AA3.14.13 REVISIONS TO DRAFT ADDITIONAL ANALYSIS

AA3.14.13.1 DRAFT ADDITIONAL ANALYSIS REVISED PAGES

Agency Meetings

Beginning in October, representatives of SDSU started coordinating and meeting with representatives of the City of San Diego, SANDAG, MTS, and Caltrans in connection with the analysis presented here. SDSU provided copies of the LLG draft traffic technical report that serves as the basis for this Draft Additional Analysis to the appropriate technical personnel at each agency seeking review and comment on the draft document. All comments provided, verbal and written, were considered and responsive revisions were made to the draft report and corresponding analysis. Information relating to the agency meetings that have taken place to date is included in Appendix Y to this Draft Additional Analysis.

In January 2018, SDSU representatives will begin meeting with representatives of the City, SANDAG/MTS, and Caltrans to further discuss the analysis and the mitigation measures proposed in Section AA3.14.9. To that end, certain mitigation measures have already been revised in response to the technical meetings that began in October. Representatives of SDSU will continue to meet with representatives of the City, SANDAG/MTS, and Caltrans during the public comment period on this Draft Additional Analysis, and the Final Additional Analysis will include updated information pertaining to those meetings. Information regarding meetings between SDSU and the other agencies held after release of the Draft Additional Analysis is provided in the Topical Response: Agency Meetings.

Public Review Process

This Draft Additional Analysis is being circulated for a 45-day public review period commencing January 12, 2018 and concluding February 25, 2018. Written responses will be prepared to all comments raising issues within the scope of the analysis presented here. As previously noted, this Draft Additional Analysis has been prepared in specific response to a court order referred to as a Writ of Mandate issued following litigation.[7] The scope of the court's order is limited to three specific issues, and, CSU/SDSU, as the lead agency, requests that reviewers limit their comments to those subjects ruled inadequate by the court and the corresponding analyses presented in this Draft Additional Analysis.

Following preparation of responses to comments, a document entitled Final Additional Analysis will be prepared that will include the written responses to comments, and other responsive documentation. The Draft Additional Analysis, Final Additional Analysis, and 2007 Final EIR will

[7] See footnote 5, supra.

Existing Freeway Ramp Meter Operations

Freeway entrance ramps that currently have ramp meters installed and in operation were analyzed under existing conditions. As shown in **Table AA3.14-5**, the following freeway ramp meter presently incurs a delay exceeding 15 minutes

- SB Fairmount Avenue to EB I-8 (PM peak hour)

TABLE AA3.14-5
EXISTING RAMP METER OPERATIONS

Location/Scenario	Peak Hour	Peak Hour Demand	Ramp Meter Rate (Flow)[a]	Excess Demand	Delay per Lane [b]	Queue per Lane [c]
SB Fairmount Ave to EB I-8	PM	390	246	144	**35**	3,600
NB College Avenue to WB I-8	AM	306	*Restrictive: 318* *Observed:* 296	10	2	250
SB College Avenue to WB I-8	AM	336	*Restrictive: 336* *Observed:* 300	36	7	888
NB College Avenue to EB I-8	PM	350	*Restrictive: 570* *Observed:* 330	20	4	500

Footnotes:

a. While meter rates were obtained from Caltrans (see LLG TIA *Appendix D*), the rates were reduced to reflect existing ramp meter observations.
b. Delay expressed in minutes per lane.
c. Queue expressed in feet per lane.

General Notes:

1. **Bold** indicates meter delays exceeding 15 minutes.

~~1.~~2. Peak hour demand is shown in vehicles per hour per lane.

Residential Street Segment Operations

The 2007 Master Plan traffic study analyzed several residential neighborhood street segments in the vicinity of the proposed Adobe Falls faculty/staff housing. The 2007 analysis found that the residential streets could accommodate the additional Project traffic. To determine whether this conclusion remains valid, a traffic count was conducted in April 2016 ~~on~~at the College Avenue / Del Cerro Boulevard intersection~~between Capri Drive and College Avenue~~, the entrance to the Del Cerro community from College Avenue~~where the Adobe Falls faculty/staff housing would be built~~.

Based on a count comparison between the 2007 and 2016 traffic counts, the 2016 volume on Del Cerro Boulevard was lower by 30% than the 2007 counts. LLG TIA Appendix F shows this calculation. Therefore, since the background traffic volumes have decreased since 2007, the available capacity actually has increased since that time. Therefore, the conclusion that the Adobe Falls area residential streets can accommodate the Project traffic without resulting in significant impacts still applies.

TABLE AA3.14-13
EXISTING + PROJECT RAMP METER OPERATIONS

Location/Condition	Peak Hour	Peak Hour Demand	Ramp Meter Rate (Flow)[a]	Excess Demand	Delay per Lane[b]	Queue per Lane[c]
SB Fairmount Ave to EB I-8						
Existing	PM	390	246	144	35	3600
Existing + Total Project	PM	392	246	146	36	3650
Project Increase	PM	2	NA	2	1	50
NB College Avenue to WB I-8						
Existing	AM	306	296	10	2	250
Existing + Total Project	AM	327	296	31	6	775
Project Increase	AM	21	NA	21	4	525
SB College Avenue to WB I-8						
Existing	AM	336	300	36	7	888
Existing + Total Project	AM	342	300	42	8	1050
Project Increase	AM	6	NA	6	1	162
NB College Avenue to EB I-8						
Existing	PM	350	330	20	4	500
Existing + Total Project	PM	419	330	89	16	2225
Project Increase	PM	69	NA	69	12	1725

Footnotes:

a. While meter rates were obtained from Caltrans, the rates were reduced to reflect existing ramp meter observations.
b. Delay expressed in minutes per lane.
c. Queue expressed in feet per lane.

General Notes:

1. **Bold** typeface indicates meter delays exceeding 15 minutes.
2. NA = Not Applicable.
~~2.~~3. Peak hour demand is shown in vehicles per hour per lane.

TABLE AA3.14-15
NEAR-TERM (YEAR 2022) INTERSECTION OPERATIONS

Intersection	Control Type	Peak Hour	Near-Term (Year 2022)		Near-Term (Year 2022)+ Project		Δ[c]	Significant Impact?
			Delay[a]	LOS[b]	Delay	LOS		
13. Reservoir Drive / Alvarado Road	Signal	AM	9.2	A	9.3	A	0.1	No
		PM	10.2	B	10.3	B	0.1	No
14. Lake Murray Boulevard / Parkway Drive	Signal	AM	33.9	C	34.1	C	0.2	No
		PM	32.7	C	32.9	C	0.2	No
15. 70th Street / Alvarado Road	Signal	AM	39.2	D	39.3	D	0.1	No
		PM	51.2	D	51.9	D	0.7	No
16. I-8 WB Ramps / Parkway Drive	AWSC[f]	AM	24.8	C	25.9	D	1.1	No
		PM	**59.2**	**F**	**62.1**	**F**	**2.9**	**Yes**
17. I-8 EB Ramps / Alvarado Road	Signal	AM	24.7	C	25.1	C	0.4	No
		PM	23.0	C	23.1	C	0.1	No
18. Montezuma Road / Collwood Boulevard	Signal	AM	21.6	C	21.9	C	0.3	No
		PM	31.9	C	32.1	C	0.2	No
19. Montezuma Road / Yerba Santa Drive	Signal	AM	9.5	A	11.4	B	1.9	No
		PM	9.4	A	9.5	A	0.1	No

Footnotes:

a. Average delay expressed in seconds per vehicle.
b. Level of Service.
c. "Δ" denotes the project-induced increase in delay.
d. MSSC – Minor Street Stop Controlled intersection. The highest (worst) of the minor street right-turn delay (westbound right-turn) or major street (northbound left-turn) is reported. Left turns from Zura Way to College Avenue are not allowed.
e. MSSC – Minor Street Stop Controlled intersection. Minor street approach delay is reported.
f. AWSC – All-Way Stop Controlled intersection.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 < 10.0	A	0.0 < 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
> 80.1	F	> 50.1	F

General Notes:

1. **Bold** typeface indicates intersections operating at LOS E or F.

TABLE AA3.14-17
NEAR-TERM (YEAR 2022) + PROJECT RAMP METER OPERATIONS

Location/Condition	Peak Hour	Peak Hour Demand	Ramp Meter Rate (Flow)[a]	Excess Demand	Delay per Lane[b]	Queue per Lane[c]
SB Fairmount Ave to EB I-8						
Near-Term (Year 2022)	PM	419	246	173	42	4325
Near-Term (Year 2022) + Project	PM	419	246	173	42	4325
Project Increase	PM	0	NA	0	0	0
NB College Avenue to WB I-8						
Near-Term (Year 2022)	AM	356	296	60	12	1500
Near-Term (Year 2022) + Project	AM	367	296	71	14	1775
Project Increase	AM	11	NA	11	2	275
SB College Avenue to WB I-8						
Near-Term (Year 2022)	AM	356	300	56	11	1388
Near-Term (Year 2022) + Project	AM	358	300	58	12	1438
Project Increase	AM	2	NA	2	1	50
NB College Avenue to EB I-8						
Near-Term (Year 2022)	PM	398	330	68	12	1700
Near-Term (Year 2022) + Project	PM	412	330	82	15	2050
Project Increase	PM	14	NA	14	3	350

Footnotes:

a. While meter rates were obtained from Caltrans, the rates were calibrated to reflect existing ramp meter observations.
b. Delay expressed in minutes per lane.
c. Queue expressed in feet per lane.

General Notes:

1. Bold & shading represents a potential significant impact.
2. NA = Not Applicable.
3. Peak hour demand is shown in vehicles per hour per lane.

TABLE AA3.14-21
HORIZON YEAR (YEAR 2035) + PROJECT RAMP METER OPERATIONS

Location/Condition	Peak Hour	Peak Hour Demand	Ramp Meter Rate (Flow)[a]	Excess Demand	Delay per Lane[b]	Queue per Lane[c]
SB Fairmount Ave to EB I-8						
Horizon Year (Year 2035)	PM	489	246	243	59	6075
Horizon Year (Year 2035) + Project	PM	491	246	245	60	6125
Project Increase	PM	2	NA	2	1	50
NB College Avenue to WB I-8						
Horizon Year (Year 2035)	AM	419	318	101	19	2525
Horizon Year (Year 2035) + Project	AM	440	318	122	23	3050
Project Increase	AM	21	NA	21	4	525
SB College Avenue to WB I-8						
Horizon Year (Year 2035)	AM	428	336	92	16	2288
Horizon Year (Year 2035) + Project	AM	434	336	98	18	2450
Project Increase	AM	6	NA	6	2	162
NB College Avenue to EB I-8						
Horizon Year (Year 2035)	PM	445	570	0	0	0
Horizon Year (Year 2035) + Project	PM	514	570	0	0	0
Project Increase	PM	69	NA	0	0	0

Footnotes:

a. Meter Rates were obtained from Caltrans.
b. Delay expressed in minutes per lane.
c. Queue expressed in feet per lane.

General Notes:

1. Bold & shading represents a potential significant impact.
2. NA = Not Applicable.
~~2.~~3. Peak hour demand is shown in vehicles per hour per lane.

TABLE AA3.14-28
MTS BUS ANALYSIS – HORIZON YEAR (YEAR 2035) + PROJECT

Direction	Peak Hour	Existing Capacity (Riders/hr)[c]	Horizon Year (Year 2035) Volume (Riders/hr)[a]	Project Ridership (Riders/hr)[b]	Horizon Year (Year 2035) + Project Volume (Riders/hr)	V>C?
Inbound (towards SDSU)	AM	758	387	324	711	No
	PM	717	188	173	361	No
Outbound (from SDSU)	AM	771	183	41	224	No
	PM	804	379	401	780	No

Footnotes:

a. Bus ridership data obtained from SANDAG indicates an increase in passenger boardings of approximately 2.29%/year for bus routes serving the SDSU Transit Center. Thus, a 2.5%/year increase in ridership for 19 years was assumed for the Horizon Year (Year 2035) scenario.

b. Based on a comparison of Year 2016 trolley and bus ridership data at the SDSU Transit Center, the bus ridership was calculated as 75% of the trolley ridership. Therefore, the project bus ridership was assumed as 75% of the trolley ridership.

c. Existing capacity calculated using the equation shown above under *Analysis Approach and Methodology*. The SDSU Transit Center is served by different types of buses with varying capacities. The calculations for the bus capacity are shown in LLG TIA *Appendix O*. The total ridership demand (i.e. Horizon Year (Year 2035) + Project) was calculated and compared to the existing capacity to determine if the bus demand from the project can be met.

In conclusion, based on the design passenger capacity of the trolley and buses serving the SDSU Transit Center, sufficient capacity is available to accommodate the forecasted increase in transit riders from the Project. Therefore, the Project would not result in significant impacts related to transit.

