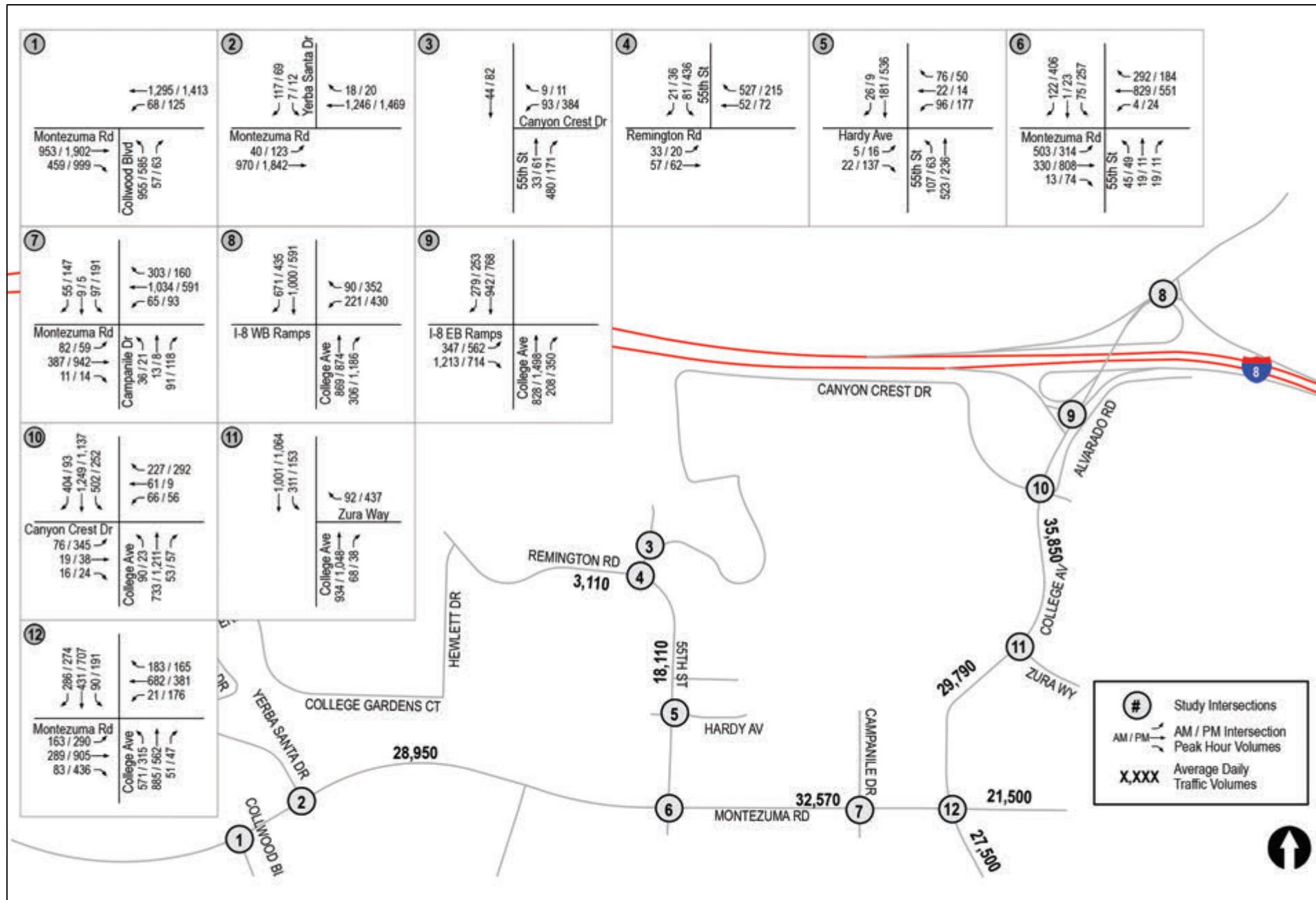


Figure 4.14-7 Vicinity Map

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SOURCE: LINSCOTT LAW & GREENSPAN 2017