AA3.14.9 SUMMARY OF SIGNIFICANT IMPACTS AND MITIGATION MEASURES

As described below, this Additional Analysis discusses feasible on-campus measures that could reduce or avoid the need for off-site mitigation. These measures include implementation of a TDM program with a TDM coordinator charged with implementing the program, and includes strategies to increase rideshare opportunities, and facilitate bicycle and pedestrian travel, and transit ridership (see Mitigation Measure AATCP-19). While the TDM mitigation measure would not eliminate any of the identified significant impacts, by facilitating the use of transportation modes alternative to single rider vehicle trips, the measure would contribute to a potential reduction of approximately 3% in vehicle miles traveled (VMT) by SDSU students, faculty, and staff. (See Final Additional Analysis, Appendix AA, Additional Transportation Impact Analysis Appendices, SDSU DAA TDM Quantification Analysis.)

Additionally, as further discussed below, since the 2007 prior approval of the Campus Master Plan, SDSU has taken other actions on campus to reduce or avoid vehicle trips and, thereby, reduce the need for off-site mitigation. These actions include adoption of student residency policies requiring

students to live on campus, and the construction of a substantial number of student housing units and amenities, both on and adjacent to or within walking distance of campus. These actions have, and will continue to, reduce vehicle trips and related VMT. In response to a comment by the City of San Diego (L-5-2), this section provides information regarding modifications to the proposed project that would further reduce the project's traffic impacts.

Preliminarily, as explained in the previous sections, the analysis of traffic impacts was conducted under two scenarios, a Near-Term direct impact scenario approximating year 2022, and a long-term cumulative Horizon Year scenario approximating 2035. Under the Near-Term scenario, mitigation was proposed in the DAA that would reduce the identified significant impacts to less than significant at all locations. However, the recommended mitigation for three of those impacted locations would require City of San Diego approval to remove existing on-street parking in order to implement the recommended improvements. Because removal of the on-street parking is uncertain, impacts at these three locations are identified as significant and unavoidable (Alvarado Road: East Campus Drive to Reservoir Drive, and Reservoir Drive to 70th Street; and, College Avenue: Montezuma Road to Cresita Drive.)

As to the long-term Horizon Year scenario, significant cumulative impacts are identified at 11 intersections, 9 segments, 2 ramp meters, and 6 freeway mainline segments. Mitigation identified under the Near-Term scenario also would mitigate the significant cumulative impacts under the Horizon Year scenario at 5 intersections and 3 segments. In addition, as explained in this section, CSU/SDSU has agreed to fully fund and construct the necessary improvements at 5 of the remaining significantly impacted intersections and two segments even though its impacts are cumulative only and, therefore, its mitigation requirement is the payment of a proportionate "fair-share" amount towards the necessary improvements. As to the remaining locations, SDSU has agreed to implement Adaptive Signal Controls at three of the locations, which would partially mitigate the impacts. As to these three locations and one other location, it is either physically infeasible to implement the necessary improvements due to right-of-way limitations, or there is no plan or program presently in place to provide the remainder funds coupled with the project's proportionate payment and, therefore, impacts at these locations are considered significant and unavoidable.

It is as to these significant and unavoidable impacted locations that additional measures are considered.

In response to the City's comment, SDSU reviewed the trip generating components of the 2007 Campus Master Plan to determine if feasible project modifications could be made that would further reduce the number of vehicle trips generated by the project and the corresponding need for off-site mitigation. Following that review, SDSU has determined to remove the Alvarado Hotel component from the 2007 Campus Master Plan. The hotel component, which would have provided housing for

university guests, was proposed to include up to 120 rooms and studio suites. Based on this number, the Alvarado Hotel component would have generated a total of 1,200 ADT. (Table AA3.14-8A, Project Trip Generation.)

To determine the reduction in impacts that would occur with elimination of the hotel component of the project, an analysis was conducted by the project's traffic engineer, LLG. The results of the LLG analysis are presented in detail in the *Topical Response: Project Modification*. In summary, the analysis determined that removal of the hotel component would result in the elimination of the following three significant impacts under the Near-Term scenario:

1. I-8 Westbound Ramps / Parkway Drive intersection;
2. Alvarado Road: Reservoir Drive to 70th Street segment; and
3. College Avenue: Montezuma Road to Cresita Drive segment.

As discussed below, mitigation for the impacts to the segments of Alvarado Road and College Avenue require the removal of existing on-street parking, which as noted is uncertain and, therefore, the impacts ultimately are identified as significant and unavoidable. Therefore, elimination of the hotel would result in the elimination of these Near-Term potentially significant unavoidable impacts. However, as explained in the Topical Response, these same three locations would be significantly impacted in the Horizon Year even with elimination of the hotel. Therefore, while implementation of the proposed project modification would result in fewer vehicle trips, the ultimate number of significant and unavoidable impacts would not be reduced by the modification.

Based on the City of San Diego's significance criteria, the Project would result in significant impacts at several study area intersections, street segments, ramp meters, and mainline freeway segments in the Near-Term and Horizon Year scenarios. A summary listing of those impacts and the corresponding recommended mitigation follows. Please note that the impacts, mitigation measures, and data tables presented in this section reflect the modified project with elimination of the Alvarado Hotel.

Near-Term (Year 2022)

Significant Impacts – Direct[11]

The Project would result in significant direct impacts at the following locations under the Near-Term scenario.

[11] While the City's significance thresholds identify impacts under this analysis scenario as "direct," because the analysis considers traffic generated by "other developments not presently

Intersections

College Avenue / I-8 Eastbound Ramps (PM peak hour)

College Avenue / Canyon Crest Drive (PM peak hour)

College Avenue / Zura Way (PM peak hour)

College Avenue / Montezuma Road (AM and PM peak hours)

~~I-8 WB Ramps / Parkway Drive (PM peak hour)~~

Street Segments

Alvarado Road: E. Campus Drive to Reservoir Drive

~~Alvarado Road: Reservoir Drive to 70th Street~~

College Avenue: I-8 Eastbound Ramps to Zura Way

~~College Avenue: Montezuma Road to Cresita Drive~~

Ramp Meters

None

Freeway Mainline

None

Mitigation Measures

The mitigation measures presented in this section were prepared in direct response to Paragraph 3.(a) of the Writ of Mandate.

The improvements listed below would mitigate the project's significant direct impacts identified under the Near-Term (Year 2022) scenario.

operational but which are anticipated to be operational at that time (near term)," the impacts are more accurately described as "cumulative" for purposes of CEQA analysis.

Intersections

AATCP-1 College Avenue / I-8 Eastbound Ramps (Intersection #8). The improvement necessary to mitigate the Project's significant impact at the College Avenue / I-8 Eastbound Ramp is to widen the northbound College Avenue approach to the on-ramp to provide an additional lane on College Avenue between Canyon Crest Drive and the I-8 EB on-ramp.

Prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 25,056~~211~~[12] or its equivalent, SDSU shall commence and to the extent feasible complete construction of the widening of the northbound College Avenue approach to the College Avenue / I-8 Eastbound Ramp to provide an additional (third) northbound lane between Canyon Crest Drive and the I-8 EB on-ramp by the identified trigger, to the reasonable satisfaction of the City of San Diego City Engineer and Caltrans. To implement the improvements, SDSU shall prepare design plans and submit such plans to the City of San Diego and Caltrans for review and approval. Following City and Caltrans approval, SDSU shall obtain any necessary construction permits and provide bond assurances to the reasonable satisfaction of Caltrans and the City Engineer prior to constructing the subject improvements consistent with the approved City and Caltrans plans. In the event the proposed improvements are not approved and constructed by the above identified trigger~~in a timely manner~~, the impact would remain temporarily significant and unavoidable until approval and construction of the improvements, but in no event shall said improvement be delayed beyond the identified trigger without good cause and reasonable coordination with the City of San Diego Engineer. (Note: The phrase "or its equivalent" as used in this and other mitigation measures refers to the fact that the near-term construction of the ~~Alvarado Hotel, in combination with construction of a portion of the~~ Adobe Falls Faculty/Staff Housing~~,~~ could trigger the identified significant impact prior to FTE enrollment actually reaching the designated number, in this case, 25,056~~211~~. Accordingly, Table AA3.14-34, Mitigation Trigger Analysis, of this Draft Additional Analysis, identifies

[12]For 2017/2018, the FTE for capacity and master planning purposes is projected to be 24,555. (See LLG TIA Appendix T.) This number serves as the baseline FTE. The total FTE trigger is then calculated as follows: baseline FTE (i.e. 24,555) + FTE trigger shown in Table AA3.14-34, Mitigation Trigger Analysis. *For e.g.: Impact A-1*: 24,555 baseline FTE + 501~~656~~ FTE increase = 25,056~~211~~ total FTE. Similar methodology was followed for all other significantly impacted locations. See Table AA3.14-34 and related text (immediately following Table AA3.14-33) for additional information.

the number of FTE equivalent ~~hotel rooms and~~ faculty/staff housing that would trigger the identified impact requiring mitigation.)

AATCP-2 College Avenue / Canyon Crest Drive (Intersection #9). The improvement necessary to mitigate the Project's significant impact at the College Avenue / Canyon Crest Drive intersection is to widen the northbound College Avenue approach to the intersection to provide an additional lane.

Prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 25,265~~251~~ or its equivalent, SDSU shall commence and to the extent feasible complete construction of the widening of the northbound College Avenue approach to the College Avenue / Canyon Crest Drive intersection to provide an additional (third) northbound through lane by the identified trigger, to the reasonable satisfaction of the City of San Diego City Engineer. To implement the improvements, SDSU shall prepare design plans and submit such plans to the City of San Diego for review and approval, and prior to commencing construction, SDSU shall obtain any necessary construction permits and provide bond assurances to the reasonable satisfaction of the City Engineer. In the event the proposed improvement is not approved and constructed by the above identified trigger, the impact would remain temporarily significant until approval and construction of said improvement, but in no event shall said improvement be delayed beyond the identified trigger without good cause and reasonable coordination with the City of San Diego Engineer.

AATCP-3 College Avenue / Zura Way (Intersection #10). The improvement necessary to mitigate the Project's significant impact at the College Avenue / Zura Way intersection is to install a traffic signal at the intersection. A signal warrant analysis is included in LLG TIA Appendix P, which concludes that a signal is warranted at the College Avenue / Zura Way intersection.

Prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 24,586~~608~~ or its equivalent, SDSU shall commence and to the extent feasible complete construction of the installation of a traffic signal at the College Avenue / Zura Way intersection by the identified trigger, to the reasonable satisfaction of the City of San Diego City Engineer. To implement the improvements, SDSU shall prepare design plans and submit such plans to the City of San Diego for review and approval, and prior to commencing construction, SDSU shall obtain any necessary construction permits and provide bond assurances to the reasonable satisfaction of the City Engineer. In the event the proposed improvement is not approved and constructed by the above identified

trigger, the impact would remain temporarily significant until approval and construction of said improvement, but in no event shall said improvement be delayed beyond the identified trigger without good cause and reasonable coordination with the City of San Diego Engineer.

AATCP-4 College Avenue / Montezuma Road (Intersection #11). The improvement necessary to mitigate the Project's significant impact at the College Avenue / Montezuma Road intersection is to re-stripe the eastbound Montezuma Road approach to the intersection to provide an additional (second) eastbound left-turn lane on Montezuma Road to northbound College Avenue, and also to install an overlap phase for the eastbound right-turn to southbound College Avenue at the intersection traffic signal.

Prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 25,998~~912~~ or its equivalent, SDSU shall commence and to the extent feasible complete construction by the identified trigger of the re-stripin~~g~~e of the eastbound Montezuma Road approach to the College Avenue / Montezuma Road intersection to provide an additional (second) eastbound left-turn lane on Montezuma Road to northbound College Avenue and also shall install an overlap phase for the eastbound right-turn to southbound College Avenue at the intersection traffic signal, to the reasonable satisfaction of the City of San Diego City Engineer. To implement the improvements, SDSU shall prepare design plans and submit such plans to the City of San Diego for review and approval, and prior to commencing construction, SDSU shall obtain any necessary construction permits and provide bond assurances to the reasonable satisfaction of the City Engineer. In the event the proposed improvement is not approved and constructed by the above identified trigger, the impact would remain temporarily significant until approval and construction of said improvement, but in no event shall said improvement be delayed beyond the identified trigger without good cause and reasonable coordination with the City of San Diego Engineer.

AATCP-5 I-8 Westbound Ramp / Parkway Drive (Intersection #16) [Horizon Year Cumulative Impact]. The improvement necessary to mitigate the Project's significant impacts at the I-8 Westbound Ramp / Parkway Drive intersection is to install either a traffic signal or a roundabout at the intersection, dependent upon the results of an Intersection Control Evaluation (ICE) analysis. The improvement ultimately decided upon shall be determined based on input provided by Caltrans and the City of La Mesa (the local jurisdiction), and also shall account for any queuing that could affect adjacent intersections, including the 70th Street/Parkway Drive intersection.

Since there is no plan or program in place to provide the necessary funding in combination with the Project's fair-share (14.2%), SDSU has determined it is feasible and, therefore, agreed to fully fund and implement the necessary improvements in light of the substantial benefits that would accrue to the SDSU community and for the limited purpose of this project only. To that end, ~~P~~prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 26,671~~24,795~~ or its equivalent, SDSU shall either construct or provide full funding to the City of La Mesa for the installation of either a traffic signal or a roundabout at the I-8 Westbound Ramp / Parkway Drive intersection, dependent upon the results of an ICE analysis. To implement the improvements, SDSU shall prepare design plans and submit such plans to Caltrans and the City of La Mesa for review and approval. Following Caltrans and La Mesa approval, SDSU shall install the traffic signal or roundabout consistent with the approved plans. In the event the proposed improvements are not approved and constructed in a timely manner, the impact would remain temporarily significant and unavoidable until approval and construction of the improvements.

Street Segments

AATCP-6 Alvarado Road: E. Campus Drive to Reservoir Drive. The improvement necessary to mitigate the Project's significant impact on the segment of Alvarado Road from East Campus Drive to Reservoir Drive is to widen and re-stripe Alvarado Road to add a two-way center left-turn lane or add left turn pockets at the Alvarado Road intersections at Alvarado Court and the Villa Alvarado Apartments driveway. This improvement would require the removal of on-street parking on a portion of the segment, which is noted in the College Area Community Plan. However, ~~T~~the removal of on-street parking may not be approved by the City of San Diego~~feasible, however,~~ since alternative parking spaces may not be available, although SDSU would be able to retain the on-street parking on a portion of Alvarado Road by widening the segment that fronts SDSU property between Alvarado Court and approximately 250 feet west of the Alvarado Medical Center driveway.

Assuming the removal of on-street parking where necessary is feasible, prior to Full-Time Equivalent (FTE) enrollment reaching 25,286~~24,910~~ or its equivalent, SDSU shall, to the reasonable satisfaction of the City of San Diego City Engineer and provided the City approves removal of the existing on-street parking on the section not adjacent to SDSU property, commence and to the extent feasible complete construction of the re-striping~~e~~ and widening, where feasible, Alvarado Road between E. Campus Drive and

Reservoir Drive to add a two-way center left-turn lane or add left turn pockets at the Alvarado Road intersections at Alvarado Court and the Villa Alvarado Apartments driveway by the identified trigger, to the reasonable satisfaction of the City of San Diego City Engineer. To implement the improvements, SDSU shall prepare design plans and submit such plans to the City of San Diego for review and approval, and prior to commencing construction, SDSU shall obtain any necessary construction permits and provide bond assurances to the reasonable satisfaction of the City Engineer. In the event the proposed improvement is not approved and constructed by the above identified trigger, the impact would remain temporarily significant until approval and construction of said improvement, but in no event shall said improvement be delayed beyond the identified trigger without good cause and reasonable coordination with the City of San Diego Engineer. However, if the removal of on-street parking where necessary is not feasible, the improvements are infeasible~~cannot be fully implemented~~ due to right-of-way limitations and the impact would remain significant and unavoidable.

AATCP-7 Alvarado Road: Reservoir Drive to 70th Street [Horizon Year Cumulative Impact]. The improvement necessary to mitigate the Project's significant impact on the segment of Alvarado Road from Reservoir Drive to 70th Street is to restripe this segment of Alvarado Road to add a two-way center left-turn lane or add left turn pockets at the major apartment and retail driveways along Alvarado Road. This improvement would require the removal of on-street parking, which is noted in the College Area Community Plan, although the City of San Diego may not approve the removal ~~may not be feasible~~ since alternative parking spaces may not be available.

Since there is no plan or program in place to provide the necessary funding in combination with the Project's fair-share (20.0%), SDSU has determined it is feasible and, therefore, agreed to fully fund and implement the necessary improvements in light of the substantial benefits that would accrue to the SDSU community and for the limited purpose of this project only. To that end, ~~A~~assuming the removal of on-street parking where necessary is feasible, prior to Full-Time Equivalent (FTE) enrollment reaching 26,534~~25,465~~ or its equivalent, SDSU shall, to the reasonable satisfaction of the City of San Diego City Engineer and provided the City approves removal of the existing on-street parking, re-stripe~~where feasible,~~ Alvarado Road between Reservoir Drive and 70th Street to add a two-way center left-turn lane or add left turn pockets at the major apartments and retail driveways along Alvarado Road. To implement the improvements, SDSU shall prepare design plans and submit such plans to the City of

San Diego for review and approval, and prior to commencing construction, SDSU shall obtain any necessary construction permits and provide bond assurances to the reasonable satisfaction of the City Engineer. However, if the removal of on-street parking where necessary is not approved by the City~~feasible~~, the improvements are infeasible~~cannot be fully implemented~~ due to right-of-way limitations and the impact would remain significant and unavoidable.

AATCP-8 College Avenue: I-8 Eastbound Ramp to Zura Way. The improvement necessary to mitigate the Project's significant impact on the segment of College Avenue from Zura Way to the I-8 Eastbound Ramp is to widen this segment of College Avenue to provide an additional (third) northbound travel lane.

Prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 24,804~~862~~ or its equivalent, SDSU shall commence and to the extent feasible complete construction of the widening of northbound College Avenue from Zura Way to the I-8 Eastbound Ramp to provide an additional (third) northbound travel lane, by the identified trigger. To implement the improvements, SDSU shall prepare design plans and submit such plans to the City of San Diego and Caltrans for review and approval. Following City and Caltrans approval, SDSU shall obtain any necessary construction permits and provide bond assurances satisfactory to Caltrans and the City Engineer prior to constructing the subject improvements consistent with the approved City and Caltrans plans. In the event the proposed improvements are not approved and constructed by the above identified trigger~~in a timely manner~~, the impact would remain temporarily significant and unavoidable until approval and construction of the improvements, but in no event shall said improvement be delayed beyond the identified trigger without good cause and reasonable coordination with the City of San Diego Engineer.

AATCP-23 College Avenue: Montezuma Road to Cresita Drive [Horizon Year Cumulative Impact]. The improvement necessary to mitigate the Project's significant impact on the segment of College Avenue from Montezuma Road to Cresita Drive is to construct a raised median on the segment either by widening College Avenue or removing the existing on-street parking~~and construct a raised median~~. However, widening College Avenue at this location is not feasible because it would require the acquisition of additional right-of-way that is owned by multiple individual third parties. As to the removal of on street parking, the City of San Diego has informed SDSU that only portions of the parking could be removed.

Since there is no plan or program in place to provide the necessary funding in combination with the Project's fair-share (24.8%), SDSU has agreed to fully fund and implement the necessary improvements in light of the substantial benefits that would accrue to the SDSU community and for the limited purpose of this project only. To that end, if the removal of on-street parking on the segment of College Avenue between Montezuma Road and Cresita Drive sufficient to construct a raised median is approved by the City of San Diego, prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 26,670 or its equivalent, SDSU shall construct a raised median on College Avenue between Montezuma Road and Cresita Drive, to the reasonable satisfaction of the City of San Diego City Engineer. To implement the improvements, SDSU shall prepare design plans and submit such plans to the City of San Diego for review and approval, and prior to commencing construction, SDSU shall obtain any necessary construction permits and provide bond assurances to the reasonable satisfaction of the City Engineer. However, if the removal of on-street parking is not approved by the City, this mitigation is infeasible because~~: (i)~~ the installation of a raised median would require road widening, which in turn would require the acquisition of additional right-of-way on College Avenue between Montezuma Road and Cresita Drive that is owned by multiple individual third parties~~; and (ii) installation of a raised median would restrict access to the residential uses fronting College Avenue~~. Therefore, the ~~road widening and~~ installation of a raised median would be~~is~~ infeasible and, as a result, this impact is considered significant and unavoidable.

It is also noted that in addition to this mitigation measure, Mitigation Measure AATCP-19 provides for the expansion of service of the existing on-campus shuttle to include off-campus locations that potentially would include this area of College Avenue. ~~As an alternate strategy, SDSU could widen the sidewalks on the segment of College Avenue between Montezuma Road and Cresita Drive to facilitate increased pedestrian travel, and/or re-stripe the road to provide for bicycle lanes, although this latter improvement would require removal of the limited existing curbside parking. However, neither bicycle lanes nor widened sidewalks would reduce the identified vehicular level of service impact to less than significant.~~

Post Mitigation Operations

Tables AA3.14-29 and **AA3.13-30** report the results of intersection and street segment mitigation analysis for the Near-Term + Project conditions. As shown in the tables, if implemented, the proposed mitigation measures would reduce the Project impacts to a level of less than significant. However, as

previously explained, implementation of certain improvements is not feasible and, therefore, impacts at these locations are considered significant and unavoidable. LLG TIA Appendix P contains the post mitigation analysis worksheets. LLG TIA Appendix Q includes a conceptual sketch of each of the proposed improvements.

TABLE AA3.14-29
NEAR-TERM (YEAR 2022) INTERSECTION MITIGATION ANALYSIS

Intersection	Control Type	Peak Hour	Near-Term (Year 2022) without Project		Near-Term (Year 2022) + Project			Near-Term (Year 2022) + Project With Mitigation		Mitigation
			Delay [a]	LOS [b]	Delay	LOS	Δ[c]	Delay	LOS	
8. College Avenue / I-8 EB Ramps	Signal	PM	74.3	E	~~79.3~~ 76.6	E	~~**5.0**~~ **2.3**	~~37.0~~ 35.7	D	Construct an additional (third) northbound lane on College Avenue between the I-8 EB on-ramp and Canyon Crest Drive (feasible).
9. College Avenue / Canyon Crest Drive	Signal	PM	~~57.9~~56.1	E	~~71.8~~ 58.9	E	~~**13.9**~~ **2.8**	~~43.5~~ 39.5	D	Construct an additional (third) northbound through lane (feasible).
10. College Avenue / Zura Way	MSSC[d]	PM	178.9	F	~~199.5~~ 189.7	F	~~**20.6**~~ **10.8**	~~31.4~~ 30.8	C	Install a traffic signal (feasible).
11. College Avenue / Montezuma Rd	Signal	AM	65.4	E	~~71.1~~ 70.1	E	~~**5.7**~~ **4.7**	~~51.7~~ 51.4	D	Restripe to provide a second eastbound left-turn lane on Montezuma Road to northbound College Avenue; and install an overlap phase on the eastbound right-turn to southbound College Avenue (feasible).
		PM	91.0	F	~~109.2~~ 107.7	F	~~**18.2**~~ **16.7**	~~63.4~~ 62.9	E	

TABLE AA3.14-29
NEAR-TERM (YEAR 2022) INTERSECTION MITIGATION ANALYSIS

Intersection	Control Type	Peak Hour	Near-Term (Year 2022) without Project		Near-Term (Year 2022) + Project			Near-Term (Year 2022) + Project With Mitigation		Mitigation
			Delay [a]	LOS [b]	Delay	LOS	Δ[c]	Delay	LOS	
~~I-8 WB Ramps / Parkway Dr~~	~~AWSC~~[e]	~~PM~~	~~59.2~~	~~F~~	~~62.1~~	~~F~~	~~**2.9**~~	~~13.8~~	~~B~~	~~Install a traffic signal (feasible).~~

Footnotes:

a. Average delay expressed in seconds per vehicle.

b. Level of Service.

c. Δ denotes the project-induced delay increase.

d. MSSC – Minor Street Stop Controlled intersection. The highest (worst) of the minor street right-turn delay (westbound right-turn) or major street (northbound left-turn) is reported. Left turns from Zura Way to College Avenue are not allowed.

~~AWSC – All Way Stop Controlled intersection.~~

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 < 10.0	A	0.0 < 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
> 80.1	F	> 50.1	F

General Notes:

1. Bold represents a significant impact

TABLE AA3.14-30
NEAR-TERM (YEAR 2022) SEGMENT MITIGATION ANALYSIS

Segment	LOS E Capacity [a]	Near-Term (Year 2022) without Project			Near-Term (Year 2022) with Project				Mitigated LOS E Capacity [a]	Near-Term (Year 2022) + Project With Mitigation			Mitigation
		Volume	LOS [b]	V/C [c]	Volume	LOS [b]	V/C [c]	V/C Δ		Volume	LOS	V/C	
Alvarado Road													
E. Campus Dr to Reservoir Dr	8,000	9,340	F	1.168	~~9,610~~ 9,490	F	~~1.201~~ 1.186	~~**0.033**~~ **0.018**	15,000	~~9,610~~ 9,490	C	~~0.641~~ 0.633	Widen/restripe Alvarado Road to include a two-way left-turn lane or left turn pockets (feasible/infeasible).
~~Reservoir Dr to 70th Street~~	~~8,000~~	~~7,490~~	~~E~~	~~0.936~~	~~7,760~~	~~E~~	~~0.970~~	~~**0.034**~~	~~15,000~~	~~7,760~~	~~C~~	~~0.517~~	~~Restripe Alvarado Road to include a two-way left-turn lane or left turn pockets (feasible/infeasible).~~
College Avenue													
I-8 EB Ramps to Zura Way	40,000	40,470	F	1.012	~~41,930~~ 41,210	F	~~1.048~~ 1.030	~~**0.036**~~ **0.018**	~~50,000~~ 45,000	~~41,930~~ 41,210	E~~D~~	~~0.839~~ 0.916	Widen to provide an additional (third) northbound lane (feasible).
~~Montezuma Rd to Cresita Drive~~	~~30,000~~	~~30,670~~	~~F~~	~~1.022~~	~~31,000~~	~~F~~	~~1.033~~	~~0.011~~	~~40,000~~	~~31,000~~	~~D~~	~~0.775~~	~~Widen to provide a raised median or provide bike lanes by removing parking (infeasible)~~

Footnotes

a. Capacities based on City of San Diego's Roadway Classification & LOS table.
b. Average Daily Traffic
c. Volume to Capacity ratio

General Notes:

1. Bold and shading represents a potential significant impact

Horizon Year (Year 2035)

Significant Impacts – Cumulative

The Project would result in significant direct impacts at the following locations under the Horizon Year scenario.