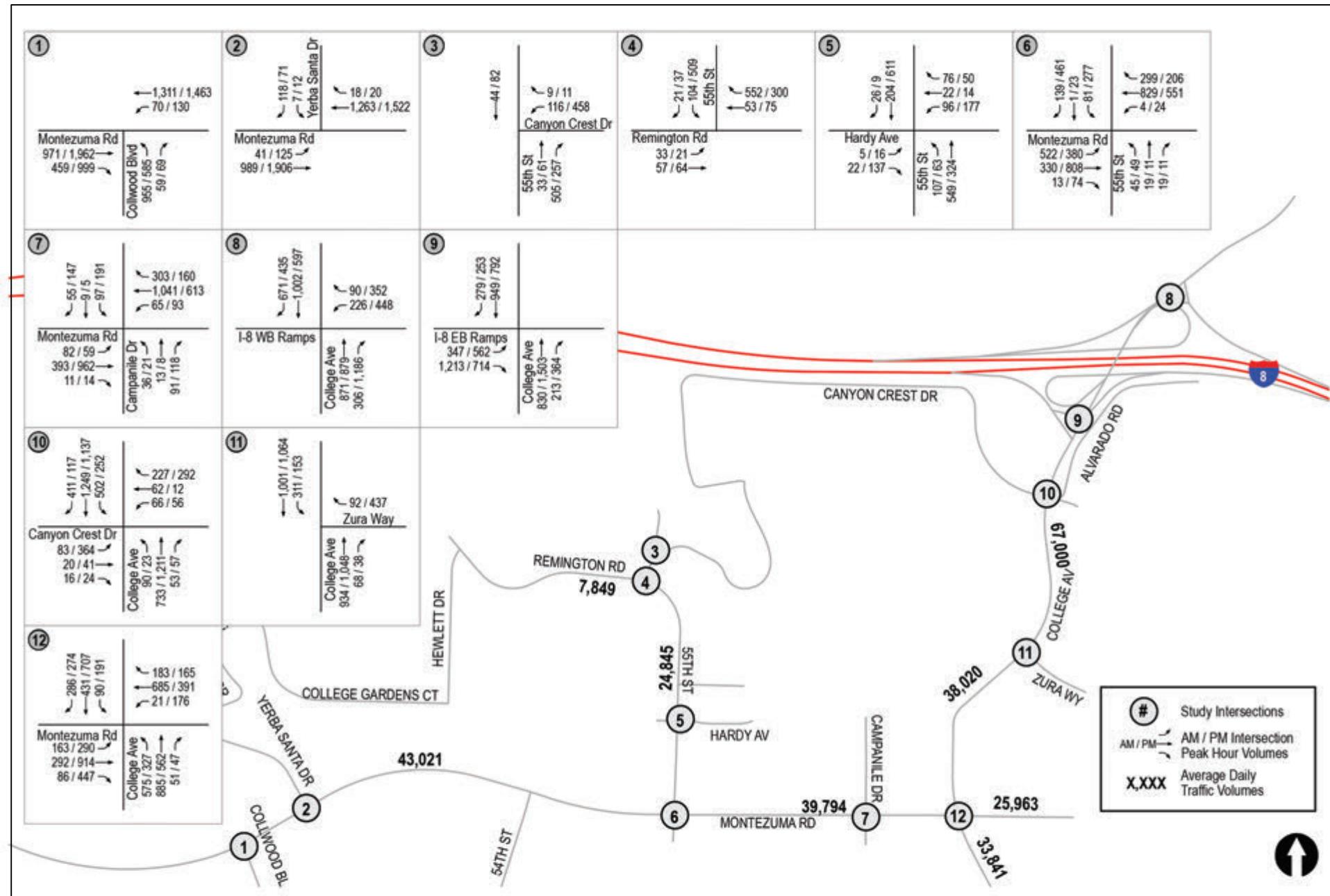
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New Student Housing Project EIR



Figure 4.14-8
Study Area Existing Traffic Volumes

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SOURCE: LINSMOTT LAW & GREENSPAN 2017