Intersections

Fairmount Avenue / I-8 Westbound Off Ramp / Camino Del Rio N. (PM peak hour)

55th Street / Montezuma Road (PM peak hour)

Campanile Drive / Montezuma Road (AM peak hour)

College Avenue / I-8 Eastbound Ramps (AM and PM peak hours)

College Avenue / Canyon Crest Drive (AM and PM peak hours)

College Avenue / Zura Way (AM and PM peak hours)

College Avenue / Montezuma Road (AM and PM peak hours)

Alvarado Court / Alvarado Road (PM peak hour)

70th Street / Alvarado Road (PM peak hour)

I-8 WB Ramps / Parkway Drive (AM and PM peak hours)

Montezuma Road / Collwood Boulevard (PM peak hour)

Street Segments

Alvarado Road: E. Campus Drive to Reservoir Drive

Alvarado Road: Reservoir Drive to 70th Street

College Avenue: Del Cerro Boulevard to I-8 Westbound off-ramp

College Avenue: I-8 Eastbound Ramps to Zura Way

College Avenue: Zura Way to Montezuma Road

College Avenue: Montezuma Road to Cresita Drive

Montezuma Road: Fairmount Avenue to Collwood Boulevard

Montezuma Road: Collwood Boulevard to 55th Street

Montezuma Road: 55th Street to College Avenue

Ramp Meters

Northbound College Avenue to Westbound I-8

Southbound College Avenue to Westbound I-8

Freeway Mainline

Interstate 8: Fairmount Avenue to Waring Road (eastbound)

Interstate 8: Waring Road to College Avenue (eastbound)

Interstate 8: College Avenue to Lake Murray Boulevard (eastbound)

Interstate 8: College Avenue to Lake Murray Boulevard (westbound)

Interstate 8: Lake Murray Boulevard to Fletcher Parkway (eastbound)

Interstate 8: Lake Murray Boulevard to Fletcher Parkway (westbound)

Mitigation Measures

The improvements listed below would mitigate the Project's significant cumulative impacts identified under the Horizon Year scenario.

Intersections

AATCP-24 Fairmount Avenue / I-8 Westbound Off Ramp / Camino Del Rio N (Intersection #1). The improvement necessary to mitigate the Project's significant cumulative impact at the Fairmount Avenue / I-8 Westbound Off Ramp / Camino Del Rio North intersection is to widen the eastbound approach to provide an additional (second) eastbound exclusive right-turn lane on Camino Del Rio N. to southbound Fairmount Avenue at this intersection.

Improvements to the interchange are included in the FY 2015 Navajo Public Facilities Financing Plan, Project T-12B (see City of San Diego Comment L-5-26). However, there is no plan or program in place to provide the necessary funding in combination with the Project's fair-share (0.9%)~~, nor is there a plan or program in place to construct the necessary improvements at this intersection~~. Therefore, the identified improvements are infeasible as they are not capable of being accomplished in a successful manner within a reasonable period of time and, as a result, this impact is considered significant and unavoidable.

Notwithstanding, prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 27,806 or its equivalent, SDSU shall provide funding to the City of San Diego, in an amount to be jointly agreed upon by SDSU and the City based upon professional cost estimates, for the installation of Adaptive Signal Controls at the traffic signals located at the following intersections: Fairmount Avenue / I-8 Eastbound Off Ramp; Fairmount Avenue / Camino Del Rio North / I- Westbound Off Ramp; and Fairmount Avenue / Mission Gorge Road. Implementation of this feasible mitigation, however, will not reduce the identified impacts to less than significant.

AATCP-9 55th Street / Montezuma Road (Intersection #4). The improvements necessary to mitigate the Project's significant cumulative impact at the 55th Street / Montezuma Road intersection are to modify the traffic signal and restripe the 55th Street southbound approach to include: one (1) dedicated southbound right-turn lane; one (1) shared southbound right/thru/left-turn lane; and one (1) dedicated southbound left-turn lane.

Since there is no plan or program in place to provide the necessary funding in combination with the Project's fair-share (10.6~~9~~%), nor is there a plan or program in place to construct the necessary improvements at this intersection, SDSU has determined it is feasible and, therefore, agreed to fully fund and implement the necessary improvements in light of the substantial benefits that would accrue to the SDSU community and for the limited purpose of this project only. To that end, prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 28,346~~762~~ or its equivalent, SDSU shall restripe the 55th Street southbound approach to the 55th Street / Montezuma Road intersection to include: one (1) dedicated southbound right-turn lane; one (1) shared southbound right/thru/left-turn lane; and one (1) dedicated southbound left-turn lane, and also shall implement the associated~~coordinate with the City regarding~~ signal modification to the reasonable satisfaction of the San Diego City Engineer. To

implement the improvements, SDSU shall prepare design plans and submit such plans to the City of San Diego for review and approval. Following City approval, and prior to commencing construction, SDSU shall obtain any necessary construction permits and provide bond assurances satisfactory to the City Engineer.

AATCP-10 Campanile Drive / Montezuma Road (Intersection #5). The improvement necessary to mitigate the Project's significant cumulative impact at the Campanile Drive / Montezuma Road intersection is to restripe the Montezuma Road westbound approach to the intersection to provide an exclusive westbound right-turn lane on Montezuma Road to northbound Campanile Drive.

Since there is no plan or program in place to provide the necessary funding in combination with the Project's fair-share (10.3~~12.1~~%), nor is there a plan or program in place to construct the necessary improvements at this intersection, SDSU has determined it is feasible and, therefore, agreed to fully fund and implement the necessary improvements in light of the substantial benefits that would accrue to the SDSU community and for the limited purpose of this project only. To that end, prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 28,274~~670~~ or its equivalent, SDSU shall restripe the Montezuma Road westbound approach to the Campanile Drive / Montezuma Road intersection to provide an exclusive westbound right-turn lane on Montezuma Road to northbound Campanile Drive, and implement the associated signal modifications to the reasonable satisfaction of the San Diego City Engineer. To implement the improvements, SDSU shall prepare design plans and submit such plans to the City of San Diego for review and approval. Following City approval, and prior to commencing construction, SDSU shall obtain any necessary construction permits and provide bond assurances satisfactory to the City Engineer.

College Avenue / I-8 Eastbound Ramp (Intersection #8). The improvements to be implemented as mitigation for the Project's direct impact to the College Avenue / I-8 Eastbound Ramp intersection (provide a third northbound lane on College Avenue between Canyon Crest Drive and I-8 [AATCP-1]) would also mitigate the Project's significant cumulative impact and no further mitigation is necessary.

College Avenue / Canyon Crest Drive (Intersection #9). The improvements to be implemented as mitigation for the Project's direct impact to the College Avenue / Canyon Crest Drive intersection (widen the intersection to provide an additional (third) northbound lane [AATCP-2]) would also mitigate the Project's significant cumulative impact at this location and no further mitigation is necessary.

College Avenue / Zura Way (Intersection #10). The improvements to be implemented as mitigation for the Project's direct impact to the College Avenue / Zura Way intersection (install a traffic signal [AATCP-3]) would also mitigate the Project's significant cumulative impact at this location and no further mitigation is necessary.

College Avenue / Montezuma Road (Intersection #11). The improvements to be implemented as mitigation for the Project's direct impact to the College Avenue / Montezuma Road intersection (restripe the eastbound approach to include an additional (second) eastbound left-turn lane on Montezuma Road to northbound College Avenue and install a right-turn overlap phase [AATCP-4]) would also mitigate the Project's significant cumulative impact at this location and no further mitigation is necessary.

AATCP-25 Alvarado Court / Alvarado Road (Intersection #12). The improvement necessary to mitigate the Project's significant cumulative impact at the Alvarado Court / Alvarado Road intersection is to install a traffic signal at the intersection. A signal warrant analysis is included in LLG TIA Appendix P, which concludes that a signal is warranted at the Alvarado Court / Alvarado Road intersection.

~~However,~~Since there is no plan or program in place to provide the necessary funding in combination with the Project's fair-share (59.1~~8~~%), nor is there a plan or program in place to construct the necessary improvements at this intersection, SDSU has determined it is feasible and, therefore, agreed to fully fund and implement the necessary improvements in light of the substantial benefits that would accrue to the SDSU community and for the limited purpose of this project only. To that end, prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 27,285 or its equivalent, SDSU shall install a traffic signal at the Alvarado Court/Alvarado Road intersection. To implement the improvements, SDSU shall prepare design plans and submit such plans to the City of San Diego for review and approval. Following City approval, and prior to commencing construction, SDSU shall obtain any necessary construction permits and provide bond assurances satisfactory to the City Engineer. ~~Therefore, the identified improvement is infeasible and, as a result, this impact is considered significant and unavoidable.~~

AATCP-11 70th Street / Alvarado Road (Intersection #15). The improvement necessary to mitigate the Project's significant cumulative impact at the 70th Street / Alvarado Road intersection is to install an overlap phase on the northbound right-turn to eastbound Alvarado Road at the intersection traffic signal.

Since there is no plan or program in place to provide the necessary funding in combination with the Project's fair-share (9.6~~10.2~~%), nor is there a plan or program in place to construct the necessary improvements at this intersection, SDSU has determined it is feasible and, therefore, agreed to fully fund and implement the necessary improvements in light of the substantial benefits that would accrue to the SDSU community and for the limited purpose of this project only. To that end, prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 29,086~~359~~, SDSU shall ~~coordinate with the City to~~ install an overlap phase on the northbound right-turn to eastbound Alvarado Road at the 70th Street/Alvarado Road intersection traffic signal to the reasonable satisfaction of the San Diego City Engineer. To implement the improvements, SDSU shall prepare design plans and submit such plans to the City of San Diego for review and approval. Following City approval, SDSU shall obtain any necessary construction permits and provide bond assurances satisfactory to the City Engineer.

Interstate 8 Westbound Ramps / Parkway Drive (Intersection #16). The improvements to be implemented as mitigation for the Project's ~~direct~~ impact at the I-8 Westbound Ramps / Parkway Drive intersection (install a traffic signal [AATCP-5]) would ~~also~~ mitigate the Project's significant cumulative impact at this location and no further mitigation is necessary.

AATCP-12 Montezuma Road / Collwood Boulevard (Intersection #18). The improvement necessary to mitigate the Project's significant cumulative impact at the Montezuma Road / Collwood Boulevard intersection is to modify the traffic signal at the intersection to provide a right-turn overlap phase on the northbound approach.

Since there is no plan or program in place to provide the necessary funding in combination with the Project's fair-share (9.3~~7~~%), nor is there a plan or program in place to construct the necessary improvements at this intersection, SDSU has determined it is feasible and, therefore, agreed to fully fund and implement the necessary improvements in light of the substantial benefits that would accrue to the SDSU community and for the limited purpose of this project only. To that end, prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 30,050~~386~~ or its equivalent, SDSU shall modify the traffic signal at the Montezuma Road / Collwood Boulevard intersection to provide a right-turn overlap phase on the northbound approach to the reasonable satisfaction of the San Diego City Engineer. To implement the improvement, SDSU shall prepare design plans and submit such plans to the City of San Diego for review and approval, and prior to commencing construction, SDSU

shall obtain any necessary construction permits and provide bond assurances to the reasonable satisfaction of the City Engineer.

Street Segments

Alvarado Road: E. Campus Drive to Reservoir Drive. The improvements identified to mitigate the Project's direct impact to the segment of Alvarado Road from E. Campus Drive to Reservoir Drive (~~widen and~~ restripe Alvarado Road to construct a two-way center left-turn lane or add left turn pockets) would, if implemented, also mitigate the Project's significant cumulative impact at this location.

However, as previously explained in Mitigation Measure AATCP-6, the improvements identified to mitigate the direct impacts at this location may be infeasible. If that is the case, cumulative impacts at this location would be significant and unavoidable.

Alvarado Road: Reservoir Drive to 70th Street. The improvements identified to mitigate the Project's ~~direct~~ impact to the segment of Alvarado Road from Reservoir Drive to 70th Street (restripe Alvarado Road to construct a two-way center left-turn lane or add left turn pockets [AATCP-7]) would, if implemented, ~~also~~ mitigate the Project's significant cumulative impact at this location.

However, as previously explained in Mitigation Measure AATCP-7, the improvements identified to mitigate the ~~direct~~ impacts at this location may be infeasible. If that is the case, cumulative impacts at this location would be significant and unavoidable.

AATCP-30 College Avenue: Del Cerro Boulevard to I-8 WB off-Ramp. The improvement necessary to mitigate the Project's significant cumulative impact to the segment of College Avenue from Del Cerro Boulevard to Interstate-8 WB off-ramp is to restripe or, alternatively if the City of San Diego requires, widen northbound College Avenue to provide an additional lane.

~~However,~~Since there is no plan or program in place to provide the necessary funding in combination with the Project's fair-share (30.8~~32.1~~%), nor is there a plan or program in place to construct the necessary improvements at this segment, in the event the City approves the addition of a northbound lane via re-striping, which SDSU's traffic engineer has determined is feasible and would fully mitigate the impact, SDSU has agreed to fully fund and implement the re-striping in light of the substantial benefits that would accrue to the SDSU community and for the limited purpose of this project only. To that end, prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 26,671 or its equivalent, and contingent upon City approval, SDSU shall re-stripe

northbound College Avenue between Del Cerro Boulevard and the I-8 WB off-ramp to provide an additional lane. To implement the improvement, SDSU shall prepare design plans and submit such plans to the City of San Diego for review and approval, and prior to commencing construction, SDSU shall obtain any necessary construction permits and provide bond assurances to the reasonable satisfaction of the City Engineer~~Furthermore, the addition of a lane to this segment of College Avenue would conflict with the Navajo Community Plan designation~~. In the event the City does not approve the re-striping and requires instead that College Avenue be widened at this location, the road widening would require the acquisition of additional right-of-way that is owned by multiple individual third parties. Therefore, under this latter scenario, the identified improvements are infeasible and, as a result, this impact is considered significant and unavoidable.

College Avenue: I-8 Eastbound Ramps to Zura Way. The improvements to be implemented as mitigation for the Project's direct impact to the segment of College Avenue from the I-8 Eastbound Ramps to Zura Way (widen College Avenue to provide an additional (third) northbound lane [AATCP-6]) would also mitigate the Project's significant cumulative impact at this location and no further mitigation is necessary.

College Avenue: Zura Way to Montezuma Road. The improvement necessary to mitigate the Project's significant cumulative impact to the segment of College Avenue from Zura Way to Montezuma Road is to widen the four-lane portion of College Avenue to provide an additional travel lane.

However, implementation of this~~the necessary~~ improvement is infeasible because the right-of-way necessary to add a fifth lane is not available due to the proximity of buildings fronting College Avenue along this segment~~at this location~~, and the potential future availability of right of way on the east side of College Avenue as part of the area's redevelopment is speculative. Additionally, ~~W~~while the College Area Community Plan depicts College Avenue as six lanes between Zura Way and Montezuma Road, there is no plan or program in place to provide the necessary funding in combination with the Project's fair-share (31.5~~34.5~~%), nor is there a plan or program in place to construct the necessary improvements at this segment. Therefore, the addition of a fifth lane is infeasible and, as a result, this impact is considered significant and unavoidable.

College Avenue: Montezuma Road to Cresita Drive. The improvements identified to mitigate the Project's ~~direct~~ impact to the segment of College Avenue from Montezuma Road to Cresita Drive (~~widen College Avenue to~~ construct a raised median [AATCP-23]) would, if implemented, ~~also~~ mitigate the Project's significant cumulative impact at this location. However, as previously explained, the improvements identified to mitigate the ~~direct~~ impacts at this location may be~~are~~ infeasible and,

therefore, ~~the cumulative impact mitigation also is infeasible and, as a result,~~ cumulative impacts at this location are considered significant and unavoidable.

AATCP-26 Montezuma Road: Fairmount Avenue to Collwood Boulevard. The improvement necessary to mitigate the Project's significant cumulative impact to the segment of Montezuma Road from Fairmount Avenue to Collwood Boulevard is to widen this segment of Montezuma Road to provide an additional eastbound travel lane.

However, implementation of the necessary improvement is infeasible because: (i) the right-of-way necessary to add a lane is not available due to the existing topography; and (ii) there is no plan or program in place to provide the necessary funding in combination with the Project's fair-share (7.8~~8.2~~%), nor is there a plan or program in place to construct the necessary improvements at this location. Therefore, the identified improvements are infeasible and, as a result, this impact is considered significant and unavoidable.

Notwithstanding, prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 28,283 or its equivalent, SDSU shall provide funding to the City of San Diego, in an amount to be jointly agreed upon by SDSU and the City based upon professional cost estimates, for the installation of Adaptive Signal Controls at the traffic signal located at the Montezuma Road / Collwood Boulevard intersection. Implementation of this feasible mitigation, however, will not reduce the identified impacts to less than significant.

AATCP-27 Montezuma Road: Collwood Boulevard to 55th Street. The improvement necessary to mitigate the Project's significant cumulative impact to the segment of Montezuma Road from Collwood Boulevard to 55th Street is to widen this segment of Montezuma Road to provide an additional eastbound travel lane.

However, implementation of the necessary improvements is infeasible because: (i) the right-of-way necessary to add a lane is not available due to the existing topography; and (ii) there is no plan or program in place to provide the necessary funding in combination with the Project's fair-share (8.7~~9.1~~%), nor is there a plan or program in place to construct the necessary improvements at this location. Therefore, the identified improvements are infeasible and, as a result, this impact is considered significant and unavoidable.

Notwithstanding, prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 28,032 or its equivalent, SDSU shall provide funding to the City of San Diego, in an amount to be jointly agreed upon by SDSU and the City based upon professional cost estimates, for the installation of Adaptive Signal Controls at the traffic signals located at the intersections of Montezuma Road and Yerba Santa Drive, 54th Street, and 55th Street. Implementation of this feasible mitigation, however, will not reduce the identified impacts to less than significant.

AATCP-28 Montezuma Road: 55th Street to College Avenue. The improvement necessary to mitigate the Project's significant cumulative impact to the segment of Montezuma Road from 55th Street to College Avenue is to install a raised median along this segment of Montezuma Road.

~~However,~~Since there is no plan or program in place to provide the necessary funding in combination with the Project's fair-share (21.2~~9~~%), nor is there a plan or program in place to construct the necessary improvements at this location, SDSU has determined it is feasible and, therefore, agreed to fully fund and implement the necessary improvements in light of the substantial benefits that would accrue to the SDSU community and for the limited purpose of this project only. To that end, prior to SDSU Full-Time Equivalent (FTE) enrollment reaching 26,998 or its equivalent, SDSU shall install a raised median on the segment of Montezuma Road between 55th Street and College Avenue, to the reasonable satisfaction of the City of San Diego City Engineer. To implement the improvement, SDSU shall prepare design plans and submit such plans to the City of San Diego for review and approval, and prior to commencing construction, SDSU shall obtain any necessary construction permits and provide bond assurances to the reasonable satisfaction of the City Engineer.~~Therefore, the identified improvement is infeasible and, as a result, this impact is considered significant and unavoidable.~~

Ramp Meters

AATCP-13 Northbound College Avenue to I-8 Westbound. The improvement necessary to mitigate the Project's identified significant cumulative impact at the Northbound College Avenue to I-8 Westbound ramp meter is to provide additional capacity on the I-8 westbound mainline. To that end, California State University / SDSU shall support Caltrans in its efforts to obtain funding from the state Legislature for the costs to prepare a Project Study Report-Project Development Support Project Initiation Document (Study) to evaluate alternatives to increase capacity, improve mobility, and

relieve congestion at the Interstate-8 / College Avenue interchange including the Northbound College Avenue to I-8 Westbound on-ramp. Alternatives to be considered could include enhanced acceleration/deceleration lanes and interconnecting ramp meters. Dependent on the outcome of the study, California State University/SDSU shall continue to support Caltrans in its efforts to obtain funding from the state Legislature for the costs to implement the capital improvements identified in the Study. However, as there presently are no capacity improvements planned for this on-ramp, mitigation to reduce the identified significant impact to less than significant is infeasible and the impact is considered significant and unavoidable.

AATCP-14 Southbound College Avenue to I-8 Westbound. The improvement necessary to mitigate the Project's identified significant cumulative impact at the Southbound College Avenue to I-8 Westbound ramp meter is to provide additional capacity on the I-8 westbound mainline. To that end, California State University / SDSU shall support Caltrans in its efforts to obtain funding from the state Legislature for the costs to prepare a Project Study Report-Project Development Support Project Initiation Document (Study) to evaluate alternatives to increase capacity, improve mobility, and relieve congestion at the Interstate-8 / College Avenue interchange including the Southbound College Avenue to I-8 Westbound on-ramp. Alternatives to be considered could include enhanced acceleration/deceleration lanes and interconnecting ramp meters. Dependent on the outcome of the study, California State University/SDSU shall continue to support Caltrans in its efforts to obtain funding from the state Legislature for the costs to implement the capital improvements identified in the Study. However, as there presently are no capacity improvements planned for this on-ramp, mitigation to reduce the identified significant impact to less than significant is infeasible and the impact is considered significant and unavoidable.

Freeway Mainline

AATCP-15 Interstate 8: Fairmount Avenue to Waring Road (eastbound). The improvement necessary to mitigate the Project's identified significant cumulative impact (4.1~~5~~.4%) to the eastbound segment of Interstate-8 between Fairmount Avenue and Waring Road is to provide additional capacity on the I-8 eastbound mainline. To that end, California State University / SDSU shall support Caltrans in its efforts to obtain funding from the state Legislature for the costs to prepare a Project Study Report-

Project Development Support-Project Initiation Document (Study) to evaluate alternatives to increase capacity, improve mobility, and relieve congestion at either the I-8 / Fairmount Avenue or I-8 / Waring Road interchange and, relatedly, on the segment of I-8 between Fairmount Avenue and Waring Road. Alternatives to be considered could include enhanced acceleration/deceleration lanes and interconnecting ramp meters. Dependent upon the outcome of the Study, California State University / SDSU shall continue to support Caltrans in its efforts to obtain funding from the state Legislature for the costs to implement the capital improvements identified in the Study. However, as there presently are no capacity improvements planned for this segment of I-8, mitigation to reduce the identified significant impact to less than significant is infeasible and the impact is considered significant and unavoidable.

AATCP-16 Interstate 8: Waring Road to College Avenue (eastbound). The improvement necessary to mitigate the Project's identified significant cumulative impact (4.8~~6.2~~%) to the eastbound segment of Interstate-8 between Waring Road and College Avenue is to provide additional capacity on the I-8 eastbound mainline. To that end, California State University / SDSU shall support Caltrans in its efforts to obtain funding from the state Legislature for the costs to prepare a Project Study Report-Project Development Support-Project Initiation Document (Study) to evaluate alternatives to increase capacity, improve mobility, and relieve congestion at the I-8 / College Avenue Interchange and, relatedly, on the segment of I-8 between Waring Road and College Avenue. Alternatives to be considered could include enhanced acceleration/deceleration lanes and interconnecting ramp meters. Dependent upon the outcome of the Study, California State University / SDSU shall continue to support Caltrans in its efforts to obtain funding from the state Legislature for the costs to implement the capital improvements identified in the Study. However, as there presently are no capacity improvements planned for this segment of I-8, mitigation to reduce the identified significant impact to less than significant is infeasible and the impact is considered significant and unavoidable.

AATCP-17 Interstate 8: College Avenue to Lake Murray Boulevard (eastbound and westbound). The improvement necessary to mitigate the Project's identified significant cumulative impact to the eastbound (3.8~~4.1~~%) and westbound (3.3~~3.7~~%) segments of Interstate-8 between College Avenue and Lake Murray Boulevard is to provide additional capacity on the I-8 eastbound and westbound mainlines. To that end, California State University / SDSU shall support Caltrans in its efforts to obtain funding from the state

Legislature for the costs to prepare a Project Study Report-Project Development Support-Project Initiation Document (Study) to evaluate alternatives to increase capacity, improve mobility, and relieve congestion at the I-8 / College Avenue Interchange and, relatedly, on the segment of I-8 between College Avenue and Lake Murray Boulevard. Alternatives to be considered could include enhanced acceleration/deceleration lanes and interconnecting ramp meters. Dependent upon the outcome of the Study, California State University / SDSU shall continue to support Caltrans in its efforts to obtain funding from the state Legislature for the costs to implement the capital improvements identified in the Study. However, as there presently are no capacity improvements planned for this segment of I-8, mitigation to reduce the identified significant impact to less than significant is infeasible and the impact is considered significant and unavoidable.