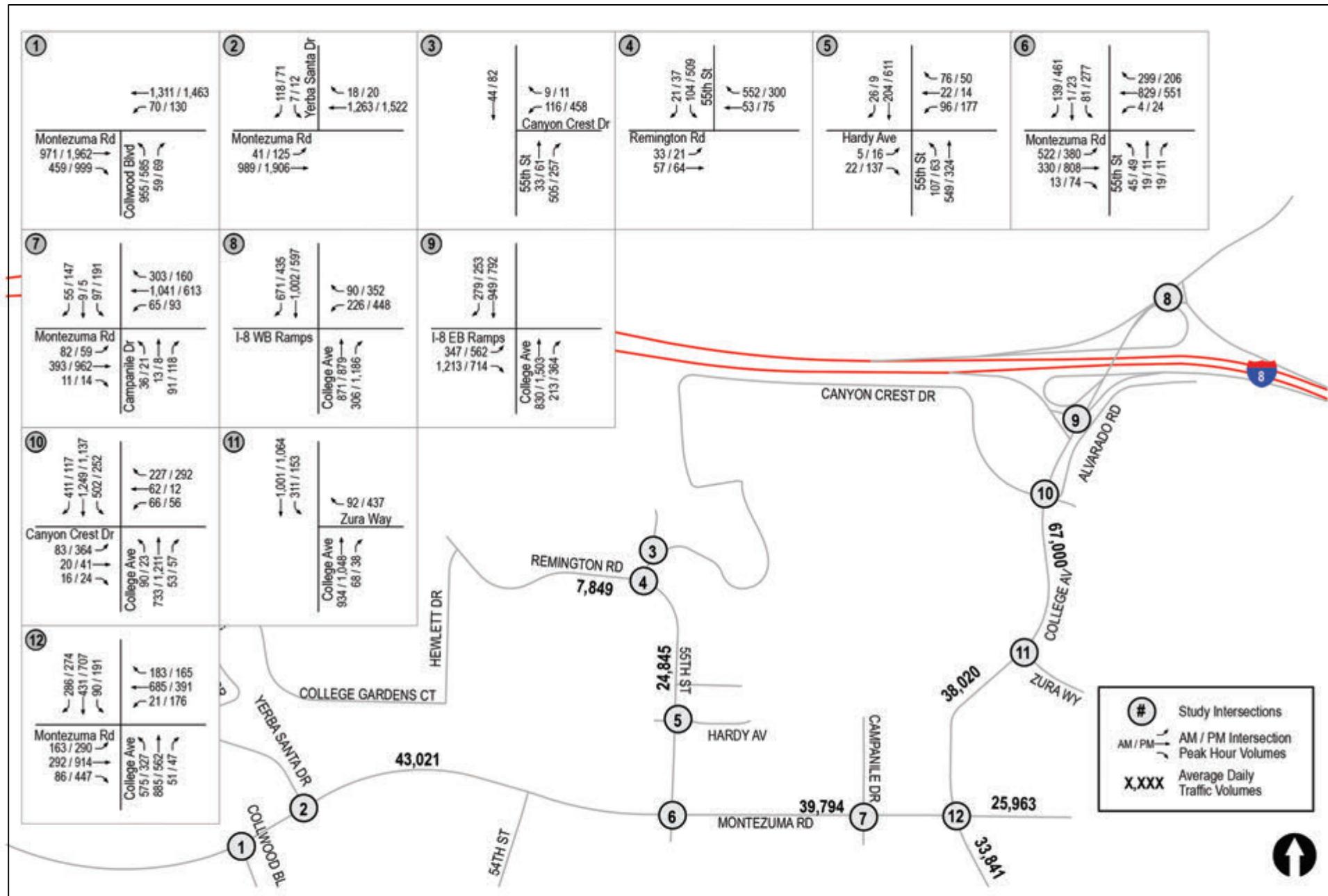
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New Student Housing Project EIR