AATCP-18 Interstate 8: Lake Murray Boulevard to Fletcher Parkway (eastbound and westbound). The improvement necessary to mitigate the Project's identified significant cumulative impact to the eastbound (9.8~~10.4~~%) and westbound (8.7~~9.4~~%) segments of Interstate-8 between Lake Murray Boulevard and Fletcher Parkway is to provide additional capacity on the I-8 eastbound and westbound mainlines. To that end, California State University / SDSU shall support Caltrans in its efforts to obtain funding from the state Legislature for the costs to prepare a Project Study Report-Project Development Support-Project Initiation Document (Study) to evaluate alternatives to increase capacity, improve mobility, and relieve congestion at the I-8 / Fletcher Parkway or I-8 / Lake Murray Boulevard interchange and, relatedly, on the segment of I-8 between Lake Murray Boulevard and Fletcher Parkway. Alternatives to be considered could include enhanced acceleration/deceleration lanes and interconnecting ramp meters. Dependent upon the outcome of the Study, California State University / SDSU shall continue to support Caltrans in its efforts to obtain funding from the state Legislature for the costs to implement the capital improvements identified in the Study. However, as there presently are no capacity improvements planned for this segment of I-8, mitigation to reduce the identified significant impact to less than significant is infeasible and the impact is considered significant and unavoidable.

Transportation Demand Management

As part of the 2007 Campus Master Plan, The Board of Trustees of the California State University adopted a mitigation measure requiring SDSU to develop a campus transportation demand management (TDM) program that facilitates a balanced approach to mobility, with the ultimate goal

of reducing single occupant vehicle trips to and from campus in favor of alternative modes of travel. The adequacy of the mitigation measure was challenged in court, and while the litigation was pending, SDSU retained a transportation consulting firm to prepare a study evaluating potential TDM measures that would reduce the number of single-rider vehicle trips generated by SDSU students, faculty, and staff in favor of alternative forms of transportation. Following review and input by SANDAG and the Metropolitan Transit System, the study was made final.[13]

The TDM Study included a transportation and parking existing conditions analysis, a screening process for potential TDM strategies, and the development of a multi-phase implementation plan. The Study was intended "to assist and guide SDSU in its efforts to maximize its transportation resources and provide specific strategies to enable the university to invest in a transportation system that supports all modes of travel." (TDM Study, page 1-1.)

Included within the TDM Study is a series of strategies to be considered and further evaluated for implementation by SDSU. The strategies include: identifying a TDM coordinator; increasing ride-sharing and car-sharing opportunities; enhancing the existing bicycle and pedestrian network; facilitating transit ridership through various means, including financial incentives; and, prioritizing investments in on-campus housing and amenities. (TDM Study, pages 1-2 to 1-3.)

Following its review and consideration of the TDM Study strategies, and in direct response to Paragraph 3.(c) of the Writ of Mandate, SDSU recommends the Board of Trustees adopt the following mitigation measure to reduce to the extent possible the number of single-rider vehicle trips generated by the SDSU campus:

AATCP-19 Immediately ~~F~~following re-approval of the 2007 Campus Master Plan by The Board of Trustees of the California State University, and no later than commencement of the Fall 2019 semester unless otherwise noted, SDSU shall take the following actions to implement or, as applicable, continue to implement, the following~~on-campus~~ transportation demand management (TDM) strategies designed to reduce the number of vehicle trips generated by SDSU students, faculty, and staff:

1. **TDM Coordinator.** Immediately following Master Plan approval, SDSU shall identify the SDSU employment position with primary responsibility for overseeing implementation of the following TDM strategies~~measures on-campus including, but not limited to, the TDM measures listed in this mitigation measure,~~

[13] *Transportation Demand Management Program Final Report* (June 2013), Nelson Nygaard (TDM Study). A copy of the TDM Study is provided in Appendix V to the LLG TIA.

and task such position with conducting the appropriate implementation, outreach, ~~and~~ marketing, and monitoring activities.

2. **Increase RideShare Opportunities.** SDSU, or the TDM Coordinator as applicable, shall:

    a. Provide a central digital platform location for information relating to available alternative transportation opportunities (to be implemented by Fall 2018);

    b. Provide preferential vanpool/carpool parking spaces in each parking lot commensurate with demand (to be implemented by Fall 2018);

    c. Allow use of shared parking passes for carpools and vanpools (shared parking passes authorize the use of one parking pass that is shared amongst all of the drivers of a designated carpool or vanpool) (to be implemented by Fall 2018);

    d. Connect the existing Enterprise Rent-A-Car VanPool system to the SDSU Human Resources (HR) staff/faculty database for more efficient ride-matching (the HR database includes information regarding home address and employment department, thereby facilitating carpool matches based on location and work schedule) (to be implemented by Fall 2019);

    e. Provide dedicated parking spaces and subsidies, funded through SANDAG and SDSU, towards leasing (SANDAG provides $400 towards) and fuel costs (SDSU provides $100 towards) associated with vanpools operated through the Enterprise Rent-A-Car VanPool system (to be implemented by Fall 2018);

    f. Promote ZimRide and Waze Carpool (~~a~~ rideshare platforms) and SANDAG's iCommute program by all appropriate means including, but not limited to, providing informational packets to all resident students during student orientation (to be implemented by Fall 2018);

    g. Expand hours of operation, increase frequency, and expand the service area of the currently on-campus only SDSU Red & Black shuttle to include off-campus locations to be determined based on the results of a pilot program to be implemented in 2018 (to be implemented by Fall 2019);

h. Facilitate continued operation of private shuttles operating between off-campus apartments and campus by identifying off-campus pick-up/drop-off locations (to be implemented by Fall 2018); and,

i. Designate on campus locations for ride-hailing services, including, but not limited to, Uber~~,~~ and Lyft (see Figure AA3.14-13, On Campus Student Housing and Amenities, for location of existing and planned future rideshare locations) (to be implemented by Fall 2018).

3. **Facilitate Bicycle and Pedestrian Travel.** SDSU, or the TDM Coordinator as applicable, shall:

a. Establish a Bike-Share pilot program on campus to be expanded if successful. Program features will include: dockless program; 100 bicycles initially; students to receive a discount for subscription; incentives/disincentives relating to placement of bicycles following use; and, bicycles may be taken off-campus (to be implemented by Fall 2018);

b. Upgrade existing Class III bicycle facilities to Class II facilities along 54th Street from Collwood Boulevard to El Cajon Boulevard, and upgrade the existing Class III bicycle facilities to Class II facilities along Collwood Boulevard from Monroe Avenue to 54th Street (to be implemented by Fall 2019);

c. Install a Class II bike lane within the existing 36-foot curb-to-curb width~~lines~~ on Canyon Crest Drive between Lot 16 (former A Lot) and Lot 15 (former X lot) in order to improve bicycle access to/from and within campus (to be implemented by Fall 2019);

d. Provide shared lane markings (sharrows) on Aztec Circle Drive to alert motorists that bicyclists may be using the full travel lane (implemented 2018);

e. Provide on-campus Class I bike paths between Hardy Road and Hilltop Way, and between Union Street and Viejas Arena (Aztec Walk)(installed since 2007, in 2010);

f. Provide Class II bike lanes on College Avenue between Montezuma Road and Zura Way (installed since 2007, in 2017);

g. Maintain the existing on-campus bike racks (with capacity for approximately 1,070 bikes) and four bike maintenance stations (tools and air, unstaffed), and continue to monitor need for additional racks as necessary (to be implemented by Fall 2018); and

h. Provide pedestrian improvements, including pedestrian signals, widened sidewalks, and bulb-outs at South Campus Plaza (westeast side of College Avenue), and Montezuma Road and Campanile Drive (installed since 2007, in 2017).

4. **Facilitate Transit Ridership.** SDSU, or the TDM Coordinator as applicable, shall:

a. Maintain existing transit pass program for students (discounted by Metropolitan Transit System (MTS) and subsidized by SDSU) transit pass program for students and enable purchases by credit card (credit card purchases to be implemented by Fall 2018);

b. Establish a pre-tax payroll deduction program for faculty and staff purchase of MTS transit passes, vanpooling, and pooled on-demand rideshare services (e.g., uberPOOL and Lyft Line), provided SDSU meets the state/CSU required minimum participation level (to be implemented by Fall 2019);

c. Provide reduced cost transit passes for faculty and staff, provided SDSU meets the MTS required minimum participation level. Cost reduction will be between 10% and 25%, depending on participation level (to be implemented by Fall 2019); and,

d. Increase on-campus vehicle parking feesrates for single-rider student vehicles by 2025.

In light of the ongoing evolution of transportation technology and advancements, the strategies set forth above may be modified or replaced, as necessary, with alternative strategies of equal or enhanced effectiveness. Therefore, the TDM Coordinator shall annually evaluate the above strategies to ensure that the strategies are meeting the needs and priorities of the SDSU students, faculty, and staff. Program monitoring shall occur pursuant to the Mitigation Monitoring and Reporting Program adopted as part of the project approvals. As new technologies and strategies become available, the strategies included in this mitigation

measure can be modified in order to implement alternative technologies and/or strategies of equal or enhanced effectiveness.

In addition to the above TDM strategies, since approval in 2007 of the Campus Master Plan, SDSU has adopted student residency policies and constructed a substantial number of student housing units and amenities both on and adjacent to or within walking distance of campus that have assisted in reducing vehicle trips and related vehicle miles traveled (VMT). Since 2010, SDSU has required Freshmen enrolling from out of the SDSU service area to live on campus, and, beginning in Fall 2019, all out of service area Sophomores also will be required to live on campus. To meet these requirements and the increased demand to live on campus, SDSU has added approximately 1,350 on-campus student housing beds since 2007, and additional housing presently is being constructed and/or planned for construction on and adjacent to campus (within one block of Montezuma Road) that would house an additional approximate 1,630 students by 2019 (1,330 on campus and 300 adjacent to campus). Thus, by Fall 2019, SDSU will be housing approximately 2,980 more students on and adjacent to campus than it did in 2007. Additionally, the previously approved (2011) Plaza Linda Verde project (now referred to as South Campus Plaza) provides additional student housing capacity for 1,016 beds, and this 2007 Campus Master Plan would provide additional potential housing capacity of 2,176 beds, for a total of 3,192 additional beds. See Final Additional Analysis, Appendix AA, Student Housing Demand Materials.

In addition, since 2007, SDSU has added over 35,000 gross square feet (GSF) of retail amenities within walking distance of campus. These amenities, which include a grocery store (Trader Joe's), several restaurants, and a Verizon store, reduce the need for students, faculty, and staff to drive from the campus to shop for their goods and services. Please see Figure AA3.14-13 for illustration of the housing and amenities added since 2007.

2007 FEIR Mitigation Measures

In addition to the mitigation measures listed above, the following mitigation measures were included~~adopted~~ as part of the 2007 Final EIR and, for that reason, the measures are carried forward here, with revised numbering:

AATCP-20[14] Del Cerro Residential Streets. Following occupancy of the Adobe Falls Faculty/Staff Housing Lower Village, SDSU, or its designee, shall prepare a Traffic Calming Study to determine the methods available to control and/or reduce vehicle speeds on residential roadways in the Del Cerro community. The Traffic Calming Study shall focus on the vicinity of the two elementary schools located near the intersection of Del Cerro Boulevard and College Avenue – Phoebe Hearst Elementary School and the Temple Emanuel school, and shall consider all appropriate traffic calming strategies, including those identified in the City of San Diego Street Design Manual (~~November 2002~~ March 2017). Following completion of the study, SDSU shall contribute its fair-share of the costs to implement feasible traffic calming measures identified in the study based on the percentage of Adobe Falls / Faulty Staff Housing generated average daily trips ("ADT") relative to the ~~community~~ street segment or intersection location total ADT.

AATCP-29[15] Following occupancy of the Adobe Falls Faculty / Staff Housing Lower Village, and every six months ~~T~~thereafter, SDSU, or its designee, shall conduct traffic counts on Adobe Falls Road, Mill Peak Road, Capri Drive, Arno Drive, and Genoa Drive, to determine existing roadway average daily trips ("ADT"). At such time as the ADT generated by the Adobe Falls Faculty/Staff Housing Upper and Lower Villages reaches 80% of the total ADT forecast in this EIR for the Adobe Falls housing, SDSU shall institute regular shuttle service between campus and the Adobe Falls housing ~~to the community~~ to ensure project-generated ADT do not exceed the levels forecast in this EIR.

AATCP-21[16] Construction-Related Impacts. Prior to the commencement of construction activities associated with the proposed project, SDSU shall ~~work with the City of San Diego to~~ prepare a Traffic Control Plan ("TCP"), to the reasonable satisfaction of the City Engineer, to minimize the impacts to the surrounding City roadways, including those roads located within the Del Cerro/Adobe Falls community, that may result during project construction activities. Special attention shall be paid to Alvarado Road and the potential effect of construction related traffic on Alvarado Hospital emergency access. The TCP

[14] See 2007 Campus Master Plan FEIR, mitigation measure TCP-23. Revisions reflect complete text of mitigation measure.

[15] See 2007 Campus Master Plan FEIR, mitigation measure TCP-24.

[16] See 2007 Campus Master Plan FEIR, mitigation measure TCP-25

shall require that a minimum of one lane of travel on Alvarado Road remain open at all times during project construction; that flaggers~~men~~ be utilized to assist in the direction of traffic when necessary; that area emergency response providers be given notice of road closures by SDSU's contractors; and that construction activities, including partial road closures, which shall be subject to the City of San Diego's permitting process, and the movement of heavy equipment, occur during off-peak periods to the maximum extent feasible.

AATCP-22[17] During project-specific review of the Adobe Falls Faculty/Staff Housing Lower Village, SDSU, or its designee, shall conduct a peak-hour intersection analysis of the project's impacts on the Adobe Falls Road/Waring Road intersection.

[17] See 2007 Campus Master Plan FEIR, mitigation measure TCP-26

Post Mitigation Operations

Tables AA3.14-31 and **AA3.14-32** report the results of the intersection and street segment mitigation analysis for the Horizon Year (Year 2035) + Project conditions. As shown in the tables, if implemented, the recommended improvements would reduce the project's impacts to intersections and street segments to less than significant. However, as previously explained, implementation of certain improvements is not feasible and, therefore, impacts at these locations are considered significant and unavoidable. Additionally, mitigation to provide additional capacity to the I-8 mainline and related ramps also is infeasible and, therefore, impacts to Caltrans facilities are considered significant and unavoidable. LLG TIA Appendix P and Appendix S contain the post mitigation analysis worksheets.

A review of potential impacts to pedestrian & bicycle movement that could result from implementation of the mitigation measures was conducted by LLG. Based on that review, none of the mitigation measures identified here would result in the removal of existing bike lanes or sidewalks, nor would they result in a decrease in width of these facilities. In the one instance where a potential conflict would arise (re-striping the southbound approach to the Montezuma Road / 55th Street intersection to provide two southbound right turn movements [AATCP-9]), since there is no pedestrian crossing allowed on the west leg of the intersection, the right turn improvements would not present a pedestrian or bicycle conflict. Therefore, implementation of the recommended mitigation would not significantly impact existing pedestrian and bicycle facilities.

Additionally, several of the recommended improvements would improve bicycle/pedestrian safety, such as the installation of a bike lane along Canyon Crest Drive. ~~For example, the installation of a bike lane along Canyon Crest Drive would improve the safety conditions for bicyclists along Canyon Crest.~~ In addition, the installation of a new traffic signal at College Avenue and Zura Way would allow for a controlled crossing of College Avenue where one does not presently exist. This would be a positive safety improvement for both bicyclists and pedestrians. There is no existing sidewalk along the west side of College Avenue, and left turns from Zura Way onto southbound College Avenue are not permitted.

LLG also conducted a review of the potential conflicts between the recommended bicycle improvements and transit circulation. No conflicts were identified as no travel lanes utilized by transit would be removed in order to provide the recommended improvements.

TABLE AA3.14-31
HORIZON YEAR (YEAR 2035) INTERSECTION MITIGATION ANALYSIS

Intersection	Control Type	Peak Hour	Horizon Year (Year 2035) without Project		Horizon Year (Year 2035) with Project			With Mitigation		Mitigation[g] (fair-share)
			Delay	LOS	Delay	LOS	Δ[f]	Delay	LOS	
1. Fairmount Avenue / I-8 WB Off Ramp / Camino Del Rio N.	Signal	PM	241.7	F	243.8	F	**2.1**	178.6	F	Widen to provide an additional (second) eastbound exclusive right-turn lane on Camino Del Rio N. to southbound Fairmount Avenue (infeasible)<u>; provide Adaptive Signal Control (feasible)</u>.
4. 55th Street / Montezuma Road	Signal	AM	59.0	E	~~66.0~~ <u>65.5</u>	E	~~**7.0**~~ <u>**6.5**</u>	~~56.7~~ <u>56.2</u>	E	Restripe the southbound approach on 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 (feasible).
		PM	107.8	F	~~110.7~~ <u>110.4</u>	F	~~**2.9**~~ <u>**2.6**</u>	~~103.2~~ <u>103.0</u>	F	
5. Campanile Dr / Montezuma Rd	Signal	AM	93.4	F	~~105.9~~ <u>99.8</u>	F	~~**12.5**~~ <u>**6.4**</u>	~~47.4~~ <u>39.6</u>	D	Restripe to provide an exclusive westbound right-turn lane on Montezuma Road to northbound Campanile Drive (feasible).
8. College Ave / I-8 EB Ramps	Signal	AM	45.3	D	~~55.1~~ <u>53.0</u>	~~E~~ <u>D</u>	~~**9.8**~~ <u>**7.7**</u>	~~54.3~~ <u>52.2</u>	D	Provide an additional (third) northbound lane between I-8 EB off-ramp and Canyon Crest Drive (feasible).
		PM	140.0	F	~~182.4~~ <u>178.0</u>	F	~~**42.4**~~ <u>**38.0**</u>	~~44.3~~ <u>42.3</u>	D	
9. College Ave / Canyon Crest Dr	Signal	AM	81.6	F	~~91.4~~ <u>89.1</u>	F	~~**9.8**~~ <u>**7.5**</u>	~~76.5~~ <u>72.7</u>	E	Provide an additional (third) northbound through lane (feasible).
		PM	~~103.7~~ <u>102.9</u>	F	~~194.3~~ <u>177.4</u>	F	~~**90.6**~~ <u>**74.5**</u>	~~92.4~~ <u>86.3</u>	F	
10. College Ave / Zura Way	MSSC[c]	PM	393.8	F	~~528.3~~ <u>514.5</u>	F	~~**134.5**~~ <u>**120.7**</u>	~~38.3~~ <u>37.7</u>	D	Provide a traffic signal (feasible).

TABLE AA3.14-31
HORIZON YEAR (YEAR 2035) INTERSECTION MITIGATION ANALYSIS

Intersection	Control Type	Peak Hour	Horizon Year (Year 2035) without Project		Horizon Year (Year 2035) with Project			With Mitigation		Mitigation[g] (fair-share)
			Delay	LOS	Delay	LOS	Δ[f]	Delay	LOS	
11. College Ave / Montezuma Rd	Signal	AM	107.3	F	~~121.9~~ 120.5	F	~~14.6~~ 13.2	~~80.3~~ 79.6	~~F~~ E	Restripe to provide an additional (second) exclusive eastbound left-turn lane on Montezuma Road to northbound College Avenue; and an overlap phase on the eastbound right-turn to southbound College Avenue (feasible).
		PM	135.6	F	~~155.0~~ 153.1	F	~~19.4~~ 17.5	~~106.1~~ 105.4	F	
12. Alvarado Ct / Alvarado Rd	MSSC[d]	PM	18.3	C	~~72.2~~ 69.7	F	~~53.9~~ 51.4	~~9.6~~ 9.5	A	Install a traffic signal and provide a dedicated left-turn lane on the westbound approach (~~in~~feasible).
15. 70th St / Alvarado Rd	Signal	PM	94.9	F	~~98.2~~ 98.1	F	~~3.3~~ 3.2	~~86.8~~ 86.7	F	Provide an overlap phase on northbound 70th Street to eastbound Alvarado Road (feasible).
16. I-8 WB Ramps / Parkway Dr.	AWSC[e]	AM	65.6	F	~~94.7~~ 92.3	F	~~29.1~~ 26.7	~~18.9~~ 18.8	B	Provide a traffic signal (feasible).
		PM	128.6	F	~~147.6~~ 144.3	F	~~19.0~~ 15.7	~~22.6~~ 22.2	C	
18. Montezuma Road / Collwood Road	Signal	PM	**55.0**	**E**	~~**59.6**~~ **59.2**	**E**	~~**4.6**~~ **4.2**	~~53.8~~ 53.6	D	Modify the traffic signal to provide a right-turn overlap phase on the northbound approach (feasible)

TABLE AA3.14-31
HORIZON YEAR (YEAR 2035) INTERSECTION MITIGATION ANALYSIS

Intersection	Control Type	Peak Hour	Horizon Year (Year 2035) without Project		Horizon Year (Year 2035) with Project			With Mitigation		Mitigation[g] (fair-share)
			Delay	LOS	Delay	LOS	Δ[f]	Delay	LOS	

Footnotes:

a. Average delay expressed in seconds per vehicle.

b. Level of Service.

c. MSSC – Minor Street Stop Controlled intersection. The highest (worst) of the minor street right-turn delay (westbound right-turn) or major street (northbound left-turn) is reported. Left turn lanes from Zura Way to College Avenue are not allowed.

d. MSSC – Minor Street Stop Controlled intersection. Minor street approach delay is reported.

e. AWSC – All-Way Stop Controlled intersection.

f. Δ denotes project induced delay increase.

~~f.~~g. SDSU to implement feasible mitigation measures as described herein.

SIGNALIZED		UNSIGNALIZED	
DELAY/LOS THRESHOLDS		DELAY/LOS THRESHOLDS	
Delay	LOS	Delay	LOS
0.0 < 10.0	A	0.0 < 10.0	A
10.1 to 20.0	B	10.1 to 15.0	B
20.1 to 35.0	C	15.1 to 25.0	C
35.1 to 55.0	D	25.1 to 35.0	D
55.1 to 80.0	E	35.1 to 50.0	E
> 80.1	F	> 50.1	F

General Notes:

1. Bold and shading represents a potential significant impact

TABLE AA3.14-32
HORIZON YEAR (YEAR 2035) SEGMENT MITIGATION ANALYSIS

Segment	LOS E Capacity [a]	Horizon Year (Year 2035) without Project			Horizon Year (Year 2035) with Project				Mitigated LOS E Capacity [a]	With Mitigation			Mitigation[d] (fair-share)
		Volume	LOS [b]	V/C [c]	Volume	LOS [b]	V/C [c]	V/C Δ		Volume	LOS	V/C	
Alvarado Road													
E. Campus Dr to Reservoir Dr	8,000	11,340	F	1.418	~~14,900~~ 14,780	F	~~1.863~~ 1.848	~~**0.445**~~ **0.430**	15,000 [d]	~~14,900~~ 14,780	E	~~0.993~~ 0.985	Widen/restripe to include a two-way left-turn lane or left-turn pockets (infeasible/feasible).
Reservoir Dr to 70th St	8,000	14,830	F	1.854	~~16,900~~ 16,780	F	~~2.113~~ 2.098	~~**0.259**~~ **0.244**	15,000 [d]	~~16,900~~ 16,780	F	~~1.127~~ 1.119	Restripe Alvarado Road to include a two-way left-turn lane or left-turn pockets (infeasible/feasible).
College Avenue													
Del Cerro Blvd to I-8 WB off-ramp	40,000	35,930	E	0.898	~~38,100~~ 37,980	E	~~0.953~~ 0.950	~~**0.055**~~ **0.052**	45,000	~~38,100~~ 37,980	D	~~0.847~~ 0.844	Restripe/Widen to~~and~~ provide an additional (third) northbound through lane (feasible/infeasible).
I-8 EB Ramps to Zura Way	40,000	61,100	F	1.528	~~67,670~~ 66,950	F	~~1.692~~ 1.674	~~**0.164**~~ **0.146**	45,000	~~67,670~~ 66,950	F	~~1.504~~ 1.488	Provide an additional (third) northbound through lane (feasible).
Zura Way to Montezuma Rd	40,000	35,180	E	0.880	~~38,020~~ 37,660	E	~~0.951~~ 0.942	~~**0.071**~~ **0.062**	45,000	~~38,020~~ 37,660	D	~~0.845~~ 0.837	Widen to provide an additional lane (infeasible).
Montezuma Rd to Cresita Drive	30,000	32,130	F	1.071	~~33,840~~ 33,660	F	~~1.128~~ 1.122	~~**0.057**~~ **0.051**	40~~5~~,000	~~33,840~~ 33,660	~~C~~D	~~0.752~~ 0.842	~~Widen to p~~Provide a raised median (feasible/infeasible).

TABLE AA3.14-32
HORIZON YEAR (YEAR 2035) SEGMENT MITIGATION ANALYSIS

Segment	LOS E Capacity [a]	Horizon Year (Year 2035) without Project			Horizon Year (Year 2035) with Project				Mitigated LOS E Capacity [a]	With Mitigation			Mitigation[d] (fair-share)
		Volume	LOS [b]	V/C [c]	Volume	LOS [b]	V/C [c]	V/C Δ		Volume	LOS	V/C	
Montezuma Road													
Fairmount Ave to Collwood Blvd	40,000	66,740	F	1.669	~~68,020~~ 67,960	F	~~1.701~~ 1.699	**~~0.032~~ 0.030**	45,000	**~~68,020~~ 67,960**	**F**	**~~1.512~~ 1.510**	Widen to provide an additional lane (infeasible); provide Adaptive Signal Control (feasible).
Collwood Blvd to 55th St	40,000	41,810	F	1.045	~~43,090~~ 43,030	F	~~1.077~~ 1.076	**~~0.032~~ 0.031**	45,000	**~~43,090~~ 43,030**	**E**	**~~0.958~~ 0.956**	Widen to provide an additional lane (infeasible); provide Adaptive Signal Control (feasible).
55th St to College Ave	30,000	38,210	F	1.274	~~39,790~~ 39,730	F	~~1.326~~ 1.324	**~~0.052~~ 0.050**	40,000	~~39,790~~ 39,730	E	~~0.995~~ 0.993	Provide a raised median (~~in~~feasible).