Figure 4.14-9
Existing + Total Project Traffic Volumes

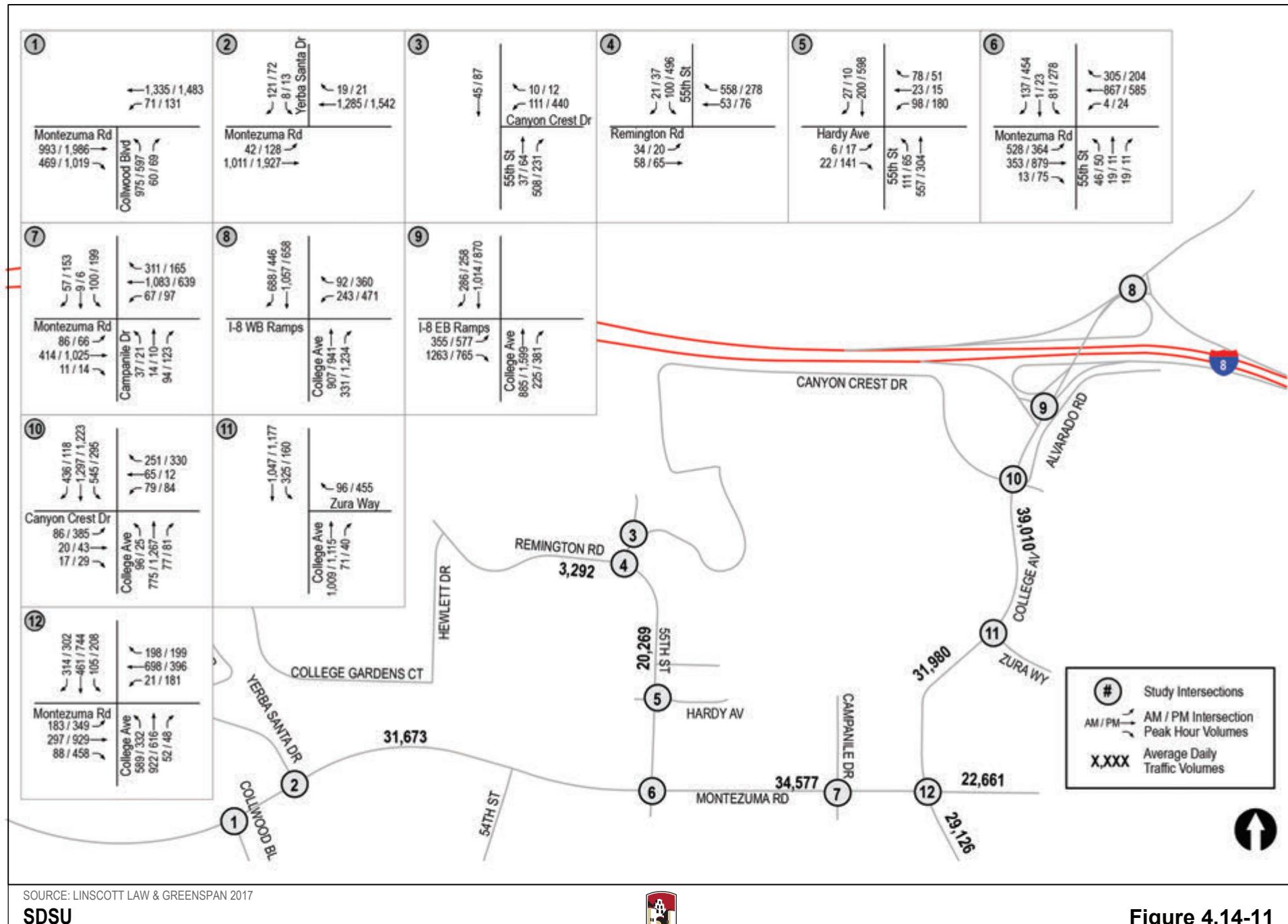
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SOURCES: LINSCOTT LAW & GREENSPAN 2017

SDSU New Student Housing Project EIR

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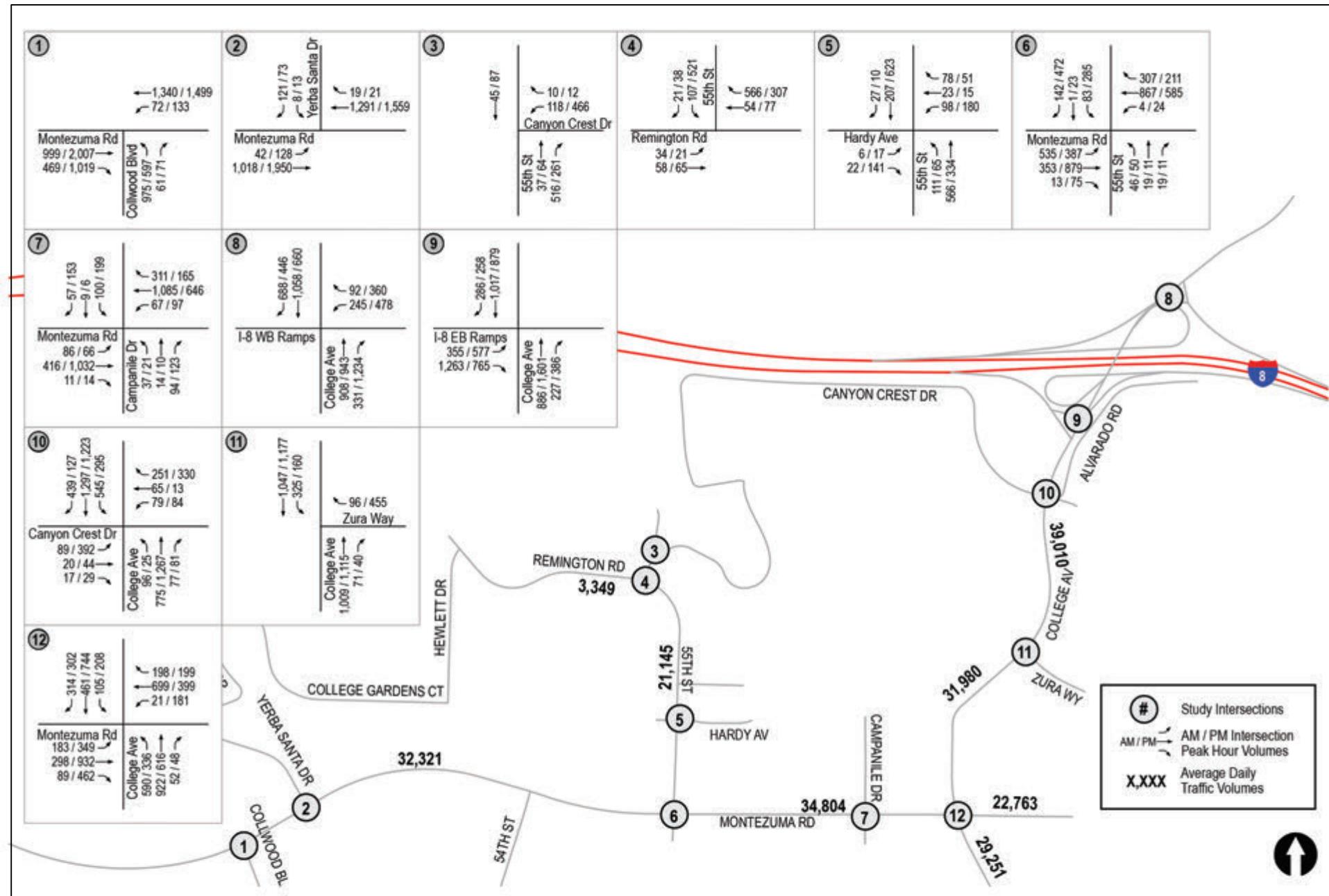
SOURCE: LINSCLT LAW & GREENSPAN 2017

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Figure 4.14-11
Existing + Cumulative Projects + Project Phase I + II
Traffic Volumes

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SOURCE: LINSOTT LAW & GREENSPAN 2017