Footnotes:

a. Capacities based on City of San Diego's Roadway Classification & LOS table.

b. Average Daily Traffic

c. Volume to Capacity ratio

~~c.~~d. SDSU to implement feasible mitigation measures as described herein.

General Notes:

1. Bold and shading represents a potential significant impact

Mitigation Measure Fair-Share Contributions

Table AA3.14-33 shows the fair share percentages for each of the recommended cumulative mitigation measures. These percentages were calculated according to the following formula, which is commonly used by the City of San Diego. See LLG TIA Appendix R for the calculations conducted for each improvement.

Intersections: Horizon Year (Year 2035) Impact Fair Share (using entering intersection volumes and highest of AM or PM peak hour fair share percentages) =

(Horizon Year (Year 2035) Project Traffic Volumes) / (Horizon Year (Year 2035) With Project – Existing Traffic Volumes)

Segments: Horizon Year (Year 2035) Impact Fair Share =

(Horizon Year (Year 2035) Project Traffic Volumes) / (Horizon Year (Year 2035) With Project – Existing Traffic Volumes)

TABLE AA3.14-33
HORIZON YEAR (YEAR 2035) FAIR SHARE CONTRIBUTION

Mitigation Measure Number	Impacted Locations	Fair Share Percentage**
AATCP–24	Fairmount Avenue / I-8 WB Off Ramp / Camino Del Rio N.	0.9%
AATCP-9	55th Street / Montezuma Road	~~10.9%~~10.6%
AATCP-10	Campanile Drive / Montezuma Road	~~12.1%~~10.3%
–	College Avenue / I-8 EB Ramps	*
–	College Avenue / Canyon Crest Drive	*
–	College Avenue / Zura Way	*
–	College Avenue / Montezuma Road	*
AATCP–25	Alvarado Court / Alvarado Road	~~59.8%~~59.1%
AATCP–11	70th Street / Alvarado Road	~~10.2%~~9.6%
AATCP–5	I-8 WB Ramps / Parkway Drive	*14.2%
AATCP-12	Montezuma Road / Collwood Boulevard	~~9.7%~~9.3%
AATCP–6	Alvarado Road: E. Campus Drive to Reservoir Drive	*
AATCP–7	Alvarado Road: Reservoir Drive to 70th Street	*20.0%
–	College Avenue: Del Cerro Boulevard to I-8 WB off-ramp	~~32.1%~~30.8%
–	College Avenue: I-8 EB Ramps to Zura Way	*

TABLE AA3.14-33
HORIZON YEAR (YEAR 2035) FAIR SHARE CONTRIBUTION

Mitigation Measure Number	Impacted Locations	Fair Share Percentage**
–	College Avenue: Zura Way to Montezuma Road	~~34.5%~~31.5%
–	College Avenue: Montezuma Road to Cresita Drive	*24.8%
AATCP–26	Montezuma Road: Fairmount Avenue to Collwood Boulevard	~~8.2%~~7.8%
AATCP–27	Montezuma Road: Collwood Boulevard to 55th Street	~~9.1%~~8.7%
AATCP–28	Montezuma Road: 55th Street to College Avenue	~~21.9%~~21.2%
AATCP-30	College Avenue: Del Cerro Boulevard to I-8 WB Ramp	30.8%
AATCP-13	Northbound College Avenue to westbound I-8	~~15.7%~~8.9%
AATCP-14	Southbound College Avenue to westbound I-8	~~6.1%~~6.6%
AATCP-15	I-8: Fairmount Avenue to Waring Road (EB)	~~5.4%~~4.1%
AATCP-16	I-8: Waring Road to College Avenue (EB)	~~6.2%~~4.8%
AATCP-17	I-8: College Avenue to Lake Murray Boulevard (EB)	~~4.1%~~3.8%
AATCP-17	I-8: College Avenue to Lake Murray Boulevard (WB)	~~3.7%~~3.3%
AATCP-18	I-8: Lake Murray Boulevard to Fletcher Parkway (EB)	~~10.4%~~9.8%
AATCP-18	I-8: Lake Murray Boulevard to Fletcher Parkway (WB)	~~9.4%~~8.7%

General Notes:

* indicates Near-Term (Year 2022) direct impact location.

** Fair-share percentages listed represent the project's proportionate share of cumulative traffic. As to mitigation, SDSU will fully fund and implement measures AATCP-9, 10, 11, 12, 25, and 28.

MITIGATION TRIGGER ANALYSIS

The following analysis was conducted to determine the estimated number of FTE students that could be added prior to triggering a significant impact at an intersection, street segment, ramp meter, or I-8 mainline under the Near-Term and Horizon Year scenarios.

Trigger Analysis Methodology

The Project consists of the following components that would generate vehicle trips: non-resident students, resident students, and the Adobe Falls Faculty/Staff housing~~, and the Alvarado Hotel~~. Each of these uses has a different trip rate metric, such as student headcount increase~~,~~ or dwelling units for faculty/staff housing~~, and rooms for the hotel~~. For the purposes of this analysis, ~~all of~~ these differing metrics were converted to a common improvement trigger metric in FTE students. In addition, for purposes of this analysis only, in order to present the most conservative scenario (i.e.,

the most accelerated scenario), it was assumed that ~~both~~ the Adobe Falls Faculty/Staff housing ~~and the Alvarado Hotel~~ would be built in the initial stages of Master Plan development. This would be conservative as buildout of the ~~Alvarado Hotel and~~ Adobe Falls Faculty/Staff Housing would reduce the reserve/available roadway capacity and thereby trigger significant impacts and the corresponding mitigation measures earlier than under the forecasted FTE increase scenario.

As explained in footnote 12, the FTE for the 2017/18 academic year is 24,555; this number serves as the baseline FTE. Starting with this number, the transportation engineer determined the number of additional FTE above the baseline that would trigger a significant impact at each location where a significant impact was identified. For example, at the College Avenue / I-8 eastbound ramps intersection, the analysis determined that the increase in FTE above the baseline that would trigger the significant impact is 501. Adding this number to the 24,555 baseline FTE means the significant impact would occur, and the mitigation is required, once the total campus FTE reaches 25,056 (24,555 + 501).

Intersections – The number of FTE students that could be added before a significant impact to an intersection would occur was determined as follows:

Based on the City of San Diego's significance criteria, the project would have a significant impact when the Project adds more than 2.0 seconds of delay at LOS E operating intersections or 1.0 second for LOS F intersections. Based on the Project's trip generation and trip distribution, the increase in FTE students and the associated traffic that would add exactly 2.0 seconds of delay at LOS E operating intersections or exactly 1.0 second for LOS F operations was determined for each significantly impacted location/facility.

Street Segments – The number of FTE students that could be added before a significant impact to a street segment would occur was determined as follows:

Based on the City of San Diego's significance criteria, the Project would have a significant impact when the Project adds more than 2% of the total traffic for LOS E operating segments or 1% of the total traffic for LOS F segments. Based on the project's trip generation and trip distribution, the increase in FTE students and the associated traffic that would add exactly 2% of the total traffic for LOS E segments or exactly 1% of the total traffic for LOS F segments was determined for each significantly impacted location/facility.

Table AA3.14-34 shows the mitigation triggers analyses for the Near-Term and Horizon Year scenarios.

TABLE AA3.14-34
MITIGATION TRIGGER ANALYSIS

Mitigation Measure Number	Impacted Locations	~~Alvarado Hotel FTE[a]~~	Adobe Falls Faculty/ Staff Housing FTE[b]	Student FTE[c]	FTE Trigger Increase[d]
Near-Term (Year 2022)					
AATCP–1	College Avenue / I-8 EB Ramps	~~576~~	501~~80~~	–	501~~656~~
AATCP–2	College Avenue / Canyon Crest Drive	~~576~~	661~~120~~	49~~–~~	710~~696~~
AATCP–3	College Avenue / Zura Way	~~53~~	31~~–~~	–	31~~53~~
AATCP–4	College Avenue / Montezuma Road	~~576~~	661	782~~120~~	1,443~~1,357~~
~~AATCP–5~~	~~I-8 WB Ramps / Parkway Drive~~	~~240~~	~~–~~	~~–~~	~~240~~
AATCP-6	Alvarado Rd.: E. Campus Dr. to Reservoir Dr.	~~355~~	661~~–~~	70~~–~~	731~~355~~
~~AATCP-7~~	~~Alvarado Rd.: Reservoir Dr. to 70th Street~~	~~576~~	~~334~~	~~–~~	~~910~~
AATCP–8	College Avenue: I-8 EB Ramps to Zura Way	~~307~~	249~~–~~	–	249~~307~~
Horizon Year (Year 2035)					
AATCP–5	I-8 WB Ramps / Parkway Drive	--	661	1,455	2,116
--	Alvarado Rd.: E. Campus Dr. to Reservoir	*See AATCP-6*			
AATCP-7	Alvarado Rd.: Reservoir Dr. to 70th Street	--	661	1,318	1,979
AATCP-9	55th Street / Montezuma Road	~~576~~	661	3,130~~2,970~~	3,791~~4,207~~
AATCP-10	Campanile Drive / Montezuma Road	~~576~~	661	3,058~~2,878~~	3,719~~4,115~~
–	College Avenue / I-8 EB Ramps	*See AATCP–1*			
–	College Avenue / Canyon Crest Drive	*See AATCP–2*			
–	College Avenue / Zura Way	*See AATCP–3*			
–	College Avenue / Montezuma Road	*See AATCP–4*			
AATCP-11	70th Street / Alvarado Road	~~576~~	661	3,870~~3,567~~	4,531~~4,804~~
–	I-8 WB Ramps / Parkway Drive	*See AATCP–5*			
AATCP-12	Montezuma Road / Collwood Boulevard	~~576~~	661	4,834~~4,594~~	5,495~~5,831~~
AATCP-23	College Avenue: Montezuma Rd. to Cresita	--	661	1,454	2,115
AATCP-24	Fairmount / I-8 WB Off-Ramp / Camino Del Rio N.	---	661	2,590	3,251

TABLE AA3.14-34
MITIGATION TRIGGER ANALYSIS

Mitigation Measure Number	Impacted Locations	~~Alvarado Hotel FTE[a]~~	Adobe Falls Faculty/ Staff Housing FTE[b]	Student FTE[c]	FTE Trigger Increase[d]
AATCP-25	Alvarado Court / Alvarado Road	---	661	2,069	2,730
AATCP-26	Montezuma Road: Fairmount to Collwood	--	661	3,067	3,728
AATCP-27	Montezuma Road: Collwood to 55th Street	--	661	2,816	3,477
AATCP-28	Montezuma Road: 55th Street to College	--	661	1,782	2,443
AATCP-30	College Avenue: Del Cerro Boulevard to I-8 WB Off-Ramp	--	661	1,455	2,116
–	College Avenue: I-8 EB Ramps to Zura Way	*See AATCP–8*			

Footnotes:

a. ~~120 room of Hotel is calculated to generate 1,200 ADT's (per Table AA3.14-9A). Based on Horizon Year (Year 2035) student headcount (11,385 students) to student trips (20,830 ADT) relationship and 1.1385 FTE conversion factor (see *footnote c*), the total FTE's for Alvarado Hotel was calculated as 576 FTE's [(11,385/20,830) x (1,200/1.1385)].~~

b. 172 DU of Adobe Falls is calculated to generate 1,376 ADT's (per Table AA3.14-9A). Based on Horizon Year (Year 2035) student headcount (11,385 students) to student trips (20,830 ADT) relationship and 1.1385 FTE conversion factor (see *footnote c*), the total FTEs for Adobe Falls housing was calculated as 661 FTEs [(11,385/20,830) x (1,376/1.1385)].

c. 11,385 student headcount = 10,000 FTEs. Therefore, 1 student headcount = 1.1385 FTE.

d. FTE Trigger Increase = ~~Alvarado Hotel FTE +~~ Adobe Falls FTE + Student FTE

General Notes:

1. FTE – Full Time Enrollments.
2. Significant and unmitigated impacted locations with no applicable FTE trigger not shown in this table.

AA3.14.10 LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project implementation would result in significant impacts to ~~off-campus~~ intersections, street segments, freeway ramp meters, and freeway mainline segments within the study area. Where feasible mitigation is available, such mitigation is identified and its implementation would reduce the corresponding impacts either to less than significant or to the extent feasible. However, in numerous instances, mitigation is not feasible due to various reasons, including physical constraints and/or the absence of a funding plan or program to implement the necessary improvements. Therefore, impacts related to these off-campus roadway facilities would be significant and unavoidable. Impacts relating to transit would be less than significant.