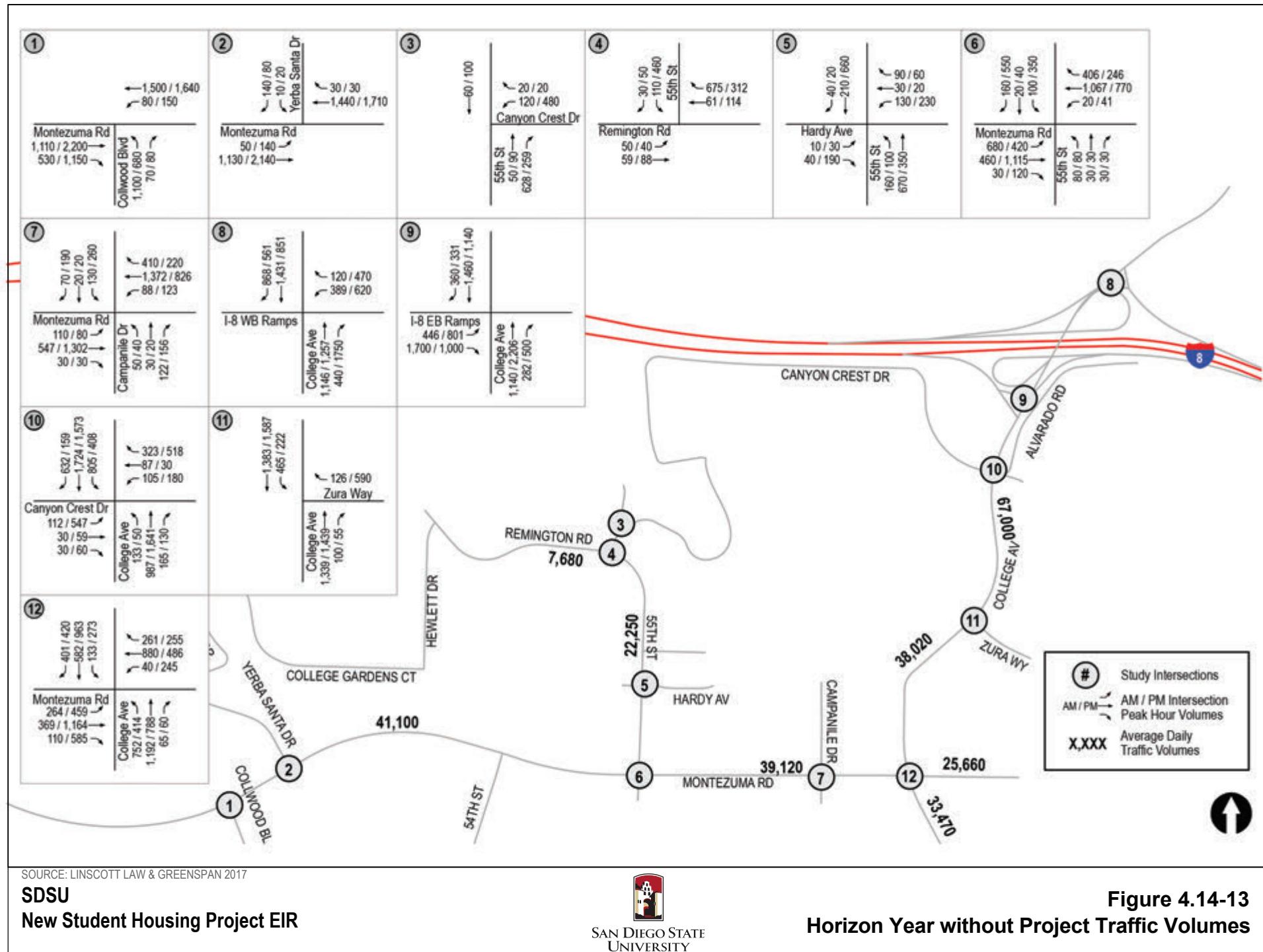
SDSU New Student Housing Project EIR



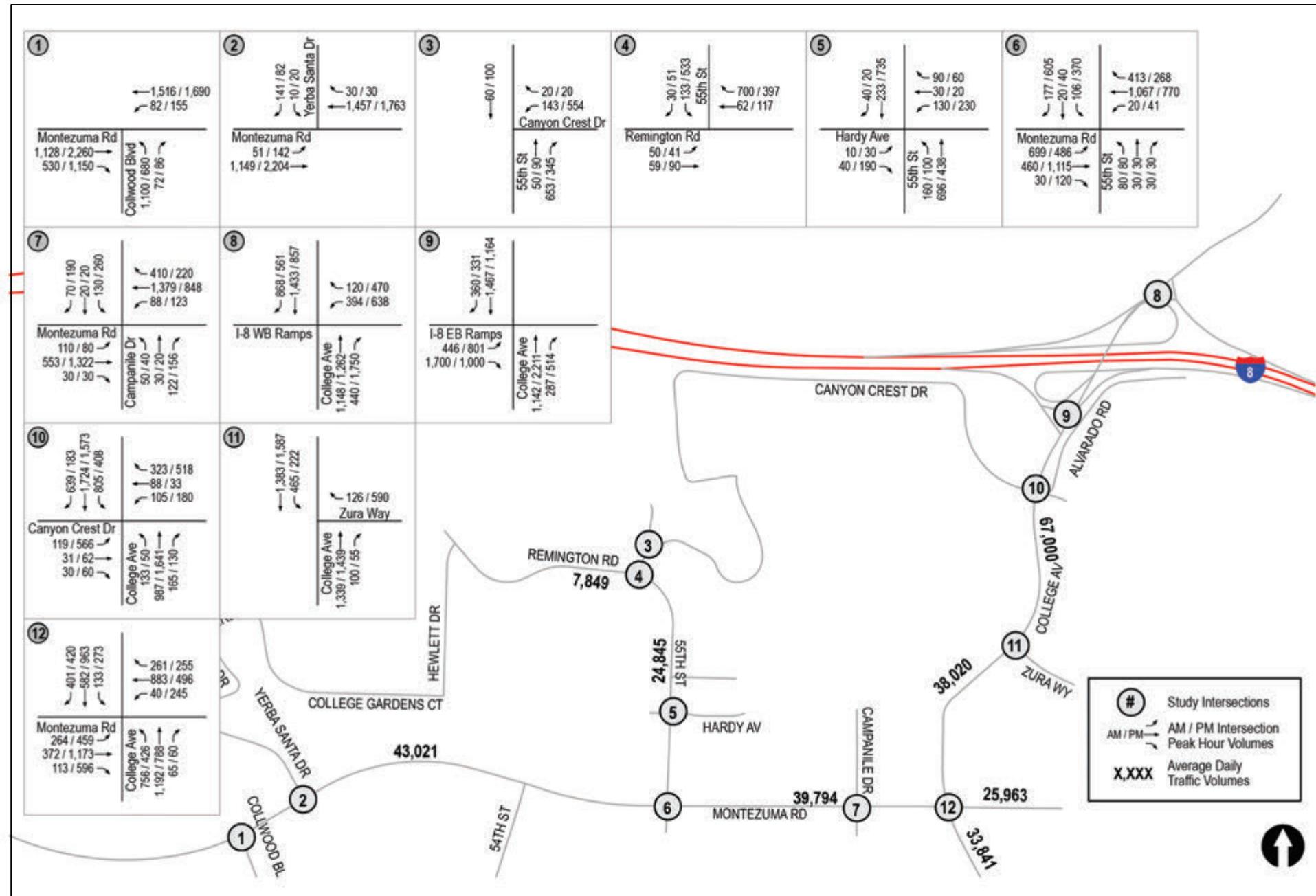
SAN DIEGO STATE UNIVERSITY Existing + Cumulative Projects + Total Traffic Volumes

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SOURCE: LINSMOTT LAW & GREENSPAN 2017

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New Student Housing Project EIR



Figure 4.14-14
Horizon Year + Total Project Traffic Volumes

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